SMA

User's Guide

User's Guide

SMA

Version 8.02
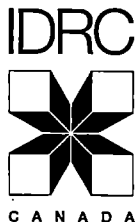
International Development Research Centre

Through support for research, Canada's International Development Research Centre (IDRC) assists developing countries in creating their own long-term solutions to pressing development problems. IDRC is funded by the Canadian government, but it is autonomous in its policies and activities. Its Board of Governors is international and reflects the nonpartisan, multicultural nature of the organization.

MINISIS

Under its program to enhance access to information using appropriate technology, IDRC supports the ongoing development, distribution, and application of MINISIS software products. MINISIS is a multi-lingual, multi-platform, relational database management system designed to manage information that is predominantly text-based.

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Getting Started with MINISIS

Introduction to the SMA User's Guide

MINISIS is a relational database management system that is ideally suited to the management of large text-intensive collections of data. The MINISIS software provides many functions and features that can be used to manage and disseminate information, including:

- Multilingual and alternate character set support.
- Handling of large text-intensive records.
- Import and export of data in common formats.
- Flexible data input function.
- Powerful data retrieval and reporting functions.
- Linking of data to provide a wider view of information.
- Provision for external programs to manipulate data.

The **Standard MINISIS Application** (SMA) is a generalized application which has a menu-driven full-screen interface that allows users to access the main MINISIS functions.

About this User's Guide

The purpose of this document is to provide step-by-step procedures for completing data entry and retrieval activities. Theory and background information is included as required. The activities covered include logging-on and selecting a database, searching for records, adding and changing records, and generating reports.

Each chapter starts with an introduction, any preliminary information, and expected results. These introductory sections are followed by the task oriented activities.

The intended audience for this document is anyone using the SMA for data entry and retrieval activities.

Conventions Used

Warnings and Notes

☞   **Example of warning text**

Warnings alert users to situations that can not be reversed or will result in the loss of data. Warnings are presented before the action, and are marked by an icon with warning text enclosed in a box as shown above.

Notes are explanations of specific circumstances or situations that are associated with a particular action. Notes are presented following the action, and are marked by an icon followed by the text, for example:

Example of note text

Platform-specific information is indicated by an icon followed by the applicable platform identifier and text, for example:

DOS
Example of platform-specific information for the PC implementation

MPE/iX
Example of platform-specific information for the MPE/iX implementation

Text Conventions

The following text conventions are used in this document:

- Keystrokes are indicated by **<key>**.
- Two keystrokes that must be entered one after the other are indicated by **<key1><key2>**.
- Two keystrokes that must be entered simultaneously are indicated by **<key1>+<key2>**.
- Prompts and menu items are in **bold type**.
- References to other sections and/or documents are in *italic type*.
- Data that is typed by the user is in line printer type.

Commands and Parameters

A uniform user interface consisting of menus and screen worksheets can be used for all MINISIS functions. The experienced user may, however, wish to type commands as an alternate means of interfacing with MINISIS. This is always optional.

Commands, keywords and parameters are presented using the following conventions:

{ }	the elements within the curly brackets are mandatory.
[ ]	the elements within the square brackets are optional.
|	select either the element on the left or the element on the right.
" "	these elements must be enclosed in double quotes.
...	the preceding elements may be repeated or multiple elements entered.
( )	these brackets must be included.
ALL CAPS	elements in all caps are keywords and must be included in the statement.

Other Documents

The following SMA and MINISIS documents are referenced and/or provide information beyond the scope of this User's Guide:

- *SMA Self-paced Tutorial*
- *SMA Exchange Guide*
- *SMA SDI Guide*
- *SMA Job Guide*
- *SMA Database Manager's Guide*
- *SMA Installation Guide*
- *MINISIS Error Messages*
- *Glossary of MINISIS Terms*

Finding and Using Information

There are two types of information documented: task-oriented, and reference. Task-oriented information presents both theory and step-by-step procedures to accomplish a specific activity. Reference information presents a summary of the action to be taken at the cursor position and the consequences of that action.

Task-oriented information is covered in the paper-based documents and the on-line Application help system. Reference information is presented in the on-line Context-sensitive help system.

Parts and Chapters

The paper-based documents are organised in parts and chapters. Each part represents a module or set of related tasks. For example, *Using MINISIS Update to Add and Modify Records* contains chapters covering the various tasks to add, change, delete and lock records in a database.

A chapter covers a specific type of task. For example, *Adding Records* presents the process for adding records to a database.

On-line Help Systems

There are two types of on-line help: Application help and Context-sensitive help.

Application Help

The application help, which is accessed through <F3><F1>, is a reflection of the paper-based documentation, but delivered on-line. At the bottom of the help screen there are five items in a horizontal menu: **ERROR, ABOUT HERE, CONTENTS, INDEX**, and **USER INFO**.

A feature of the application help system is that you can exit and when you re-enter the system will open at the same point, as if you had left a bookmark in that page.

Refer to *Chapter 4: Using the Full Screen Interface* for more information on the Application help system.

Context-sensitive Help

The Context-sensitive help, which is accessed through **<F1>**, provides reference-type information about the current cursor position. At the bottom of the help screen there are four options in a horizontal menu: **VALUE**, **DESCRIPTION**, **SYNTAX**, and **EXAMPLE**.

Refer to *Chapter 4: Using the Full Screen Interface* for more information on the Context-sensitive help system.

Introducing the SMA

The SMA is a generalized application that presents the main MINISIS functions used for the definition and maintenance of database structures; data entry and retrieval; import and export of data in common formats; and implementation of a current awareness (SDI) service.

The SMA functions are presented in a series of menus and data entry worksheets together with a comprehensive context-sensitive help system.

When defining database structures, the Database Manager will create various data entry worksheets and forms together with text for the context-sensitive help system. The functions of MINISIS may also be extended by the use of external programs, or User Routines. User Routines are programs, written in a conventional programming language, that access the MINISIS processors to complete a specialized manipulation of data.

The **SMA** main menu presents the following functions:

- Select
- Query
- Update
- Report
- Exchange
- SDI
- Job
- Maintain

Select

The Select function is used to select and open a database. A database must be opened before any other function, except Maintain, can be used.

For information on selecting and opening a database, refer to *SMA User's Guide: Selecting a Database.*

Query

The Query function is used to search a database and select records. Search criteria are either entered as Query statements, or a Query Worksheet can be used. Statements can be combined to form a Query strategy, and the results (Hits) can be saved in a file for future use.

The Query function is also used by other MINISIS functions when the selection of records is required. For example, to modify a record in update, the record must first be selected.

For information on selecting records in a database, refer to the *SMA User's Guide: Selecting Records Using MINISIS Query*.

Update

The Update function is used to add new records to a database or to modify existing records. Data entry worksheets are presented for the input or modification of data. There are **Edit** options available to assist in the update process, including a MINISIS Clipboard facility that can be used to copy data from one record to another.

For information on adding and modifying records, refer to the *SMA User's Guide: Using MINISIS Update to Add and Modify Records*.

Report

The Report function is used to generate output of data for viewing. The output can be directed to the screen, a file, or to a printer. There is the facility to define report specifications that detail the page layout and the data that will be included.

For information on producing reports, refer to the *SMA User's Guide: Producing MINISIS Reports*.

Exchange

The Exchange function is used to import and export data. Records can be imported and exported in ISO 2709 format, fixed and variable point formats, and the MINISIS BATCHIN format.

For information on importing and exporting data, refer to the *SMA Exchange Guide*.

SDI

The SDI function is used to set up a Current Awareness Service which disseminates information based on subscriber profiles.

For information on setting up a Current Awareness Service, refer to the *SMA SDI Guide*.

This feature is not available with this release.

Job

The Job function is used to launch MINISIS activities in the background or batch mode.

For information on running MINISIS activities in batch mode, refer to the *SMA Job Guide*.

This feature is not available with this release.

Maintain

The Maintain function is used to define and maintain database structures and supporting tables.

For information on defining and maintaining database structures, refer to the *SMA Database Manager's Guide*.

Using the Full Screen Interface

MINISIS and the SMA provide a full screen interface. A terminal or computer capable of full screen addressing is required to make use of these features.

This chapter introduces the full screen interface and its elements. It begins with a general description of the interface and then discusses the various elements in detail.

The full screen interface uses the complete screen to present the menus, prompts, and data boxes that guide the user. The screen is divided into several distinct areas. Each area has a purpose and as users learn the interface, they know where to look for the various types of information they need.
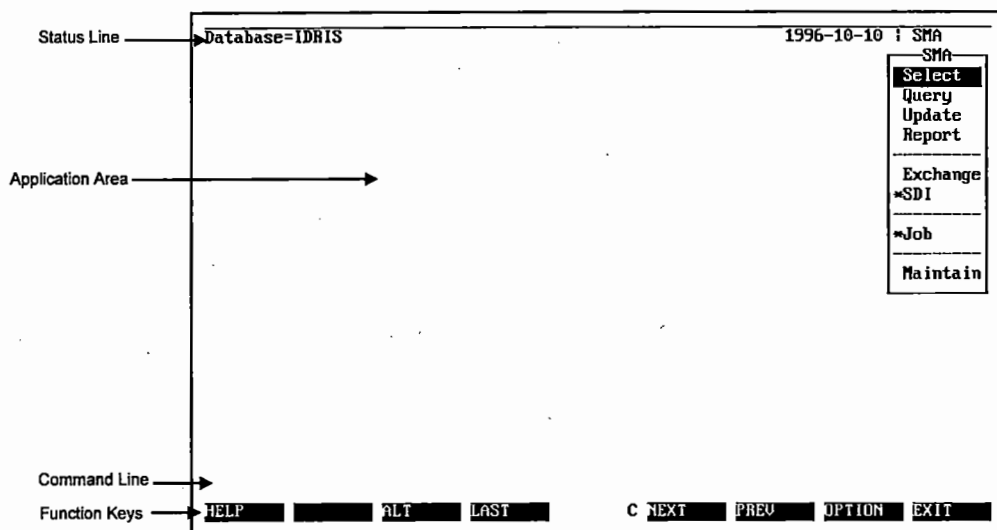
4-1: Screen Areas in the Full Screen Mode SMA

The top line of the screen is called a *status line*. This line presents information from the Application. The SMA displays the open database, the date, and the Application identifier. This information is overwritten when an error occurs.

The error message appears as highlighted text. Once the user responds to the error message, it is cleared and the usual status line elements are presented again.

The bottom line of the screen is reserved for the function key labels. These appear as highlighted boxes along the bottom row. There are eight boxes representing the eight function keys that the SMA uses. The text identifying the key appears when the function key is available. If there is no text in the highlight box, the function key is not available. Three function keys are always available: <F1>, <F3>, and <F8>.

The line above the function key labels is the command line. Users can "jump" to the command line and issue a single command for the module they are using. After the command is issued, the user is returned to the Application area.

The Application area occupies the main body of the screen. This is where the menus and worksheets are displayed.

Menus and Lists

> ☞ **When selecting menu and list items there is an important difference between the DOS and MPE/iX implementations: DOS – press <Enter>; MPE/iX – press <Return>. If <Enter> is pressed when using the MPE/iX implementation, corruption of data could occur.**

Many options in the SMA are presented through menus. The menus *cascade* down, indented from the parent menu. Most of the menus are *pull down* menus. The **Options** menus are *pop up* menus that respond to <F7>. When a menu item is not available, an asterisk (*) is displayed to the left of the item.

Lists allow users to select and insert values into data boxes. There are two styles of list, but both allow users to highlight and select items. The most common list presentation is through the context-sensitive help. This list is under the **VALUE** option, in the help display. The other type of list appears on the left side of the screen when users are performing copy or specification management actions. Users can scroll up and down through the list or search for a particular value in the list.

A highlight bar is used to select an item from a menu or list. Use the following keystrokes to move the highlight bar in a menu or list:

- <Up> to move up one item

- **<Down>** to move down one item
- **<Home>** to move to the first item
- **<End>** to move to the last item
- pressing a letter moves the cursor to the next item that starts with that character (not case sensitive)
- **<F4>** moves the cursor to the last list item (not used with menus)
- **<F3><F4>** moves the cursor to the first list item (not used with menus)

Unlike menus, lists allow users to choose more than one item. When adding data elements to a repeatable field, selecting fields to copy, or managing specifications, users can highlight and select any number (up to the list length) of items from the list. When working in a list, **<F7>** opens the **Select** menu for selecting list items. This menu allows users to add and remove list items from the selection.

4-2: MINISIS Lists and Menus

Forms, Worksheets, and Data Boxes

Query Worksheets use a single page to present a series of prompts and data boxes to assist users to search the database. Data entry worksheets are used for databases and SMA modules to gather information from users. Data entry worksheets can have one or more forms, presented as pages on the screen.

The data entry worksheets use prompts and data boxes to identify and gather the data from the user. Data boxes are associated either with a database field or a MINISIS command parameter. When the data entry worksheet is associated with a database (in the Update Module), the data boxes are connected to database fields and the attributes of the field control the data type, length, validation, and so on. Rather than learning commands and the various parameters, users can instruct the system by typing in answers to questions presented on data entry worksheets. Each prompt and data box combination is connected to a MINISIS action.

Data Entry

DOS

Data can be inserted directly into and deleted from fields on the PC. Use **<Insert>** to switch between insert and overwrite modes. Overwrite replaces, character by character, the data with the newly-typed data.

Use **<Tab>** to move forward from one data box to the next. Use **<Shift>+<Tab>** to move backwards through the data boxes.

If the field uses a scrollable data box, use **<F5>** to move down a window-page, and **<F6>** to move the display up one window-page. When users are typing into the data box, the system scrolls the window-page up automatically.

If the field is a repeatable field, **<F5>** moves the display down one occurrence, and **<F6>** moves the display up one occurrence.

If the data box is part of a repeatable Group, press **<Ctrl>+<Right Arrow>** to move to the Group level and then use **<F5>** and **<F6>** to move down and up through the Group occurrences.

MPE/iX

Data can be typed directly into fields if there is no data in the field. The **Edit Options** – *Insert Text, Extract/Delete Text, Change Text,* and *Find Text* – allow users to edit the contents of data boxes on the HP.

Use **<Tab>** to move forward from one data box to the next. Use **<Shift>+<Tab>** to move backwards through the data boxes.

If the field uses a scrollable data box, use **<F5>** to move down a window-page, and **<F6>** to move the display up one window-page. When users are typing into the data box, the system scrolls the window-page up automatically.

If the field is a repeatable field, **<F5>** moves the display down one occurrence, and **<F6>** moves the display up one occurrence.

If the data box is part of a repeatable Group, press the **<Ctrl>+<Right Arrow>** key combination to move to the Group level and then use **<F5>** and **<F6>** to move down and up through the Group occurrences.

Function Keys

MINISIS displays two groups of function keys, a primary group and a secondary group. The secondary group is activated through the **<F3>** key and is only displayed until the secondary function key is pressed.

The system displays the primary group of function keys along the bottom of the screen. This can be suppressed in the configuration of MINISIS. This template shows which of the primary keys are available at any given point in the system. The template will display and activate the available secondary keys when **<F3>** is pressed. Pressing **<F3>** when the secondary group of function keys is activated will display and activate the primary keys.

Not all functions are available at all times. The functions that are available throughout the system are: **<F1>** and **<F3><F1>** for help, **<F3>** for switching between groups of functions, and **<F8>** and **<F3><F8>** for ending actions.

DOS
Functions activated by the secondary group of keys can be requested directly when the primary keys are displayed by using the **<Alt>** key. For example, in place of the two keystrokes **<F3><F1>**, you can use **<Alt>+<F3>**.

<Esc> can be used in place of **<F8>**.

Primary   Alternate

Primary		Alternate	
F1 Context-Sensitive Help		**F3** **F1** Application Help	
F2 Command Line		**F3** **F2** Command Mode	
F3 Alternate			
F4 Last		**F3** **F4** First	
F5 Next		**F3** **F5** Next Form	
F6 Previous		**F3** **F6** Previous Form	
F7 Options		**F3** **F7** System Options	
F8 Exit		**F3** **F8** Main Menu	

Key List

<F1> Context-Sensitive Help

Context-sensitive help provides information about the menu item or worksheet field at the cursor location.

<F3><F1> Application Help

The Application help provides information supplied with the application.

<F2> Command Line

While working in full screen mode, users can use the command line prompt at the bottom left of the screen and enter instructions directly. **<F2>** moves the cursor from the Application area down to the command line. The range of commands available is determined by the relative position in an application. Only commands related to the functions in the active module are available. After the command is entered, the system returns the user to the menu system.

Command line and Command mode are not available with this release.

<F3><F2> Command Mode

Command mode differs from the command line. In the command mode, the user leaves the full screen menu mode and enters into a scroll mode operation. The commands available in command mode include the option to change the active module or application. The command mode has a broader range of activities than the command line. The user remains in command mode until **<F3><F2>** is pressed again.

<F3> Alternate

The **<F3>** key is used to change the function key display and range to the secondary group. If the function key menu is displayed on the last line of the application screen, the names of the keys changes when the **<F3>** key is pressed. The display changes to show any secondary function keys available in the active module or submodule.

<F4> Last

<F4> is available when a list or repeatable field data box is the active screen component. This function key moves the cursor to the last member of the list or the last occurrence in the repeatable field.

<F3><F4> First

<F3><F4> is available when a list or repeatable field data box is the active
screen component. This function key moves the cursor to the first member of
the list or the first occurrence in the repeatable field.

<F5> Next

<F5> is active when the cursor is positioned in a repeatable field or a wide
data box. When the active data box has pagination indicators, this function key
moves the display forward through the logical pages of the data box. When
the display is wider than the 80 character limit of the terminal screen, this
function key shifts the display to the right.

<F3><F5> Next Form

The <F3><F5> function key is active when the worksheet displayed has more
than one form. This function key displays the next form in the worksheet
sequence.

<F6> Previous

<F6> is active when the cursor is positioned in a repeatable field or a wide
data box. When the active data box has pagination indicators, this function key
moves the display back through the logical pages of the data box. When
display is wider than the 80 character limit of the terminal screen, this function
key shifts the display to the left.

<F3><F6> Previous Form

<F3><F6> is active when the worksheet displayed has more than one form.
This function key displays the previous form in the worksheet sequence.

<F7> Options

This function key opens a menu of options that varies with each module and
submodule. The full explanation of these menus and their options is given in
the various reference chapters.

<F3><F7> System Options

The **System Options** menu lists the user-definable session defaults.

<F8> Exit

Any action started by a user can be ended without the system executing or
acting on the activity. The <F8> key closes the active worksheet or menu and
moves the user back one level of activity.

<F3><F8> Main Menu

Some activities, such as selecting databases or setting session defaults, require that the user be positioned at the **SMA main** menu. The **<F3><F8>** key combination clears the active option and closes all modules and submodules, returning the user to the **SMA main** menu.

<End>

In full screen mode, the **<End>** key moves the cursor to the last item on a menu, or to the last character entered in a data box.

This key is not available on the MPE/iX platform.

<Home>

In full screen mode, the **<Home>** key moves the cursor to the first item on a menu, or to the start of a data box.

This key is not available on the MPE/iX platform.

<Enter>

DOS
In full screen mode, the **<Enter>** key activates the highlighted menu item or processes the active form or worksheet. In scroll mode and command mode, the **<Enter>** key processes the prompt or command entry.

MPE/iX
In full screen mode, the **<Enter>** key processes the active form or worksheet.

<Return>

MPE/iX
In full screen mode, the **<Return>** key activates the highlighted menu or list item. In scroll mode and command mode, the **<Return>** key processes the command entry.

Application Help

Application help offers information on error messages, information about the current activity (**ABOUT HERE**), some documentation accessible through a table of contents, an index of keywords, and user-created information.

Application help is not dependant on the database open at the time. To access application help press **<F3><F1>** at any time and then select from the available options.

```
                                                           1996-10-10 : SMA
                                                                   ┌──SMA──
                                                                   │ Select
                              ─────────ABOUT HERE─────────         │uery
            ┌────────────────────────────────────────────────┐    │pdate
            │ This is the uppermost layer of the Standard MINISIS │eport
            │ Application(SMA). Using this menu it is possible to arrive │──────
            │ at all functions incorporated into the SMA. This top level │xchange
            │ menu is divided into three groups of activities. The top │DI
            │ group contains the most commonly used functions - also │──────
            │ refered to as the End User modules.             │    │ob
            │                                                 │    │──────
            │ The top group of menu items Select, Query, Update, and │aintain
            │ Report. Select is not a true module, but a necessary item. │
            │ Users must open a database before many other modules can │
            │ be activated. Query allows users to select records of │
            │ information from the database. Update allows users to add, │
            │ change, and delete records of information from the │
            │                                             +   │
            └────────────────────────────────────────────────┘
               ERROR      ABOUT HERE    CONTENTS      INDEX      USER INFO


     ▌HELP   ▌    ▌       ▌   ▌ALT    ▌  ▌LAST   ▌        C ▌NEXT  ▌  ▌PREV ▌  ▌OPTION▌ ▌EXIT  ▌
```

4-3: Application Help Window

Error Messages

Error messages are displayed on the first line of the screen. They overwrite the status line information. When the error situation is corrected, or when Help has been activated, the error message is cleared from the screen and the status line information is restored. If there is an error, this option will be selected automatically by pressing **<F3><F1>**. This activates the Application help and the Error message help screen. The error help will include probable causes, recovery information and references to the documentation.

About Here Descriptions

Select the first option, **ABOUT HERE**, to view information about the active process or module. The information available in the **ABOUT HERE** section varies from simple information about the active process or module to references to the documentation or training material.

Table of Contents for Online Information

Some online documentation is included with the SMA. This information is structured with a table of contents. To access the information in this online system, select **CONTENTS**. This will activate a Table of contents. The cursor (appearing as a highlight bar) will be on the first item in the Table of contents. To read about a topic, move the cursor to highlight the title in the Table of contents and press **<Enter>** key. The text related to that topic will be presented, replacing the Table of contents. The text will also contain a reference to the paper documentation for more detailed information.

Index of keywords

To find out about a particular activity using the index of keywords, select **INDEX**. The index lists keywords alphabetically. The list can be browsed either by paging through or by entering a keyword directly. To page through help, use **<F5>** to move forward and **<F6>** to move back. To move directly to a keyword, press **<F7>**. This activates the **Find** data box. Type a keyword and the system searches the list for a match. When the first match is found the system pages through the list and highlights the keyword. If the keyword is not found, the system displays an error message indicating the index term could not be found. To display information about a keyword, highlight the word and press **<Enter>**. The system displays a screen with information on the keyword.

User Information

News for users may also be posted on the system and accessed through the **USER INFO** selection in Application Help.

Information about the databases available to the user is reached through Application help. To read about a database, select **USER INFO**. This activates a menu with two selections: News and Databases. Highlight Databases and press **<Enter>**. This activates a list of databases available to the user. The window keeps the last level of help listed at the top left corner as users delve deeper into the information levels.

To read about a particular database, highlight the database name on the list presented in the Databases window and press **<Enter>**. This closes the list of databases, puts the title (Databases) under **USER INFO** in the upper left corner of the help window and opens the database data window. The database data window offers the topics entered during the database development. The text associated with each topic can be accessed by highlighting the topic and pressing **<Enter>**. The topic and text come from a repeatable field entered during database development.

To read news about the application, highlight News and press **<Enter>**. This information is entered by the Database Manager.

Context-Sensitive Help

Context-sensitive help is available through **<F1>**. The information presented is matched to the position of the cursor. The system responds to **<F1>** with information provided to match the work in progress. The first screen is a description with a menu of choices:

Value

Opens a list of the data box values in ascending order (sorted by the appropriate sorting sequence).

Value Lists

To mark or select information from the value lists, highlight **VALUE**, which activates a list, press **<F7>** to open the **Find** menu. The **Find** menu allows users to search and select from the value list. The information in the lists comes from the validation table or field definition.

Description

Offers an explanation of the data box or menu option.

The description is entered by the Database Manager for field values. Information on SMA worksheets and commands is supplied by IDRC.

Syntax

Opens a window with the syntax information for a data box.

Parameter Help

For help with syntax, highlight **SYNTAX**. This activates a window with information on the expected or acceptable syntax for data or commands.

Example

Opens a window with a list of examples for the data box. This type of Context-sensitive help is not usually available for fields with a Value List.

Examples

To view some examples of the data or command syntax, highlight **EXAMPLE**. This activates a window of data or command examples.

Logging onto MINISIS

This chapter describes how to identify yourself to MINISIS and get access to the applications, databases, and functions you use to work with the system. The process of identifying yourself to MINISIS involves entering your username and password.

A username is a series of one to eight characters that distinguishes one user from another. In some cases, a group of users will be given the same username. This may be done if the users have the same profile and access rights to the system.

A password is also a series of one to eight characters that distinguishes one user from another. The username is set by the Database or System Manager, but the user can create their own password and add a layer of protection to their data structures and the information stored in them.

The MINISIS system has the option of creating profiles for users. These profiles indicate to the system:

- which processes each user can access
- which databases each user can access
- the default language for the user
- which statistics to collect
- which associations to make for each user (this may be billing information).

Preliminary Information

MPE/iX

Before logging onto MINISIS, you may have to sign onto the HP system. See your System Manager for instructions on how to sign onto the HP.

To complete the logging on process, you require your username and password.

Expected Results

Once you have successfully logged on, MINISIS displays the first level screen
assigned to your profile. In general, the system goes directly to the first level
menu of the SMA.

To Log Onto MINISIS

1   To start MINISIS, at the system prompt enter:
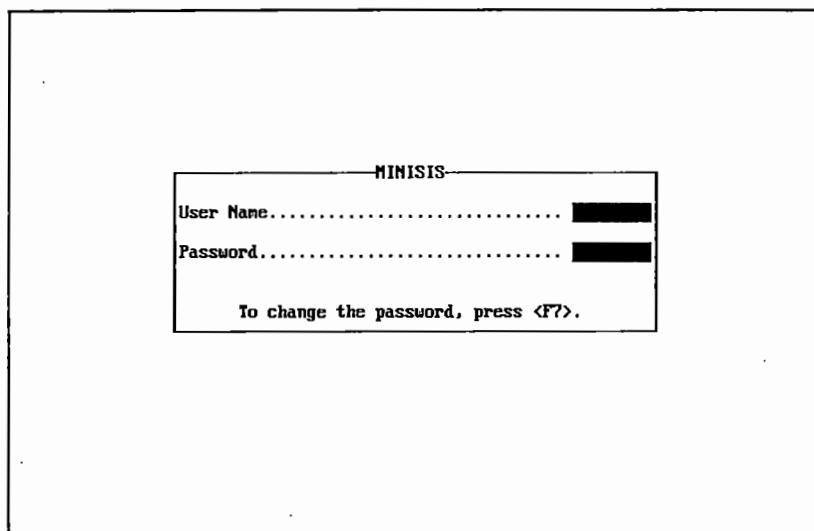
DOS
   SMA

MPE/iX
   SMA.<group>.<account>

The SMA will be opened at the Logon Screen, shown in Figure 5-1.
The cursor is, by default, in the **Username** data box.

```
┌──────────────────────MINISIS──────────────────────┐
│                                                    │
│ User Name...............................  ████████ │
│                                                    │
│ Password................................  ████████ │
│                                                    │
│        To change the password, press <F7>.        │
│                                                    │
└────────────────────────────────────────────────────┘
```

5-1: The MINISIS Logon Screen

2   Type the username assigned to you, and press **<Tab>**.

The cursor will move to the **Password** data box.

3   Type your password and press **<Enter>**.

If you have entered the information correctly, the system displays
the **SMA main** menu.

If you have entered information incorrectly, the cursor returns to the
Username data box.

4   Repeat steps 2 and 3 until you successfully log onto MINISIS.

The system allows you three tries before halting the logon session.
If you do not know your correct username and password
combination, contact your System Manager or Database Manager.

Changing the MINISIS Password

This chapter describes the process for changing or creating your MINISIS logon password.

The Database or System Manager develops user profiles for the system. The system recognizes users by their username and password combination when they log onto MINISIS. This process involves associating each user with a profile. The profile describes the processes and data the user can access and identifies the default language for the user. The Database or System Manager creates unique usernames and passwords for each user. Users can change their passwords but not their usernames.

If the Database Manager or System Manager has not assigned a password to the username, the user can create one. Users are encouraged to change their passwords often to protect their data. When changing a password there are some important guidelines to be aware of:

- choose a sequence of characters that is easy to remember, but not easy to guess.
- for maximum security, use a combination of letters and digits.

Preliminary Information

MPE/iX
Before logging onto MINISIS, you may have to sign onto the HP system. See your System Manager for instructions on signing onto the HP.

To complete the process of changing your password, you require your username and current password. To create a password, you need your username.

Expected Results

Once you have changed or created your password, the system recognizes the new username and password combination.

To Change a MINISIS Logon Password

1 To start MINISIS, at the system prompt enter:

DOS
   SMA

MPE/iX
   SMA.<group>.<account>

The system opens the SMA at the logon screen. The cursor is, by default, in the **Username** data box.

2 Type the username assigned to you, and press the **<Tab>** key.

The cursor will move to the **Password** data box.

3 Type your password. **Do not press <Enter> after typing in your password.**

4 To change your password, press **<F7>**.

The system opens the **New Password** data box, shown in Figure 6-1.

```
┌──────────────────────────────────────────────────────────────────┐
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
│            ┌──────────────────MINISIS──────────────────┐          │
│            │User Name.............................. idris│          │
│            │                                            │          │
│            │Password...............................     │          │
│            │                                            │          │
│            │      To change the password, press <F7>.   │          │
│            └────────────────────────────────────────────┘          │
│            ┌────────────────────────────────────────────┐          │
│            │New Password......................... ██████ │          │
│            └────────────────────────────────────────────┘          │
│                                                                    │
│                                                                    │
│                                                                    │
└──────────────────────────────────────────────────────────────────┘
```

6-1: New Password Data Box

5   Type a new password, and press **<Enter>**.

Passwords can be 1-8 characters long. They must contain
alphanumeric characters (A-Z, a-z, 0-9). Lower case data is
converted to upper case only before comparison. No punctuation
or special characters will be accepted.

When MINISIS accepts your new password, the system will open
the SMA at the **SMA main** menu.

If you forget your password

Contact the System Manager if you forget your password. *For a stand-alone
system, refer to the System Configurator.*

Selecting a Database

This chapter describes how to select and open a MINISIS database.

MINISIS databases are collections of related information maintained in a machine-readable form. The information is organized into distinct units called records. This helps you access the information and arrange it in a meaningful manner.

Your user profile identifies which databases are available to you. These databases can be listed on the screen. The system creates a dynamic list of the databases available to you.

The SMA allows each user to have one database open at one time. If you are changing from one database to another, the system closes the database you have open, before opening the new database.

Preliminary Information

To open a database, you must be positioned at the **SMA main** menu. If you have a module or submodule open (for example, Report), press <F3><F8> to return to the **SMA main** menu. To access a database, you must have access privileges in your profile for that database, and the database must be associated with the application you are using.

Expected Results

The Database Manager may enter information screens in the database definition that are displayed when the database is opened. If these screens exist, they are displayed. The name of the database appears in the status line, in the upper left hand corner of the screen.

Select Database Data Box

1 Highlight **Select**, and press **<Enter>**.

The system displays the **Select Database** data box and positions
the cursor in the data box. The **Select Database** data box is
shown in Figure 7-1.

If you know the name of the database, go to step 6.

```
                                              1996-10-10 | SMA
                                                      ┌─SMA─┐
                          ─────────Select Database──────────
                  Name......................█████████████████████
                       For a list of available databases, press <F1>.

                                                   ┌──────────┐
                                                   │ Exchange │
                                                   │ ⋆SDI     │
                                                   ├──────────┤
                                                   │ ⋆Job     │
                                                   ├──────────┤
                                                   │ Maintain │
                                                   └──────────┘




  ▐HELP     ▌  ▐     ▌  ▐ALT  ▌  ▐LAST  ▌     C.▐NEXT  ▌ ▐PREV  ▌ ▐OPTION▌ ▐EXIT  ▌
```
7-1: Select Database Data Box

2 Press **<F1>**.

The system displays a dynamic list of the databases available, as
shown in Figure 7-2. The first database name in the list is
highlighted.

This data box can display up to 20 databases at a time. If there are
more than 20 databases in the list, a plus sign + is positioned on
the lower right hand corner of the list border.

3 Highlight the name of the database that you want to open.

4 ˙ To get a description of the highlighted database, press **<F1>**.

The system displays a description of the database.

```
                                                              1996-10-10 ¦ SMA
                                                                   ┌──SMA──┐
                              ─────────────Select Database──────────
                     │Name........................
                              ──VALUE ── Selecting a Database──
              ┌────────────────────────────────────────────────┐
              │ ANYGEO                                           │
              │ IDRIS                                            │change│
              │ ISOCODES                                         │I     │
              │ STOPWORD                                         │──────│
              │ TEST_THESAURUS                                   │b     │
              │                                                  │──────│
              │                                                  │intain│
              │                                                  │
              │
              │
              │     VALUES        DESCRIPTION       SYNTAX          EXAMPLE
              └────────────────────────────────────────────────┘


  HELP           ALT    LAST           C NEXT    PREV      OPTION   EXIT
```

7-2: List of Databases

5   To select the database, press **<Enter>**.

The database name is displayed in the **Select Database** data box.
Continue with step 7.

6   Type the name of a database, and press **<Enter>**.

If a database is already open, the system closes it and opens the
new database.

The system displays the opening screens for the selected database.
These may be copyright information screens or simply a message
indicating the database has been opened.

7   To continue, press **<F8>**.

The system closes the message box and moves the cursor to the
SMA Main menu. The database name will be displayed in the top
left corner of the screen.

Selecting Records Using MINISIS Query

Introduction to MINISIS Query

This part explains the features of the MINISIS Query module. These features allow users to select records, to browse the records online, or to send the selected records to a printer. In addition, there is a function for logging and analysis of a query session and a Mail facility.

The Logging and Analysis, and Mail features are not available with this release.

An interactive session can be run in either Scroll mode or Menu mode. When working in Scroll mode, the prompts for a Query Worksheet roll up from the bottom of the screen and Query Statements are entered after the prompt. In menu mode, the Query Worksheets and Query Statement Worksheet are presented in full screen displays.

The series of chapters explain the Query options first for Query Worksheets, then for building strategies using the Query Statement Worksheet.

Chapter List

The MINISIS Query Module

This chapter gives an overview of the Query options and features.

Selecting a Query Mode

This chapter explains how to select the search mode: Line Mode or Worksheet Mode.

Selecting Records Using a Query Worksheet

This chapter describes how to use the MINISIS Query Worksheet in Menu mode.

Selecting Records Using Query Statements and Strategies

This chapter introduces the Query Operators used to build Query statements and strategies. Using examples, this chapter also describes how to prepare and use Query statements, and how to save successful searches.

Other Query Options

This chapter explains the selections on the Query Options menu. These
include: selecting from a Fast Access Table, browsing records online, printing
records, changing display formats, and adjusting the session settings.

Logging and Analysis of a Query Session

This feature is not available with this release.

Using Mail

Mail is not available with this release.

The MINISIS Query Module

This chapter introduces some elementary searching concepts and identifies how MINISIS Query works. The Query module runs as a separate function under the SMA main menu. The searching capabilities are available from within many of the other modules (such as Update, SDI, and Exchange). This chapter begins with some basic concepts and then describes the MINISIS search methods in more detail.

MINISIS Query also has options for logging and analyzing a Query session, and for sending and receiving mail. These options are only available when the main Query module is active.

Query is a powerful tool and the presentation allows users to develop skill over time. Users who are unfamiliar with searching can select records using the Query Worksheets. Others, who may be unfamiliar with searching, with a particular or unusual search need, can use the Line Mode Query and build their search statements using the Assist menu worksheets. Gradually, these users will gain a level of expertise and be able to construct Query statements and strategies on their own.

Basic Concepts

MINISIS Query selects records of information from the database based on the contents of one or more fields within each record. Searches can be simple statements or a more complex grouping of statements to form a strategy.

Fields in a database can be associated with a Fast Access Table, which is a separate table that is used to speed up the search process. These Fast Access Tables contain lists of the field contents. Each unique key value is stored with a record identifier. MINISIS can look through this table quickly and identify which records have the required information.

Fields can also be associated with Thesaurus and Any Tables that expand the search value. These Thesaurus Tables and Any Tables contain lists of related terms. The search term can be expanded using these related terms. Using a Thesaurus Table, the search can be expanded by including terms that are broader in scope, narrower in scope, or related in scope. Using an Any Table, the search can be expanded by including related terms.

In most cases, when selecting records from a database, users identify the field, the value, and the relationship between the two.

Based on the information given, MINISIS compares the search value to the contents of the field or to the Fast Access Table associated with the field.

Users identify the field used in the search by its mnemonic. The search value can either be a data element (keyword, key value, or expression) entered from the keyboard, or another field in the database. The relationship can be an implied comparison or a stated comparison. When the search uses a Thesaurus Table or an Any Table, MINISIS uses the implied comparison value of *equal to*.

Users can group statements in a strategy using Boolean operators. MINISIS executes each statement according to the following order of operation:

- AND
- OR
- XOR
- NOT

Users can control and change this order of operation by grouping the statements using brackets. Expressions within brackets are processed first.

Basic Features

MINISIS Query offers two modes for entering search information. The first mode, Form mode, uses Query Worksheets to collect the search values. The second mode, Line mode, uses a single data box for collecting search values, the field identifier, and the type of search activity.

Form Mode

Query in Form mode uses Query Worksheets to collect the search values. The fields available for searching and the relationship between the values and the fields is predetermined. The Form creator puts the search strategy into the form. The user cannot change this strategy.

A database can have one or more Query Worksheets associated with it. Each Query Worksheet extracts different data, or uses a different strategy to search the database.

The Default Query Worksheet

The Default Query Worksheet is the primary Query Worksheet associated with the database. MINISIS uses this Query Worksheet the first time the user enters Form mode in a Query session.

Line Mode

Query in Line Mode uses a Query History Screen and a Query Statement data box. Users type and execute Query statements. The SMA gives each Query statement in a session a sequential number. The Query History Screen presents the Query session results using statement numbers, the number of records selected, and the statement used. Users can view, save, and combine these Query statements.

Line Mode Query Assist Worksheets

Line Mode Query searches can be typed directly into the Query Statement data box or built using the Query Assist Worksheets. These worksheets, available through the Query Options menu (activated by the <F7> key), list the elements of a search statement. The user fills in the worksheet and presses <Enter>. The SMA then writes the Query Statement and the user can review the statement before accepting or activating it.

Saving Strategies and Search Results

When working in Query, users can save a set of statements as a Strategy and a set of records as a Hitfile. Users can then use these Strategies and Hitfiles during later Query sessions. MINISIS treats any Strategy or Hitfile recalled and used in this way as a single Query statement.

The Default Query Field

The Database Manager designates a Default Query Field for each database. Users do not need to identify the default Query field in a Query statement. This is the field used for Present/Absent searching. Users can change the default Query field during a session, but the change is only effective during that session.

Special Features and Search Methods

Searching can be a simple or complex process. A search can be as simple as requesting all the records with a known value in a specific field. Searching for concepts or complex combinations of information can be quite difficult. MINISIS Query provides several methods for making the search more efficient.

Using Fast Access Tables

A Fast Access Table is a sorted list of the words, terms, or the contents of the entire field. The Database Manager decides whether to collect the field contents as words, terms, or whole fields. This collection process is called extraction. If extracted as words, MINISIS collects everything in the field preceded by and followed by a space as a separate entity. If extracted as terms, MINISIS collects everything preceded by and followed by a special marker, or delimiter, as a separate entity.

MINISIS maintains the Fast Access Table using one of the following three procedures:

- online;
- offline; or
- on release.

When MINISIS creates or updates a Table online, the field contents are extracted as the records are entered into the database. This action is carried out after the system verifies the data entered.

When MINISIS creates or updates a Table offline, the field contents are extracted during a special job. MINISIS does not recognize or select new ·records in the database during a Query that uses an out-of-date Fast Access Table.

When a Table is set to be updated on release, the records have a type of protection that prevents them from being selected until the contents of a field have been through some process of verification or modification.

Using Thesaurus Tables

A Thesaurus Table has a particular structure which MINISIS uses to expand or refine a search. A single language version of a Thesaurus Table has the following field definitions: Main Term, Broader Term, Narrower Term, and Related Term, described in Table 9-1.

If the Thesaurus structure is multilingual, the range of fields is repeated for each language supported by the Thesaurus. This adds the alternate language records to the group selected by a single search statement.

Table 9-1: Thesaurus Structure			
Field	**Operator**	**Description**	**Examples**
Main Term	Main	the primary term for this record	Agricultural Machinery Energy Resources
Broader Term	BT	wider in scope than the Main Term, a subject area containing the Main Term	Agriculture Natural Resources
Narrower Term	NT	tighter in scope than the Main Term, a specific topic under the Main Term	Tractors Petroleum Resources

Table 9-1: Thesaurus Structure

Field	Operator	Description	Examples
Related Term	RT	similar in scope to the Main Term, similar topic or a topic with features or functions in common with the Main Term	Agricultural Mechanization Energy Supply

Using Any Tables

An Any Table is similar to a Thesaurus except there are only two fields: the Main Term and the ANY Terms. The Any Table associates a group of terms to the Main Term. Like a Thesaurus Table, this broadens the search base, selecting records where the Main Term or one of the ANY terms occur.

Relevance and Threshold Values

Users can apply Relevance and Threshold Values to control the final display (on screen or at the printer) of records selected. Relevance and Threshold values use a numeric scale to rate the importance of records selected. Each statement has a Relevance Value. The Relevance Value of records increases according to the number of statements that they satisfy. The more relevant the record (the more statements that select the record) the higher the final Relevance Value. Each statement contributes a Relevance Value to the records selected using that statement. Records selected by more than one statement in the Strategy acquire higher Relevance Values. The Report Specification used to display the records has a Threshold Value. Only records with a Relevance Value equal to or greater than the Threshold Value are displayed.

Comparing Values

The SMA offers two comparison search types: full and partial. In a full comparison search, the SMA selects records when the contents of the search field (or Fast Access Table) correspond to a search value. The correspondence can be equal, not equal, greater than, less than, greater than or equal to, and less than or equal to. The search value can be a typed value or the contents of another field. The SMA uses the entire value in the full comparison. In a partial comparison, the SMA looks for the sequence of characters (and wildcard markers) in the search field. There are three types of partial comparison, right truncation, left truncation, and pattern. Right truncation compares the search value to the opening characters in each search field value. Left truncation compares the search value to the closing set of characters in the search field value. Pattern searching is more complex, using wildcard markers to indicate one or more characters in a given position.

Using Linked Terms

Thesaurus and Any Tables associate a primary term with lists of other possible terms. The Thesaurus Tables group the linked term according to their relationship to the main search term. Any Tables simply associate the main term to a range of alternate terms. When either of these tables are used, the system includes the alternate range of terms in the search. In a Thesaurus search, users are restricted to one range or group of terms. Either way, the SMA searches using the main term, then the terms from the associated list. This expands the range of the search value.

Searching for Values in a Particular Position

The SMA allows users to select records based on the position of two terms in relationship to each other. That relationship may be two fields in the same occurrence of a repeating Group, or two values in the same field. There are Proximity searches, which select records when the two search values occur within a certain distance (and order) from each other, and Ignore searches for records where a search value is found and another search value is not found.

Using Arithmetic Operations in a Search

Arithmetic searches allow users to combine field contents with numerics or other field contents to determine which records satisfy the search requirements. An expression, created using field contents, arithmetic operators, and numerics (or the contents of a numerical field), generates the search value. This value can then be compared against numbers, dates, or another expression. Arithmetic searches can be as simple as finding records with a particular date in the search field.

Searching for Numerical Values in a Range

Range searching is used for the System Internal Sequence Number (SISN) and numeric or date fields. The Range search selects records when the field value fits between the minimum and maximum value for the field.

Primary and Secondary Key Searching

Dot searches use the primary and secondary keys defined for a field. Primary and secondary keys are the contents of the field that have been indexed into a Fast Access Table. These values are designated as primary if they represent the most important details or description of the item that the record represents.

Presence and Absence Searching

Records can also be selected based on whether there is data in the search field. The present and absent searches do not use a search value, just a search field. If the search is a present search, all records where the search field has information in it are selected. In an absent search, only the records where the search field is empty are chosen.

Combining the Above Searches

All of these search statements can be combined to refine the search. The results may be expanded or narrowed using the Boolean operators to join or relate two statements. The Boolean operators have an order of operation that can be affected by grouping search statements in brackets.

Saving Results and Strategies

The results of an individual search statement, or a full search strategy, can be saved as Hits. The statement(s) that generated these results can be saved as a Strategy. Both of these can then be used in subsequent searches. The Hits record the SISN of the records chosen, and, when used in another search, simply selects those same records. A Strategy is a record of the statements issued to get a particular result. When a Strategy is re-used, the system executes the search on the database. If the data in the database changes over time, the final results (in terms of which record is chosen) will differ each time the Strategy is used. The final results do not differ for Hits.

Selecting a Query Mode

Query has two modes of operation, Line mode and Worksheet mode. This chapter explains how to move between the two modes.

Query Line mode presents the user with a screen with two data boxes. The upper data box presents the Query History. The Query History is the number, the contents, and the number of hits for the statement. The lower data box is a data box where the user constructs Query search statements. These statements combine field mnemonics, Query operators, and data elements to select the records in the database that match the criteria. Figure 10-1 is a sample Query Line Mode screen.

Query Worksheet mode presents the user with a series of prompts. The Database Manager, or Worksheet creator, creates the relationship between each of the field prompts. The system combines the data entered with the relationships defined to construct a search statement. If a field does not appear on the Worksheet, it cannot be used in the search. The Worksheet restricts the user to the fields identified by the prompts on the Worksheet. When the user activates a Query Worksheet Mode search, the system displays the number of selected records, called hits, on the status line of the screen.

Preliminary Information

To switch between the two modes, a user requires an open database and either an open Query Worksheet **or** an active Line Mode Query screen. To open a Query Worksheet, the user needs the name of the Worksheet and access to the Worksheet. The Worksheet must be associated with the open database.

To switch Query Worksheets, the user must be in Query Worksheet Mode.

Expected Results

At the end of these steps, the user has either an open Query Worksheet, or an active Query Line Mode Screen.

Selecting Query Line Mode

1   To activate the **Query Option** menu, press **<F7>**.

The system will open the **Query Options** menu.

2   Highlight the **Mode/Worksheet** option, and press **<Enter>**.

MINISIS displays the **Mode/Worksheet** menu. This menu has 3
options, Line Mode, Worksheet Mode, and Switch Worksheet. A
plus sign **+** marks the active mode.

3   Highlight the **Line Mode** option, and press **<Enter>**.

The system clears the Mode/Worksheet menu and the Query Option
menu. MINISIS displays the Line Mode Screen as shown in Figure
10-1. Both the Query Statement Results and the Statement data
box are empty at the start of a Query.

```
Database=IDRIS                                      1996-10-10 : SMA
=======================Query Statement Results======================
  #     Hits Statement




────────────────────────────────────────────────────────────────────


═══════════════════════Query Statement══════════════════════════════




════════════════To end Query session, press <F8>═══════════════


 HELP           ALT     LAST         C NEXT    PREV    OPTION  EXIT
```

10-1: SMA Query Line Mode Screen

Selecting Query Worksheet Mode

1   To activate the **Query Options** menu, press **<F7>**.

The system will open the **Query Options** menu.

2   Highlight the **Mode/Worksheet** option, and press **<Enter>**.

MINISIS displays the **Mode/Worksheet** menu. This menu has 3
options, Line Mode, Worksheet Mode, and Switch Worksheet. A
plus sign **+** marks the active mode.

3   Highlight the **Worksheet Mode** option, and press **<Enter>**.

The system clears the Mode/Worksheet menu and the Query Option
menu. MINISIS displays the Default Query Worksheet. An
example of a Query Worksheet is shown in Figure 10-2. To switch
to another Query Worksheet follow the steps under *Switching
Query Worksheets*.

```
Database=IDRIS                                      1996-10-10 I SMA
┌──────────────>>> IDRIS QUERY BY FORM = SIMPLE VERSION <<<──────────┐
│                                                                    │
│                                                                    │
│                      ┌..... MACRO TERM .....┐                      │
│                      │                      │                      │
│                      │                      │                      │
│                      └──────────────────────┘                      │
│                                                                    │
│                                                                    │
│                      ┌..... ENGLISH  TITLE .....┐                  │
│                      │                          │                  │
│                      │                          │                  │
│                      │                          │                  │
│                      └──────────────────────────┘                  │
│                                                                    │
└────────────────────────────────────────────────────────────────────┘
 HELP          ALT    LAST            C NEXT    PREV    OPTION   EXIT
```

10-2: Example Query Worksheet

Switching Query Worksheets

1   To activate the **Query Options** menu, press **<F7>**.

The system opens the **Query Options** menu.

2   Highlight the **Mode/Worksheet** option, and press **<Enter>**.

MINISIS displays the Mode/Worksheet menu. This menu has 3
options, Line Mode, Worksheet Mode, and Switch Worksheet. A
plus sign + marks the active mode.

3   Highlight the **Switch Worksheet** option, and press **<Enter>**.

The system opens the **Select a Query Worksheet** data box.

```
Database=IDRIS                                    1996-10-10 ¦ SMA
╔═══════════════>>> IDRIS QUERY BY FORM = SIMPLE VERSION <<<═══════════╗
║  ┌──────────────────Select a Query Worksheet──────────────────┐     ║
║  │ Name...................... ████████████████████████████████ │     ║
║  │       For a list of available worksheets, press <F1>.       │     ║
║  └────────────────┌────────────────────────────┐───────────────┘    ║
║                   └────────────────────────────┘                     ║
║                                                                      ║
║              ┌─────..... ENGLISH  TITLE .....─────┐                  ║
║              │                                    │                  ║
║              │                                    │                  ║
║              │                                    │                  ║
║              └────────────────────────────────────┘                 ║
║                                                                      ║
╚══════════════════════════════════════════════════════════════════════╝
 HELP          ALT    LAST        C NEXT    PREV    OPTION  EXIT
```

10-3: Select a Query Worksheet Data Box

4   Enter the name of the required Query Worksheet, and press
<Enter>.

The system will open the Query Worksheet. If you do not know the
name of the required Query Worksheet complete steps 5 to 6.

5   To open a list of Worksheet Names, press **<F1>**.

MINISIS opens a Context-sensitive Help Screen with a list of
available Query Worksheets.

6   To select from the list, highlight the Worksheet name required and
     press **<Enter>**.

     The system clears the list, the Worksheet Name data box, the
     Mode/Worksheet menu and the Query Option menu from the
     screen. MINISIS displays the selected Worksheet. The data boxes
     in the Query Worksheet are blank.

Selecting Records Using a Query Worksheet

Database Managers create Query Worksheets for users searching a database. Each worksheet works with a particular database and set of fields. The worksheet presents the search fields using prompts and data boxes, and is designed to make searching the database easier.

This chapter explains how to complete a Query Worksheet. The chapter examines how to move around the data boxes in a form, and how to get Help for the form and data boxes.

Forms can be a single data box or a worksheet with multiple screens of prompts.

The form creator positions the prompts and data boxes and sets the relationships between the data boxes, which is the search strategy. The form creator also creates the context-sensitive and application help for the form. The prompts specify the type of data for the field. These prompts can be as simple as the name of the underlying field.

The form creator will create Query statements that the system processes after the user completes the form and presses **<Enter>**. The user does not see this processing and the system does not prompt for additional information. The number of records retrieved, called hits, is displayed on the status line of the screen.

Preliminary Information

To complete a Query Worksheet, the user needs an open database and an active Query Worksheet. For information about opening databases, see *Getting Started with MINISIS: Selecting a Database*. For information about opening Query Worksheets, see *Selecting Records Using MINISIS Query, Selecting a Query Mode*.

Expected Results

After completing and accepting a Query Worksheet, the user will have a range of records. The user can view these records on the screen or print them on a printer. For information about how to view a selection of records, see *Selecting Records Using MINISIS Query: Other Query Options*. For information about how to print a selection of records, see *Producing MINISIS Reports*.

Completing a Query Worksheet

The layout of Query Worksheets is distinct in each database, however there are common elements and the process of moving around a Query Worksheet follows the same principles.

Moving Around the Form

When a user opens a worksheet, the cursor position, by default, is in the first data box.

1   To enter data into a data box, type the information (text or numbers), or to use the Edit options press **<F7>**.

2   To accept the data entered and move to the next data box, press **<Tab>**.

3   To move down the form to a different data box, press **<Tab>**.

The cursor moves sequentially down through the data boxes.

4   To move up the form to a different data box, press **<Shift>+<Tab>**.

The cursor moves sequentially up through the data boxes.

5   To move to the first data box, press **<F3><F4>**.

6   To move to the last data box on the form, press **<F4>**.

7   To scroll down in a pageable data box, press **<F5>**.

8   To scroll up in a pageable data box, press **<F6>**.

9   To accept the form as completed and execute the search, press **<Enter>**.

10 To leave the Query Worksheet without performing a search, press **<F8>**.

MINISIS will ignore any data entered and clear the screen.

Form Level Help

To access Application Help press **<F3><F1>**.

MINISIS displays any information provided by the form creator.

Field Level Help

To access Context-sensitive Help, move the cursor to the data box for the field and press **<F1>**.

MINISIS opens the context-sensitive help and displays information about the field. This information may simply be text describing the underlying field. It may also provide access to the range of values allowed in the field, syntax and examples.

Selecting Records Using Query Statements and Strategies

Selecting records in a database is performed through the use of query statements and strategies. A query statement is an expression that selects a record, or range of records, based on specified criteria. A query strategy is a combination of query statements joined using Boolean operators.

The results of a successful query are stored in a Hit file. Hit files can be saved and recalled. This is useful when you want to exactly duplicate a search in the future.

This chapter describes

- How to enter query statements.
- The full range of MINISIS query statements
- How to use Hit Files
- How to build a Query Strategy.

Preliminary Information

This chapter assumes that the user has selected a database and is either in the Query module, in Line mode, or has initiated a Query operation from another module.

When the Query Line mode screen is active, users can call the Query Options menu. The first item on this menu is the Query Assist option. The Query Assist menu lists the various Query statements available and each menu item activates a worksheet that helps the user build the Query statement.

Expected Results

After performing a search, the results will be displayed in the Query Statement Results data box. The user can then view selected records either on the screen or print them on a printer. For information about how to view a selection of records, see *Selecting Records Using MINISIS Query: Other Query Options*. For information about how to print a selection of records, see *Producing MINISIS Reports*.

Performing a Search in Line Mode

The Query Line mode screen is split into two work areas or data boxes: the Query Statement data box, and the Query Statement Result data box.

A search is performed in Line mode by entering a statement or strategy in the Query Statement data box, and then viewing the results in the Query Statement Result data box.

1   Type a query statement in the **Query Statement** data box.

Query statements can either be entered directly, using the syntax described in the following sections or built using the Assist option. For details on using the Assist option, refer to *Selecting Records using MINISIS Query: Other Query Options.*

2   Press **<Enter>**.

The system completes the search and displays the results in the **Query Statement Result** data box.

```
Database=IDRIS                                       1996-10-10 ¦ SMA
┌════════════════════════Query Statement Results════════════════════════┐
│   #    Hits Statement                                                  │
│   1     100 sisn 1/100                                                 │
│                                                                        │
│                                                                        │
│                                                                        │
│                                                                        │
│                                                                        │
│                                                                        │
└────────────────────────────────────────────────────────────────────────┘
┌═══════════════════════════Query Statement═══════════════════════════┐
│                                                                      │
│                                                                      │
│                                                                      │
│                                                                      │
│                                                                      │
└═══════════════════To end Query session, press <F8>══════════════════┘

 HELP          ALT    LAST          C NEXT   PREV    OPTION  EXIT
```

12-1: Query Line Mode Screen

Creating Query Statements

Query statements can either be entered directly into the Query Statement data box or built by using the Assist option. The Query Assist menu provides a series of data entry worksheets that help users build the statements required.

Selecting through Comparisons

MINISIS has flexible comparison operations. Whole values or partial values can be used to select records. When whole values are used, the flexibility lies in the type of comparison. When partial values are used, the flexibility lies in the values compared.

Full Comparison

The full comparison search uses a Fast Access Table, a comparison operator and a search value to select records. The Fast Access Table is associated with a field in the database. If there is not a Fast Access Table associated with the field then a text search will be completed. The field is identified, in the search statement, by its mnemonic or alias. The search value is either another database field or a specific data element. The comparison operators are:

Operator	Name	Description
=	equal to	Selects records where the information in the search field matches the search value (or the contents of the field identified by the To Mnemonic) exactly.
<>	not equal to	Selects records where the information in the search field does not match the search value (or the contents of the field identified by the To Mnemonic).
>	greater than	Selects records where the information in the search field has a greater value.
<	less than	Selects records where the information in the search field has a lesser value.
>=	greater than or equal to	Selects records where the information in the search field matches or has a greater value.

Operator	Name	Description
<=	less than or equal to	Selects records where the information in the search field matches or has a lesser value.

Comparison Worksheet

The Comparison option on the Assist menu opens a worksheet that sets up a comparison between the contents of a search field and a second value. The second value can be typed directly or extracted from another field in the record.

```
Database=IDRIS                                              1996-10-10 ¦ SMA
                           ══Query Statement Results══
         #   Hits Statement



                              ══Comparison══
    Search Mnemonic.............................................
    Comparison Operator........................................

                              ══Search Value══



    or Mnemonic...............................................

    Relevance.................................................


                    ══To end Query session, press <F8>══


  HELP          ALT    LAST          C NEXT    PREV    OPTION   EXIT
```

12-2: Comparison Worksheet

Comparison Statement Syntax

```
{mnemonic|alias} {=|<>|>|<|>=|<=}
{mnemonic|alias|!variable|#reference
number|["]search value["]|(["]search
value["];[["]search value["]]...)}[relevance]
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic from the open database.
alias	This is a legal alias from the open database.
!variable	This is a Hold field name. The Hold field is used in Update to store a value that is used repeatedly in a session. The Hold field name must be preceded by an exclamation mark.
#reference number	This is the result line number in the Query History data box. The line number must be preceded by the number sign.
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks. Several search values can be strung together in the same comparison if they are separated by semi-colons.
relevance	This is the numeric value assigned to the selection of a record. The more statements the record satisfies, the higher the relevance number will be.

Partial and Pattern Comparison

Partial Comparison Worksheet

The Partial Comparison item on the Assist menu opens a worksheet that sets up a partial comparison between the contents of a search field and a second value. The partial comparison can be either right or left truncation or a pattern of characters and wildcard markers. The second value can be typed directly or extracted from another field in the record.

```
┌─────────────────────────────────────────────────────────────────┐
│ Database=IDRIS                              1996-10-10 │ SMA      │
│                    ══Query Statement Results══                    │
│                    ─Partial Comparison─                           │
│ Search Mnemonic.................................. ▉▉▉▉▉▉▉▉▉        │
│       ┌───────────Right Truncated Search Value───────────┐        │
│       │ ▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉ │        │
│       └──────────────────────────────────────────────────┘        │
│       ┌──────────or Left Truncated Search Value──────────┐        │
│       │ ▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉ │        │
│       └──────────────────────────────────────────────────┘        │
│     ┌────────────or Search Pattern Value────────────┐             │
│     │                                               │             │
│     │                                               │             │
│     │ or All Key Values.....................................▉     │
│     │ Relevance.............................................▉     │
│     └───────────────────────────────────────────────┘             │
│                                                                   │
│ HELP        ALT    LAST          C NEXT   PREV   OPTION  EXIT      │
└─────────────────────────────────────────────────────────────────┘
```

12-3: Partial Comparison Worksheet

Partial Comparison Statement Syntax

Right Truncation Statement

```
{mnemonic|alias} {["]search value["]@|(["]search
value["]@[;["]search value["]@]...)}
```

Left Truncation Statement

```
{mnemonic|alias} {@["]search value["]|(@["]search
value["][;@["]search value["]]...)}
```

Pattern Search Statement

```
{mnemonic|alias} PAT
{<pattern>|(<pattern>[;<pattern>]...)}
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.

Keyword	Description
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks. Several search values can be strung together in the same comparison if they are separated by semi-colons.
pattern	This is a pattern of characters and wildcard markers. If the character string contains a series of characters used in any SMA command or keyword, the string must be bracketed by quotation marks. Valid wildcard markers are: # any digit ? any character @ any number of characters (including special characters) ! any number of alphanumeric characters.

Linked Term Tables

Thesaurus Worksheet

The Thesaurus item on the Assist menu opens a worksheet that helps users construct a Thesaurus search statement. The Thesaurus search expands the range of values used in the search. The search field must be associated with a Thesaurus Table. The Thesaurus Table contains Main Terms and their associated Broader, Narrower, and Related terms. The Thesaurus Table also contains Forbidden Terms and their appropriate Use Terms. The search value is typed directly.

```
Database=IDRIS                                             1996-10-10 | SMA
                        ═══Query Statement Results═══════════════════
      #     Hits Statement


                        ─────────Thesaurus─────────
    Search Mnemonic....................................████████████
    Thesaurus Level...........................................████████
    Relationship.................................................█
                          ────────Search Value────────
    ┌─────────────────────────────────────────────────────────────┐
    │████████████████████████████████████████████████████████████│
    └─────────────────────────────────────────────────────────────┘

    Relevance.......................................................█



                    ═══To end Query session, press <F8>═══════════

  HELP          ALT     LAST          C NEXT     PREV    OPTION   EXIT
```

12-4: Thesaurus Worksheet

Thesaurus Statement Syntax

```
{mnemonic|alias} [{ALL|levels}]  {BT|NT|RT}
{["]search value["]|["]search
value["]@|@["]search value["]|(["]search
value["];["]search value["]...)}  [relevance]
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
ALL	All levels of the Thesaurus table will be used in the search.
levels	These are the thesaurus levels to be used for the search.
BT	This will search on Broader Terms.
NT	This will search on Narrower Terms.
RT	This will search on Related Terms.

Keyword	Description
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks. Several search values can be strung together in the same comparison if they are separated by semi-colons.
relevance	This is the numeric value assigned to the selection of a record. The more statements the record satisfies, the higher the relevance number will be.

Any Worksheet

The Any item on the Assist menu opens a worksheet that helps users construct an Any search statement. The Any search expands the range of values used in the search. The search field must be associated with an Any Table. The Any Table contains ANY terms and a list of associated terms. The Any Table is similar to the Thesaurus Table but lacks the restrictive structure. Rather than gathering the values into different relationships, the ANY Term has a simple list of associated terms. The search value is typed directly.

12-5: Any Worksheet

Any Statement Syntax

```
{mnemonic|alias} ANY {["]search
value["]|["]search value["]@|@["]search
value["]|(["]search value["];["]search
value["]...)} [relevance]
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks. Several search values can be strung together in the same comparison if they are separated by semi-colons.
relevance	This is the numeric value assigned to the selection of a record.The more statements the record satisfies, the higher the relevance number will be.

Positional Searches

Proximity Worksheet

The Proximity item on the Assist menu opens a worksheet that sets up a Proximity search. This type of search looks for two values in a single field within a stated distance of each other. The distance is expressed in numerics and represents the number of words between the two search values. The search values are typed directly.

```
Database=IDRIS                                        1996-10-10  I SMA
                          ══════Query Statement Results══════
       u    Hits Statement
                                  ──────Proximity──────
     Search Mnemonic..┊............................... ▮▮▮▮▮▮▮▮

                              ──────1st Search Value──────
     ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮


     Operator........................... ▮▮▮▮▮▮▮▮▮▮▮▮▮
     Distance.......................................... ▮▮▮▮▮▮

                              ──────2nd Search Value──────
     ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮


     Relevance.......................................... ▮

     HELP ▮▮▮▮    ▮▮▮  ALT    LAST ▮▮▮    C NEXT ▮▮▮  PREU ▮▮  OPTION ▮ EXIT ▮
```

12-6: Proximity Worksheet

Proximity Statement Syntax

```
{mnemonic|alias} ["]search value["]
({ADJ|WORD|dist}["]search value["]) [relevance]
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
["]search value["]	The first search value gives the data element against which the second search value will be compared.
ADJ	This will search for adjacent search values.
WORD	This will search for values one word apart.
dist	This is a numerical value indicating the maximum distance in words between search values.

Keyword	Description
relevance	This is the numeric value assigned to the selection of a record. The more statements the record satisfies, the higher the relevance number will be.

Occurrence Worksheet

The Occurrence item on the Assist menu opens a worksheet that helps users build an Occurrence search statement. An Occurrence search looks for two values in the same record. The user identifies two search fields and two search values. The search values are typed directly.

```
Database=IDRIS                                        1996-10-10 | SMA
┌──────────────────────Query Statement Results──────────────────┐
│  #    Hits Statement                                           │
│                              ─────Occurrence─────              │
│1st Search Mnemonic..............................  █████████    │
│  ┌────────────────────1st Search Value────────────────────┐   │
│  │ ██████████████████████████████████████████████████████ │   │
│  └────────────────────────────────────────────────────────┘   │
│2nd Search Mnemonic..............................  █████████    │
│  ┌────────────────────2nd Search Value────────────────────┐   │
│  │ ██████████████████████████████████████████████████████ │   │
│  └────────────────────────────────────────────────────────┘   │
│Relevance...........................................  █         │
│                                                               │
│════════════════To end Query session, press <F8>══════════════│
└───────────────────────────────────────────────────────────────┘
 HELP          ALT    LAST       C NEXT    PREV    OPTION   EXIT
```

12-7: Occurrence Worksheet

Occurrence Statement Syntax

```
{mnemonic|alias} ["]search value["]
{mnemonic|alias} {["]search value["]} [relevance]
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.

Keyword	Description
alias	This is a legal alias for the open database.
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks.
relevance	This is the numeric value assigned to the selection of a record. The more statements the record satisfies, the higher the relevance number will be.

Ignore Worksheet

The Ignore item on the Assist menu opens a worksheet that sets up a simple Ignore statement. An Ignore statement excludes records that contain a restricted value in the search field. If the field is a repeatable field, the restriction can apply to the occurrence with the restricted value, the occurrences that precede that occurrence, or the occurrences following that occurrence. The search value and restricted value are typed directly.

This worksheet in not available with this release.

Ignore Statement Syntax

```
{mnemonic|alias} {["]search value["]|["]search
value["]@|@["]search value["]}
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks.

Arithmetic Searches

Arithmetic searching is not available with this release.

Range Searches

Range Worksheet

The Range item on the Assist menu opens a worksheet that helps users build a Range search statement. The Range statement selects records that have a field value in the search field that fits between the two search values, including the search values.

This worksheet is not available with this release.

Range Statement Syntax

```
{mnemonic|alias} ["]search value["]/["]search
value["]
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
["]search value["]	This is a data element that is the value sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks.

SISN Range Worksheet

This search does not have a corresponding data entry worksheet.

SISN Statement Syntax

```
SISN ["]search value["] [/["]search value["]]
```

where

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
["]search value["]	This is SISN number that is sought in the search field. If the data element contains a series of characters used in any SMA command or keyword, the search value must be bracketed by quotation marks.

Primary and Secondary Key Searches

 Primary and secondary key searching is not available with this release.

Using Previous Hits and Strategies

 Using previous hits and strategies is not available with this release.

Searching on the Presence and Absence of Field Data

Presence/Absence Worksheet

The Presence/Absence item on the Assist menu opens a worksheet with the options for a Present or Absent search statement. These searches simply determine whether there is data in the search field. They do not examine the contents.

 This worksheet is not available with this release.

Present Statement Syntax

```
{mnemonic|alias} PRESENT
```

Absent Statement Syntax

```
{mnemonic|alias} ABSENT
```

where:

Keyword	Description
mnemonic	This is a legal mnemonic for the open database.
alias	This is a legal alias for the open database.
PRESENT	This is the keyword to search for the presence of data in a field.
ABSENT	This is the keyword to search for the absence of data in a field.

Combining Search Statements

Combine Menu and Options

The Combine item on the Assist menu opens a menu with Boolean operators and related options. These options each activate the cursor in the Query History data box. Users select the appropriate statements and the system inserts a modified statement in the Query Statement data box.

This worksheet is not available with this release.

Combine Statement Syntax

```
query statement {AND|OR|XOR|NOT} query statement
```

Refer to the section: *Building a Query Strategy* for information on using Boolean operators to combine search statements.

Saving and Recalling Query Hit Files

Saving and recalling query hit files is not available with this release.

Building a Query Strategy

When searching for records in a large database, a simple statement could find many records containing the search value. To narrow the scope of the search, a strategy should be developed. The general process for developing a query strategy is to look for the common value that would yield the highest number of hits and then narrow it down from there.

Statements can be combined using Boolean operators. The order of searching can be controlled by grouping statements.

Elements of a Query Strategy

A query strategy can consist of either one query statement or a combination of several query statements.

Single Statements

A single query statement is used when the search is confined to searching for data in one field. A query strategy made up of one statement can be a simple or a complex statement made up of many search values linked with Boolean operators.

Combining Statements

By combining statements, it is possible to narrow the scope of a search. This is achieved by combining statements that search for specific data in different fields.

The syntax for grouping statements in a query strategy is:

```
query statement {AND|OR|XOR|NOT} query statement
{AND|OR|XOR|NOT} query statement ...
```

Boolean Operations

Boolean operators are used to link query statements to build a query strategy, as well as within a query statement. There are four Boolean operators implemented in MINISIS: AND, OR, XOR, and NOT.

AND

The AND operator requires that both query statements be true for a record to be selected.

OR

The OR operator requires that only one query statement be true for a record to be selected.

XOR

The XOR operator requires that either one or the other query statement be true, but not both, for a record to be selected.

NOT

The NOT operator requires that the query statement be false for a record to be selected.

Order of Operation and Grouping Statements in a Strategy

The query operation is completed by executing the query statements in the following order: AND, OR, XOR, NOT. This order of operation can be controlled by grouping statements using brackets ( ).

Other Query Options

During an active Query session there are several options available to assist in managing the session. These options are accessed through **<F7>**, which opens the Query Options menu.

The options available are:


```
Database=IDRIS                                      1996-10-10 | SMA
                        ═Query Statement Results═
     #     Hits Statement                  ─Query Options─
                                           │ Assist        │
                                           │ Fast Access   │
                                           │ Show          │
                                           │ List          │
                                           │ Specification │
                                           │ New           │
                                           │*Hits          │
                                           │ Strategy      │
                                           │ Options       │
                                           │ Mode/Worksheet│
                        ═Query Statement═  │*Refine Search │
                                           │ Cluster Fields│
                                           │───────────────│
                                           │ Insert Text   │
                                           │ Extract/Delete Text│
                                           │ Change Text   │
                        ═To end Query session, press <F8>═

HELP            ALT     LAST          C NEXT    PREV    OPTION  EXIT
```

13-1: SMA Query Options Menu

- **Assist**

  Opens a menu that lists the worksheets available to assist in building Query statements.

- **Fast Access**

  Displays a list of the Fast Access tables for the database.

- **Show**

  Displays the results of a search on the screen.

- **List**

  Prints the results of a search to a file or printer.

- **Specification**

  Changes the Report Specification used to display records under Show or List options.

- **New**

  Ends the current Query session and starts a new session.

- **Hits**

  Opens a series of menus and worksheets for selecting, deleting, and saving Hits. This option is covered in the chapter *Selecting Records Using Query Statements and Strategies*.

- **Strategy**

  Opens a series of menus and worksheets for selecting, deleting, and saving Strategies. This option is covered in the chapter *Selecting Records Using Query Statements and Strategies*.

- **Options**

  Opens a worksheet used for setting Query session options.

- **Mode/Form**

  Opens a menu for selecting Query mode or switching Query Worksheets.

- **Refine Search**

  Opens a worksheet for entering an additional search statement. This option is only available in Form Mode.

- **Cluster Fields**

  Opens a worksheet for entering field cluster definitions. This option is only available in Line mode.

- **Insert Text**

  Allows for the insertion of text into the Query strategy being developed.

- **Extract/Delete Text**

  Allows for the deletion of text from the Query strategy being developed, and the extraction of text from the Query strategy into the MINISIS Clipboard.

- **Change Text**

  Allows for the replacement of text in the Query strategy being developed.

Preliminary Information

The Query Options menu is available during an active Query session. The menu is activated from either the Query Statement screen, or from a Query Worksheet.

Expected Results

A Query statement will be executed and records selected, or a Query Worksheet completed and records selected.

Assist

The Assist option opens a menu that lists the worksheets that can be used to build query statements. The worksheets present data boxes for the various elements that make up the query statement. This option is only available in Line Mode.

When the statement has been built, and placed in the Query Statement data box, you can then either refine the statement or press **<Enter>** to execute the search.

1   To open the **Options** menu, press **<F7>**.

    The system opens the **Query Options** menu.

2   Highlight **Assist**, and press **<Enter>**.

    The system opens the **Query Assist** menu.

3   Highlight the type of search statement that you want to build, and press **<Enter>**.

    The system opens the Assist worksheet for the statement type selected.

4   Complete the worksheet, and press **<Enter>**.

    The system will close the worksheet and place the query statement in the Query Statement data box.

Fast Access

The Fast Access option opens lists of the values in the Fast Access Tables associated with the database. The values can then be selected and entered into a search statement or an active Query Worksheet data box.

A Fast Access Table contains a list of the keys extracted and sorted from a database. A key can be a whole field, words, or terms extracted from a field. The keys are sorted and saved in records in the Fast Access Table. Each record also contains the record identifiers of each occurrence of the key.

Line Mode

1   To open the **Options** menu, press **<F7>**.

    The system opens the **Query Options** menu.

2   Highlight **Fast Access**, and press **<Enter>**.

    The system opens the **Fast Access** field list.

3   Highlight the field to be accessed, and press **<Enter>**.

    The system opens the **Fast Access Table Contents** list, which displays all occurrences of the selected field.

4   Highlight the value to be used in the search statement, and press **<Enter>**.

    The system copies the name of the field and the value selected to the Query Statement data box.

Form Mode

1   To open the **Options** menu, press **<F7>**.

    The system opens the **Query Options** menu.

2   Highlight **Fast Access**, and press **<Enter>**.

    The system opens the **Fast Access Table Contents** list.

3   Highlight the value to be used in the Query Worksheet, and press **<Enter>**.

    The system copies the value selected to the Query Worksheet data box.

Selecting from a Fast Access List

There are two types of Fast Access Lists: a list of fields, and a list of values. When the lists are displayed on the screen, a value can be selected for inclusion in either the Search Statement or Query Worksheet data box. There are two methods of searching for a value in a list: a manual or an automated search.

The Fast Access Field List

The Fast Access Field List presents the fields available for inclusion in a search statement for a Fast Access search. The fields are presented in the order defined in the database definition.

In Line Mode, the system displays this list when Fast Access is selected from the Options menu. When a field is selected, the system opens the Fast Access Field List for all occurrences of that field.

This list is not displayed in Form mode.

```
Database=IDRIS                                    1996-10-10 : SMA
┌─────────────────────Query Statement Results═══════════════
│ ┌──────Fast Access──────┐
│ │ P010                   │              ·
│ │ (AGENCY)               │
│ │ P020                   │
│ │ (FILEID)               │
│ │ P040                   │
│ │ (UPDATE)               │
│ │ P060                   │
│ │ (STATUS)               │
│ │ P120                   │
│ │ (TITLE)                │
│ │ P160              ry Statement═══════
│ │ (FNDATE)               │
│ │ P181                   │
│ │ (CONAME)               │
│ │ P311                   │
│ └───────────────────────┘
│                        + ·
└══════════To end Query session, press <F8>══════════

 HELP          ALT    LAST        C NEXT    PREV     OPTION  EXIT
```

13-2: The Fast Access Field List

The Fast Access Table Value List

The Fast Access Table Value List presents the number of occurrences and the value of the field in the Fast Access Table. This list is presented in alphabetical order.

In Line mode, the system displays this list when a field has been selected from the Fast Access List.

In Form mode, the system displays this list when Fast Access is selected from the Options menu.

```
Database=IDRIS                                        1996-10-10 ¦ SMA
══════════════════════════Query Statement Results═══════════════════
    ┌──────Fast Access──────────────────┐
    │                      ─P010─        │
    │         1 BOSTID                   │
    │         9 FINNIDA                  │
    │        73 IDRC                     │
    │        52 IFS                      │
    │         5 JICA                     │
    │        22 SAREC                    │
    │                                    │
    │                                    │
    │                                    │
    │                                    │
    │                                    │
    │                                    │
    │                                    │
    │                                    │
    └────────────────────────────────────┘

 HELP           ALT     LAST          C NEXT    PREV    OPTION  EXIT
```

13-3: The Fast Access Value List

Manual Search

Manual searching of a list is most effective when the list is short or the term required is visible on the screen.

There are two steps required to complete a manual search:

1   Page through the list until the term required is visible, by pressing
    <F5> to move to the next page or <F6> to move to the previous
    page.

2   Highlight the term required, and press <Enter>.

The system will insert the Fast Access value into the active data box.

Automated Search

Automated searching is most effective when the list is long and the term required is not visible on the screen.

A successful search will move the highlight bar to the first match of the term requested.

1   Press **<F7>**.

The system opens the **Find** data box.

2   Enter a search value, and press **<Enter>**.

The value can either be the complete term required or enough of the term so that the system can distinguish it from other terms.

For example, if you want to move to all terms that start with Z, enter Z and the system will perform a truncated search. The system completes a truncated search and moves the highlight bar to the first occurrence of the search value.

3   Highlight the term required, and press **<Enter>**.

The system will insert the Fast Access value into the active data box.

Show

The show feature is used to display the contents of selected records on the screen. Records can be displayed from both Line and Form modes. Show uses the active Report Specification to display selected records.

In both Line and Form modes, the results of the last query are displayed.

Line Mode

1   Move the cursor to the **Query Statement Results** data box by pressing **<Shift>+<Tab>**.

    The system places the cursor at the first Hit in the data box.

2   Move the cursor to the Hit for display, and press **<F7>**.

    The system opens the **Query Options** menu.

3   Highlight the **Show** option, and press **<Enter>**.

    The system will open the **Show** worksheet.

4   Select one option on the **Show** worksheet, and press **<Enter>**.

    The system will open a data box displaying the contents of the records from the most recent search. The active Report Specification is used.

Form Mode

1   To open the **Options** menu, press **<F7>**.

    The system opens the **Query Options** menu.

2   Highlight the **Show** option, and press **<Enter>**.

    The system will open the **Show** worksheet.

3   Select one option on the **Show** worksheet and press **<Enter>**.

    The system will open a data box displaying the contents of the records from the most recent search. The active Report Specification is used.

Show Worksheet

The Show worksheet is used to tell the system which of the selected records should be displayed on the screen. There are four options: **All Records**, **Last**, **All But n First**, and **Every n Records**.

All Records

This is the default option. This checkbox cues the system to display all records found in the current search.

An **X** in this checkbox activates this option. To clear the **X** from the checkbox, press **<Delete>**.

Default: Active

Last

The number entered in this data box tells the system how many records, at the end of the search, to display on the screen.

For example, if 59 records were found in the search and 20 is entered into this data box, the system will display the last 20 records (i.e. 40-59) on the screen.

The number entered in this data box must be greater than zero and less than or equal to the number of records found in the search.

Default: Blank

All But n First

The number entered in this data box tells the system how many records to skip before displaying the records on the screen. This number must be greater than zero and less than the number of records found in the search.

Default: Blank

Every n Records

Displays every n-th record, starting with the first found record.

Show Record data box

This data box is opened by the system when Show is selected from the Query Options menu. The records found in the selected search are displayed using the active Report Specification.

The display includes the name of the Report Specification used and pagination markers. Pagination markers are plus signs + in the top and bottom borders. A + in the top border indicated that there is text on the previous page. A + in the bottom border indicates that there is text on the next page.

Figure 13-4 provides an example of the Show Record data box.

```
Database=IDRIS                                          1996-10-10 ¦ SMA
                        ─Show Record(s) using <Default>─
SISN=1
P010               : IDRC
P020               : 77-0106
P060               : Closed
P120               : Charcoal Stoves (Tanzania)
.P191              : 44300
.P192              : CAD
P160               : 19790000
P170               : 19830500
.P311              : UNIVERSITY OF DAR ES SALAAM
.P312              : Dar es Salaam
.P313              : TZ
.P314              : FORESTRY DIVISION, FACULTY OF AGRICULTURE AND VETERINARY
                     SCIENCE, UNIVERSITY OF DAR ES SALAAM, P.O. BOX 643,
                     MOROGORO, TANZANIA
P340               : 1. Charcoal Stove Project (Tanzania) : final report to
                     IDRC. 25 p. 1983.
P410               : /Tanzania/
P420               : /charcoal/
P430               : /stoves/ /engineering design/
                                                                         +
 HELP            ALT     LAST          C NEXT     PREV     OPTION  EXIT
```

13-4: The Show Record Data Box

Moving Around the Show Record data box

- To display the next page, press **<F5>**.
- To display the previous page, press **<F6>**.
- To move the cursor to the end of the last record, press **<F4>**.
- To move the cursor to the top of the first record, press **<F3><F4>**.

List

The list feature is used to print records to a specified printer. List uses the active Report Specification to print the records selected in the last query.

The options available are the same as described earlier in this chapter with the **Show** option.

Specification

This feature is used to select the Report Specification to be used when displaying records on the screen using the **Show** option, or printing a report using the **List** option.

The Specification option is not available with this release.

New

Select the **NEW** option to cancel the current search, and begin defining a new search.

Hits

The Hits option is not available with this release.

Strategy

The Strategy option is not available with this release.

Options

This menu item is used to override the default Query session options. The options available are:

General

- Reflect Truncated Indices
- Search Detail
- Non-Existent Indices Warning
- Record ranking

Thesaurus

- Enable Translation
- Enable Forbidden Terms
- Reflect Expanded Terms
- Search Language

@LEVEL 3 = Display Fast Access

- Number of lines/display
- Show zero-hits indices

Display Record

- Number of lines/display
- Reverse Order
- Highlight Indices
- Threshold

Setting the Session Options

1   To open the **Options** menu, press **<F7>**.

    The system opens the **Query Options** menu.

2   Highlight **Options**, and press **<Enter>**.

    The system opens the **Query Session Options** worksheet.

3   Complete the prompts as required for the Query session.

To accept the changes

1   Press **<Enter>**.

     The system will close the Query Session Options worksheet, and
     the default Query session options will be overridden for this
     session.

To cancel the changes

1   Press **<F8>**.

     The system will close the Query Session Options worksheet, and
     cancel any changes to the Query session Options.

Mode/Form

The Mode/Form option is used to switch between Line and Form modes, and to select a Query Worksheet when in Form mode. It opens a menu to select Line Mode, Form Mode, or Switch Form. The default mode and form is set by the Database Manager in the user profile.

For details on the use of the Mode/Form option refer to the chapter *Selecting a Query Mode*.

Refine Search

The Refine Search option is not available with this release.

Cluster Fields

The Cluster Fields option is not available with this release.

Insert Text

The **Insert Text** option is used to enter text into the current field. The text can be entered in one of two ways: the **New Text** data box can be used if the text string is only going to be entered once; and the **or from Clipboard** checkbox can be used if the text has been previously saved in the MINISIS Clipboard.

The user enters text in the **New Text** data box and the system inserts the data into the current field. If the text string being inserted causes the field length to be exceeded an error message will be displayed.

The **or from Clipboard** checkbox can be used if the text is going to be entered multiple times. The MINISIS Clipboard is a specialized hold field. The user must first have entered the required text string into the MINISIS Clipboard, using one of the other edit options such as the **Copy Text to the Clipboard** option of the **Extract/Delete** option or the **Hold on Clipboard** option of the **Hold/Clear Value** option. Once the text string is in the MINISIS Clipboard, the text can be inserted into multiple fields or records without having to re-enter the text string each time.

1   Highlight **Insert Text**, and press **<Enter>**.

    The system displays the prompt, **"Put cursor under insert point and press <ENTER>. To cancel, press <F8>"**.

2   Use the arrow keys to position the cursor where you want to insert the text in the field, and press **<Enter>**.

    The system displays the **Insert Text** data box at the bottom of the screen. This data box has two prompts: the **New Text** prompt and scrollable window; and the **or from Clipboard** prompt and checkbox.

To Insert Data into the Field from the New Text Data Box

1   Type the new data into the data box.

To accept the data

2   Press **<Enter>**.

    If the data entered is too long, the system displays the message, **New string will exceed maximum length of data**. If the new text fits in the target field, it is inserted starting at the cursor position.

To abandon the changes

3   Press <F8>.

The message **Operation cancelled** is displayed and the system
returns to the worksheet.

To Insert Data into the Field from the MINISIS Clipboard

1   Press the <Tab> key.

The system moves the cursor to the **or from Clipboard** checkbox.

2   To copy text from the MINISIS Clipboard, type an **X** in the **or from
Clipboard** checkbox.

To accept the data

3   Press <Enter>.

If there is nothing in the MINISIS Clipboard, the system displays the
message, **Clipboard is empty**. Otherwise, the system copies any
text from the MINISIS Clipboard into the target field, starting at the
cursor position. To see the contents of the MINISIS Clipboard, use
the **Show** option of the **Edit Options** menu to display the hold
fields and their contents.

To abandon the changes

4   Press <F8>.

The message **Operation cancelled** is displayed and the system
returns to the worksheet.

Extract/Delete Text

The **Extract/Delete Text** option is used to either delete text from the current field or copy or move text from the current field into the MINISIS clipboard.

The user can delete text from the current field by using the **Delete Text** option. This option differs from the **Delete Field** option. The **Delete Field** option empties the contents of the entire field, while the **Delete Text** option prompts the user for the start and end position of the text to be removed. This option can be used to empty the entire field or to remove part of the text in the field.

To enter text into the MINISIS Clipboard for insertion into other fields or records, the user can select the **Copy Text to the Clipboard** option or the **Move Text to the Clipboard** option. The difference between them is that the **Copy Text to the Clipboard** option places a copy of the text in the MINISIS Clipboard and leaves the current field unchanged, while the **Move Text to the Clipboard** option removes the text string from the current field and places the text string in the MINISIS Clipboard.

1   Highlight **Extract/Delete Text**, and press **<Enter>**.

The system displays the **Extract/Delete Text** menu.

To Delete Text from a Field

1   Highlight **Delete Text**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**".

2   Use the arrow keys to position the cursor where you want to start deleting the text from the field, and press **<Enter>**.

The system displays the prompt, "**Put cursor under end of string and press <ENTER>. To cancel, press <F8>**.

3   Use the arrow keys to position the cursor where you want to end deleting the text from the field, and press **<Enter>** key.

The system removes the selected text and refreshes the worksheet screen.

To Copy Text to the MINISIS Clipboard

1   Highlight **Copy Text to the MINISIS Clipboard**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**.

2   Use the arrow keys to position the cursor where you want to start
     copying the text from the field into the MINISIS Clipboard, and
     press **<Enter>**.

The system displays the prompt, **Put cursor under end of string**
and press <ENTER>. To cancel, press <F8>.

3   Use the arrow keys to position the cursor where you want to end
     copying the text from the field, and press **<Enter>**.

The system copies the selected text into the MINISIS Clipboard. To
see the contents of the MINISIS Clipboard, use the **Show Hold**
Fields option of the **Show** menu.

To Move Text to the MINISIS Clipboard

1   Highlight **Move Text to Clipboard**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string**
and press <ENTER>. To cancel, press <F8>.

2   Use the arrow keys to position the cursor where you want to start
     moving the text from the field into the MINISIS Clipboard, and
     press **<Enter>**.

The system displays the prompt, **Put cursor under end of string**
and press <ENTER>. To cancel, press <F8>.

3   Use the arrow keys to position the cursor where you want to end
     moving the text from the field, and press **<Enter>**.

The system moves the selected text into the MINISIS Clipboard and
refreshes the worksheet. To see the contents of the MINISIS
Clipboard, use the **Show Hold Fields** option of the **Show** menu.

To accept the data and complete the record changes

1   Press **<Enter>**.

To abandon the changes

1   Press **<F8>**.

Change Text

The **Change Text** option is used to change a text string in the current field. The user is prompted to indicate the start and end position of the text string he wants to change. Then, the user types the replacement text in the **New Text** data box.

To change one instance of the text string, the user does not use the checkboxes. When the **<Enter>** key is pressed, the system replaces the specified text string with the text string from the **New Text** data box.

The **Change All Instances** checkbox is used to perform the same change multiple times within a single occurrence of a field. This option causes the system to search the current field for every instance of the text string and replace every instance with the text string from the **New Text** data box. This is useful for doing a global change on a lengthy text field. For example, every date in a field can be updated by changing every instance of "96" to "97".

1   Highlight **Change Text**, and press **<Enter>**.

   The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**.

2   Use the arrow keys to position the cursor where you want to start changing the text in the field, and press **<Enter>**.

   The system displays the prompt, **Put cursor under end of string and press <ENTER>. To cancel, press <F8>**.

3   Use the arrow keys to position the cursor where you want to end changing the text in the field, and press **<Enter>**.

   The system displays the **New Text** data box at the bottom of the screen. This data box has three prompts: the **New Text** prompt and scrollable window; the **Change All Instances** prompt and checkbox, and the **Change All Occurrences** prompt and checkbox.

4   Type the replacement text in the **New Text** data box.

To change one instance of the text in the field

1   Press **<Enter>**.

   If the data entered is too long, the system displays the message, **New string will exceed maximum length of data**. If the replacement text fits in the field, the system replaces the selected data in the field with the data from the **New Text** data box.

To change every instance of the text in the field

1   Press **<Tab>**.

The system positions the cursor in the **Change All Instances** checkbox.

2   To select change all instances of the text string, type an **X** in the checkbox, and press **<Enter>**.

The system changes all instances where the string exists in the field, including any instances in a scrollable data box which are not displayed, with the text from the New Text data box. For example, the user could change every instance of "3" to "4" in a field.

If you want to change all instances of the word, "cat", but you do not want to change words such as "catastrophe" or "concatenate", make sure you enter " cat " (with a space before and after), and not "cat". This instructs the system to replace whole words, not text strings within words.

This technique will not work for instances of "cat" that are plural or immediately followed by a punctuation mark.

Logging and Analyzing a Query Session

This function is not available with this release.

Using MINISIS Mail

This function is not available with this release.

Using MINISIS Update to Add and Modify Records
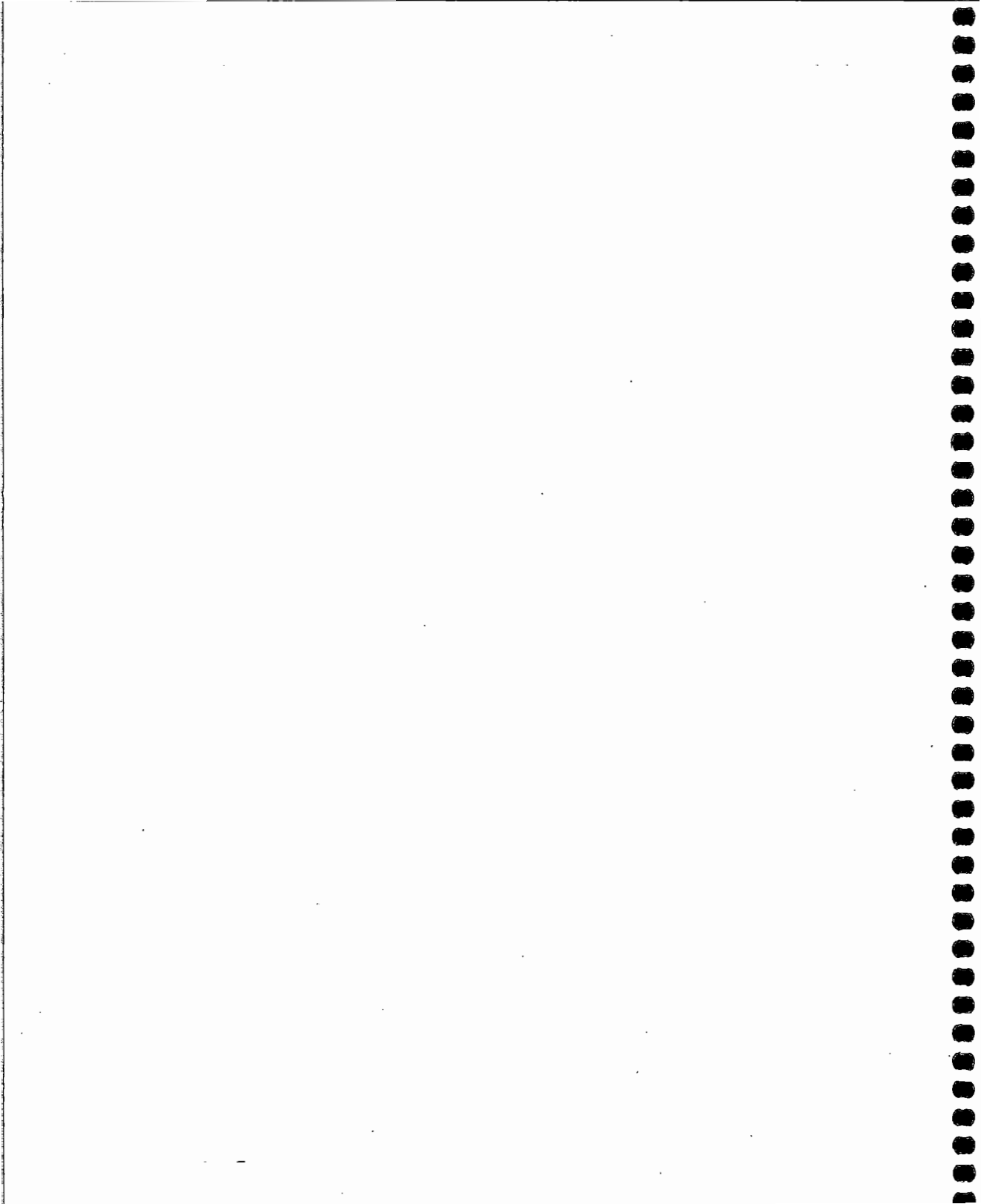
Introduction to MINISIS Update

This part explains how to use the features in the **Update** module. These features allow users to enter and change records in interactive sessions, and to change records in batch or background sessions. An interactive session can be run in either scroll mode or full-screen mode. When working in scroll mode, the menus and prompts for a data entry worksheet roll up from the bottom of the screen. In full-screen mode, the menus and worksheets are presented in full screen displays. The batch and background sessions change selected records using instructions contained in a Global Change Specification.

The **Update** chapters explain some background information first, how to use the tools in Update and then how to add records. A summary of the **Query** options is presented, and then the instructions on how to change records. The last chapters explain how to lock and unlock records, and, finally, how to use Global Change Specifications.

Global Change Specifications are not available with this release.

To understand the database structure better, refer to *SMA Database Manager's Guide*.

Chapter List

The Update Module

This chapter gives an overview of the **Update** module, including its options and features.

MINISIS Fields

This chapter describes, very briefly, the attributes of MINISIS fields.

Selecting a Data Entry Worksheet

This chapter describes how to activate a data entry worksheet for the **Update** session.

Data Entry Edit Options

This chapter describes the options available to assist in the process of adding and modifying records.

Adding Records

This chapter describes how to add a record to the database.

Setting the Default Values for a Session

Users can set up default field values for a session. These values override the defaults set in the field definitions of the database specification. These values are only active for the current session.

Creating a Query Strategy for Selecting Records

This chapter describes how to use a query strategy to select records for changing, deleting, locking, and unlocking activities.

Changing Records

This chapter describes how to change selected records.

Deleting Records

This chapter describes how records can be selected and deleted, either individually or as a group.

Locking and Unlocking Records

Locking records prevents users from changing the data in the records. Unlocking releases those records for change and, in some cases, indexing. This chapter describes how to protect and release selected records.

Global Change Specifications

 This feature is not available with this release.

The MINISIS Update Module

The MINISIS Update function revises a database by adding, changing, or deleting records. Update can also lock records against change and release locked records for editing, either individually or globally.

To revise a database, Update displays prompts on the screen. The prompts can be displayed in either scroll mode or full-screen mode.

In scroll mode, MINISIS rolls the prompts up from the bottom of the screen. In full-screen mode, MINISIS presents the prompts in worksheets.

Global Change Specifications are used to change existing records using a batch job.

Within the Update function the user can:

- add records
- change records
- select data entry worksheets
- change a range of records in a batch job
- create a batch job
- list the available batch jobs
- change the status of records.

The **Update** menu presents the following options:

- **Add**

  Use this option to create records in an interactive session.

- **Change**

  Use this option to select and alter the contents of records in an interactive session.

- **Worksheet**

  Use this option to choose a worksheet. The option gives users access to the data entry worksheets defined for the database.

- **Global Change**

  Use this option to start a Global Specification batch job that changes records in a database.

- **Edit Specification**

    Use this option to define the actions for the global changes.

- **List Specification**

    Use this option to print the attributes of the Global Specifications available for the active database. The attributes of one or more of the specifications is sent to the default printer.

- **Change Status**

    This item opens a menu and worksheets for locking and unlocking records and for setting the default values for the records to be entered.

Adding Records

The **Update** module allows users to add one or more records to the database in an interactive session. When **Add** is selected from the **Update** menu, shown in Figure 17-1, the default worksheet is opened. The default values are in place but all other fields are empty.
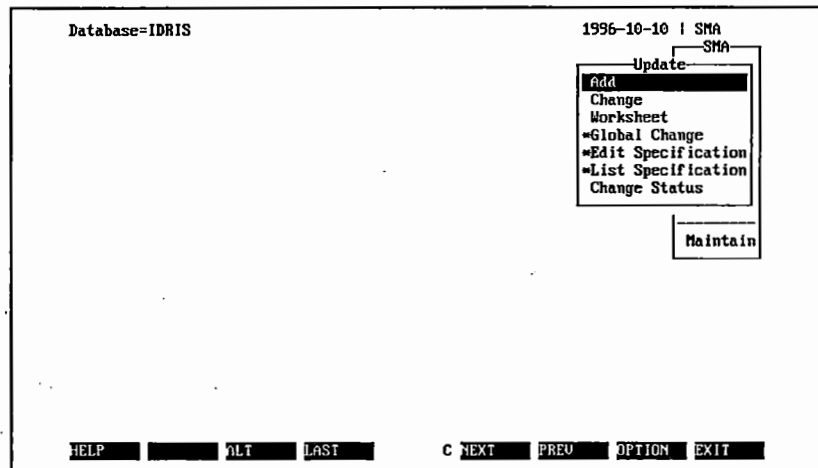
17-1: SMA Update Menu

When adding records, users fill in the necessary fields, moving from field to field using **<Tab>**, and **<Enter>** when the record is complete. MINISIS examines the record, checks that all mandatory fields have data, that all data entered into fields matches the field definitions for data type and length, and that data in any fields associated with a Validation List or Table is acceptable (can be found in the list).

When adding records in full screen mode, the worksheet is displayed using as much of the screen display area as required. The worksheet may have more than one form. If the worksheet has more than one form, the forms are numbered as pages. Each form presents a series of prompts and data boxes. The user types data into the boxes and moves between the data boxes using the <Tab> key and the <Shift>+<Tab> key combination. When all necessary fields are completed, the user presses <Enter> to save the record.

When adding records in Scroll mode, the worksheet appears as a series of prompts rolling up from the bottom of the screen. The users types data after the prompt and presses the <Enter> key, or simply presses the <Enter> key to bypass the prompt.

Changing Records

The Update module allows users to select and change one or more records in the database in both interactive and batch or background sessions. The **Change** option on the **Update** menu activates the interactive session options.

When the **Change** option is activated from the **Update** menu, a Query session is initiated. The Query session will begin in one of the following ways:

1   If this is not the first **Query** of the **Update** session, and the user is in **Form Mode** (default mode), the **Query** session will open with the last used **Query Worksheet** and the last **Query** results active. Users are prompted to either accept the last **Query** results or start a new session.

2   If this is not the first **Query** of the **Update** session, and the user is in **Line Mode**, the **Query** session will open the **Query Statement List** with the last Query results active. Users are prompted to either accept the last **Query** results or start a new session.

3   If this is not the first **Query** of the **Update** session, and the user is in **Scroll Mode**, the user can select the last **Query** results or enter a new **Query Statement**.

4   If this is the first **Query** of the **Update** session, and the user is in **Form Mode**, the **Query** session will open the default **Query Worksheet**.

5   If this is the first **Query** of the **Update** session, and the user is in **Line Mode**, the **Query Statement List** is opened.

6   If this is the first **Query** of the **Update** session, and the user is in **Scroll Mode**, the **Query Statement Prompt** appears.

Once the records for change are selected using the **Query** submodule, each selected record is displayed.

In full-screen mode, the records are displayed using the active worksheet. In Scroll mode, they are displayed line by line. Users can make any necessary changes to each record. After each record is completed, the next record in the sequence is displayed.

Field Clusters

MINISIS allows Database Managers and developers to create databases with multi-purpose or multiple levels of information. These purposes or levels can be gathered into Field Clusters. The clusters control the field prompting.

Global Change

Global Update is a feature that allows users to change data in a range of records in a database using a batch or background job. This feature is especially useful if the procedures used in managing the data are to be repeated on many records.

Global Update allows users to automate the selection of records in a database. The Global Specification uses a command language to control the process of changing data in records. The results of the job can be listed in a special report.

The full set of Query options are available to the Global Specification batch job. The criteria for selecting records is entered either as a Query statement or in response to a Query Worksheet. The records selected through the Query are then changed according to the subsequent commands.

The command language allows users to add, change, delete, replace, move, list, and copy fields. Adding creates a new occurrence of a field. Change alters the information stored in a field. Change can replace part of the information or insert information. Delete removes the information stored in a field. Replace erases the data in a field and inserts new data. Move erases the data in a field and copies it into another field. List displays the contents of a field; this is useful for reporting the changes made to fields after a Global Update job. Copy duplicates the information from one field into another field.

Global Update reports can show all of the messages that result from the actions in the job. These reports can include the output from the List command, as well as any error messages generated by the system. These reports can also be restricted to displaying only the error messages.

Global Update makes the process of maintaining the database easy by allowing records to be changed as a group. The easy to use command language is the same as the commands in the main submodules of Update. The job can be run at a time when system resources are available and the job can be scheduled to run regularly (for example, weekly or monthly).

If the System Fails

If the Update or Global session is ended due to error, any currently active add, change, lock/unlock, or delete operations will fail. The open record will remain locked until the system is reset. All other users in the same account, must exit MINISIS. The next time MINISIS is activated from that account, the following message is displayed:

"Last run of MINISIS aborted - DB <database name>"

The record or records that were active at the time of the crash will be displayed. These records can then be unlocked and work on them can continue.

If the Database Manager rectifies the situation before other users logon, the message will not be displayed.

MINISIS Fields

This chapter describes the types of fields, data, and validation available in MINISIS.

In general, a field is the smallest unit in a database that contains information. A record has one or more fields.

Table 18-1 lists the different types of fields available in MINISIS. Table 18-2 lists the different field attributes available in MINISIS. Table 18-3 lists the different data types available in MINISIS.

MINISIS processes the data entered into worksheets as shown in Table 18-4.

MINISIS displays an error message if a field has the wrong data type. If the field is a validated field, MINISIS tests the contents of the field, and if there are unacceptable values, the validation list is displayed for the field.

Table 18-1: Field Types	
Field Type	**Description**
Elementary	This is the most basic type of field. An elementary field is not subdivided.
Grouped	This field is a header field with a set or collection of fields that can be accessed through it. The member fields can be accessed collectively or individually.
MARC	A MARC field is a specialized form of Group. This type of Group is used primarily in libraries. Each member of the MARC Group is identified by a special symbol. The members and their symbols are standardized in various countries and within various organizations. For example: UNIMARC, CANMARC, and USMARC are all standards defined for MARC Groups.

Table 18-2: Field Attributes	
Attribute	**Description**
Mandatory	Data must be typed into mandatory fields. MINISIS allows fields to be designated mandatory only under certain conditions. These conditions are stated in the database specification using Query statements.
Repeatable	There may be multiple occurrences of the field. The information in each occurrence may be different. Each occurrence is dynamically given a sequential number by the system.
Forbidden	Data cannot be typed directly into a forbidden field. MINISIS allows fields to be designated forbidden only under certain conditions. These conditions are stated in the database specification using Query statements.
Display Only	Fields that are forbidden or system-generated fields can be shown on a worksheet. These fields are for display only. The user cannot position the cursor in the data box for this field, or directly affect the information in this field.
Field Cluster	Field Clustering gathers fields from within a record into logical subsets. Each Field Cluster has its own prompting sequence. The fields can be shared amongst Field Clusters. Field Clusters either have a Cluster Name or a Cluster Prompt. This is displayed at the beginning of a data entry session. Whichever Cluster the user chooses at that time is used throughout the Update session.
Validated	Special lists or tables can be associated with a field. MINISIS uses these lists and tables to restrict the data accepted in a field. Validation Lists are part of the database specification and cannot be changed during data entry. Validation Tables are separate entities and can be updated directly if the Database Manager has activated the Update option for the table. The Update option allows users to add values to the Validation Table during an Update session.
Auto-Incremental	MINISIS allows database fields to be associated with a scheme that increments the value in the field. These schemes are called Auto Incremental Schemes. The database field is given an initial value and every record entered into the database is assigned a unique value based on the combination of the initial value and the Auto Incremental Scheme.
Read-Only	Fields may be designated as read-only. These fields cannot accept data entry or changes.

Table 18-3: Data Types

Data Type	Description
Character	The data type CHARACTER allows the field to hold any combination of alphanumeric characters that can be displayed.
Numeric	The data type NUMERIC allows the field to hold any numerical value, including positive (+), negative (-) and decimal (.) values.
Date	The data types DATE are special numerical field types. MINISIS has two date formats, DATE1 and DATE2. DATE1 formats the field YYYY-MM-DD where: YYYY represents the full numerical year value MM represents the numerical value for the month (1-12) DD represents the day of the month (1-31) DATE2 formats the field DD/MM/YY where: DD represents the day of the month (01-31) MM represents the numerical value for the month (01-12) YY represents the last two digits of the numerical year value
Logical	The Logical field (LOG) contains either a **T** or a **F**. If the field contains a **T**, the field value is True. If the field contains a **F**, the field value is False.
Filename	The Filename (FILE) field type identifies an external file that contains the field information. This type of field must have a User Routine to process any data in the file.

Table 18-4: Data Processing

Platform	Validate and Verify Fields
DOS	MINISIS checks individual fields after **<Tab>** or **<F5>** is pressed.
MPE/iX	MINISIS checks all data when **<Enter>** is pressed.

Selecting a Data Entry Worksheet

This chapter describes how to select a data entry worksheet for the Update session. Each database can have one or more worksheets and the active worksheet can be changed several times in a session to accommodate different data entry needs.

The chapter begins with a brief definition of the MINISIS data entry worksheet and then explains how to select a worksheet by name or from a list.

Preliminary Information

These instructions assume that the user has an open database and has opened the **Update** menu. The worksheets available for data entry can be listed and selected.

Expected Results

When these instructions are completed, the data entry worksheet identified will become the active worksheet for the **Update** session.

In full screen mode, MINISIS displays worksheets using as much of the screen area as required. The worksheet may have more than one form. Each form presents a series of prompts and data boxes. The user types data into the data boxes and moves between them using the **<Tab>** key and the **<Shift>+<Tab>** key combination. When all necessary fields are completed, the user presses **<Enter>** to save the record.

In scroll mode, the worksheet appears as a series of prompts rolling up from the bottom of the screen. Type data after the prompt and press **<Enter>**, or simply press **<Enter>** to bypass the prompt.

Selecting a Worksheet

1   Highlight the **Worksheet** option, and press **<Enter>**.

2   Highlight **Predefined**, and press **<Enter>**.

The system opens the **Select Worksheet** data box, shown in Figure 19-1.

```
Database=IDRIS                                    1996-10-10 : SMA
                                                      ┌──SMA──
                                             ┌──────Update──
                                             ┌──────Worksheet──
                        ┌──Select Data Entry Worksheet─
                   │Name.....................  ░░ ░░ ░░░ ░░░│
                        │    For a list of worksheets, press <F1>.      │
                                                                   ┐n
                                                       │*List Specification│
                                                       │ Change Status     │
                                                       └───────────────────
                                                                │ Maintain│


 HELP          ALT     LAST          C NEXT    PREV    OPTION  EXIT
```

19-1: Select Worksheet data box

3   Type the name of the worksheet if you know it, and then continue with step 5. Otherwise, press **<F1>**.

The system opens a list of the worksheets available for the active database. The worksheets are listed in alphabetical order.

4   Highlight a worksheet name.

5   For information about the worksheet, press **<F1>**.

The system will display any text that the Database Manager has included in the worksheet definition.

6   To activate the highlighted worksheet, press **<Enter>**.

The system activates the selected worksheet. Any **Add** or **Change** actions initiated during the session use this worksheet.

Data Entry Edit Options

The **Edit Options** menu allows the user to change data in existing fields or to add data to new fields.

One of the features of the **Edit Options** menu is the MINISIS Clipboard. The MINISIS Clipboard is a specialized hold field. It provides a way to enter data into a field from more than one different field. It also provides a way of moving data between records in a database, or moving data between different databases.

Overview of the Edit Options

The **Edit Options** menu displays after **<F7>** has been pressed.

The first four options, **Insert Text**, **Extract/Delete Text**, **Change Text**, and **Find Text**, are all text operations. These four options allow the user to manipulate parts of the contents of a data field without having to manipulate the contents of the entire field.

The next two options, **Go to**, and **Hold/Clear Value** are general edit options.

The last seven options, **Delete Field**, **Replace Field**, **Move Field**, **Copy Field**, **Insert Occurrence**, **Find Occurrence** and **Show** operate on a field or record level.

Preliminary Information

This chapter assumes that a database has been opened; a **Query** strategy has been run to retrieve the records to be modified; and **Update**, **Add**, **Change**, or **Worksheet** has been selected. At this point, after tabbing to the field to be edited, the user presses **<F7>**. The system displays the **Edit Options** menu.

Insert Text

The **Insert Text** option is used to enter text into the current field. The text can be entered in one of two ways: the **New Text** data box can be used if the text string is only going to be entered once; and the **or from Clipboard** checkbox can be used if the text has been previously saved in the MINISIS Clipboard.

The user enters text in the **New Text** data box and the system inserts the data into the current field. If the text string being inserted causes the field length to be exceeded an error message will be displayed.

The **or from Clipboard** checkbox can be used if the text is going to be entered multiple times. The MINISIS Clipboard is a specialized hold field. The user must first have entered the required text string into the MINISIS Clipboard, using one of the other edit options such as the **Copy Text to the Clipboard** option of the **Extract/Delete** option or the **Hold on Clipboard** option of the **Hold/Clear Value** option. Once the text string is in the MINISIS Clipboard, the text can be inserted into multiple fields or records without having to re-enter the text string each time.

1   Highlight **Insert Text**, and press **<Enter>**.

    The system displays the prompt, "**Put cursor under insert point and press <ENTER>. To cancel, press <F8>**".

2   Use the arrow keys to position the cursor where you want to insert the text in the field, and press **<Enter>**.

    The system displays the **Insert Text** data box at the bottom of the screen. This data box has two prompts: the **New Text** prompt and scrollable window; and the **or from Clipboard** prompt and checkbox.

To Insert Data into the Field from the New Text Data Box

1   Type the new data into the data box.

To accept the data

2   Press **<Enter>**.

    If the data entered is too long, the system displays the message, **New string will exceed maximum length of data**. If the new text fits in the target field, it is inserted starting at the cursor position.

To abandon the changes

3   Press <F8>.

The message **Operation cancelled** is displayed and the system
returns to the worksheet.

To Insert Data into the Field from the MINISIS Clipboard

1   Press the **<Tab>** key.

The system moves the cursor to the **or from Clipboard** checkbox.

2   To copy text from the MINISIS Clipboard, type an **X** in the **or from
Clipboard** checkbox.

To accept the data

3   Press <Enter>.

If there is nothing in the MINISIS Clipboard, the system displays the
message, **Clipboard is empty**. Otherwise, the system copies any
text from the MINISIS Clipboard into the target field, starting at the
cursor position. To see the contents of the MINISIS Clipboard, use
the **Show** option of the **Edit Options** menu to display the hold
fields and their contents.

To abandon the changes

4   Press <F8>.

The message **Operation cancelled** is displayed and the system
returns to the worksheet.

Extract/Delete Text

The **Extract/Delete Text** option is used to either delete text from the current field or copy or move text from the current field into the MINISIS clipboard.

The user can delete text from the current field by using the **Delete Text** option. This option differs from the **Delete Field** option. The **Delete Field** option empties the contents of the entire field, while the **Delete Text** option prompts the user for the start and end position of the text to be removed. This option can be used to empty the entire field or to remove part of the text in the field.

To enter text into the MINISIS Clipboard for insertion into other fields or records, the user can select the **Copy Text to the Clipboard** option or the **Move Text to the Clipboard** option. The difference between them is that the **Copy Text to the Clipboard** option places a copy of the text in the MINISIS Clipboard and leaves the current field unchanged, while the **Move Text to the Clipboard** option removes the text string from the current field and places the text string in the MINISIS Clipboard.

1 Highlight **Extract/Delete Text**, and press **<Enter>**.

The system displays the **Extract/Delete Text** menu.

To Delete Text from a Field

1 Highlight **Delete Text**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**".

2 Use the arrow keys to position the cursor where you want to start deleting the text from the field, and press **<Enter>**.

The system displays the prompt, "**Put cursor under end of string and press <ENTER>. To cancel, press <F8>**.

3 Use the arrow keys to position the cursor where you want to end deleting the text from the field, and press **<Enter>** key.

The system removes the selected text and refreshes the worksheet screen.

To Copy Text to the MINISIS Clipboard

1 Highlight **Copy Text to the MINISIS Clipboard**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**.

2   Use the arrow keys to position the cursor where you want to start copying the text from the field into the MINISIS Clipboard, and press **<Enter>**.

The system displays the prompt, **Put cursor under end of string and press <ENTER>. To cancel, press <F8>**.

3   Use the arrow keys to position the cursor where you want to end copying the text from the field, and press **<Enter>**.

The system copies the selected text into the MINISIS Clipboard. To see the contents of the MINISIS Clipboard, use the **Show Hold Fields** option of the **Show** menu.

To Move Text to the MINISIS Clipboard

1   Highlight **Move Text to Clipboard**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**.

2   Use the arrow keys to position the cursor where you want to start moving the text from the field into the MINISIS Clipboard, and press **<Enter>**.

The system displays the prompt, **Put cursor under end of string and press <ENTER>. To cancel, press <F8>**.

3   Use the arrow keys to position the cursor where you want to end moving the text from the field, and press **<Enter>**.

The system moves the selected text into the MINISIS Clipboard and refreshes the worksheet. To see the contents of the MINISIS Clipboard, use the **Show Hold Fields** option of the **Show** menu.

To accept the data and complete the record changes

1   Press **<Enter>**.

To abandon the changes

1   Press **<F8>**.

Change Text

The **Change Text** option is used to change a text string in the current field. The user is prompted to indicate the start and end position of the text string he wants to change. Then, the user types the replacement text in the **New Text** data box.

To change one instance of the text string, the user does not use the checkboxes. When the **<Enter>** key is pressed, the system replaces the specified text string with the text string from the **New Text** data box.

The **Change All Instances** checkbox is used to perform the same change multiple times within a single occurrence of a field. This option causes the system to search the current field for every instance of the text string and replace every instance with the text string from the **New Text** data box. This is useful for doing a global change on a lengthy text field. For example, every date in a field can be updated by changing every instance of "96" to "97".

The **Change All Occurrences** checkbox is used to change every instance of the text string for every occurrence of a repeatable field. This option causes the system to search every occurrence of the field for the specified text string and to replace it with the text string from the **New Text** data box.

1   Highlight **Change Text**, and press **<Enter>**.

The system displays the prompt, **Put cursor under start of string and press <ENTER>. To cancel, press <F8>**.

2   Use the arrow keys to position the cursor where you want to start changing the text in the field, and press **<Enter>**.

The system displays the prompt, **Put cursor under end of string and press <ENTER>. To cancel, press <F8>**.

3   Use the arrow keys to position the cursor where you want to end changing the text in the field, and press **<Enter>**.

The system displays the **New Text** data box at the bottom of the screen. This data box has three prompts: the **New Text** prompt and scrollable window; the **Change All Instances** prompt and checkbox, and the **Change All Occurrences** prompt and checkbox.

4   Type the replacement text in the **New Text** data box.

To change one instance of the text in the field

1   Press **<Enter>**.

If the data entered is too long, the system displays the message, **New string will exceed maximum length of data**. If the replacement text fits in the field, the system replaces the selected data in the field with the data from the **New Text** data box.

To change every instance of the text in the field

1   Press **<Tab>**.

The system positions the cursor in the **Change All Instances** checkbox.

2   To select change all instances of the text string, type an **X** in the checkbox, and press **<Enter>**.

The system changes all instances where the string exists in the field, including any instances in a scrollable data box which are not displayed, with the text from the New Text data box. For example, the user could change every instance of "3" to "4" in a field.

To change text in every occurrence of a repeating field

1   Press **<Tab>** twice.

The system positions the cursor at the **Change All Occurrences** checkbox.

2   To change all instances of the string in every occurrence of the repeating field, type an **X** in the checkbox, and press **<Enter>**.

The system replaces every instance of the string, in every occurrence of the repeating field, with the text from the **New Text** data box. This option only works for elementary repeatable fields.

If you want to change all instances of the word, "cat", but you do not want to change words such as "catastrophe" or "concatenate", make sure you enter " cat " (with a space before and after), and not "cat". This instructs the system to replace whole words, not text strings within words.

This technique will not work for instances of "cat" that are plural or immediately followed by a punctuation mark.

Example

If there is a repeatable group such as Researcher, and Researcher contains
the fields Researcher_name and Area_of_interest. Within the group,
Researcher_name only occurs once, but Area_of_interest can occur multiple
times. You can't use Change Text, All Occurrences to change more than one
Researcher_Name. The system will not find the next occurrence of a group
and make the change. You can change all occurrences of text within
Area_of_interest, but only for the one researcher you are positioned on. The
system will not change the occurrences of Area_of_interest for the second,
third, etc. occurrences of Researcher_name.

If the text string is too long to fit in any of the occurrences, the system displays
the **Incomplete Change** data box in the upper left-hand corner of the screen.

The **Incomplete Change** data box is scrollable and displays occurrence
numbers or occurrence number ranges if the system fails to complete the
requested change. This list can be used to find the occurrences and edit them
individually. To display this list after locating an occurrence, use the **History**
option of the **Show** menu.

To verify that the system has just replaced the text strings as expected, use
the **Find Text** option to locate all instances of the changed text string.

Find Text

The **Find Text** option is used to locate a text string in either a non-repeatable field or in the current occurrence of a repeatable field. To find text in a repeatable field, use the **Find Occurrence** option.

The **Find Text** option is useful for locating a text string within a large text field. The system searches forward from the cursor position in the current field.

If the first found instance of the text string is not the required one, move the cursor past the first character in the found string and repeat the **Find Text** option. The system will position the cursor on the first character of the next found instance of the text string in the field.

1   Highlight **Find Text**, and press **<Enter>**.

The system opens the **Find** data box in the middle of the screen.

2   Type the text to be located and then press **<Enter>**.

If the text is not found, the system displays the message, **Selected value was not found**. Otherwise, the system moves the cursor to the first instance of the text that occurs in the field, including any text in a scrollable field that is not currently displayed in the data box.

This option only works for a non-repeatable elementary field. To find text in a repeatable field, use the **Find Occurrence** option.

To exit the Find option

1   Press **<F8>**.

Go to

The **Go to** option is used to position the user on a field in the worksheet or on a field in the adhoc worksheet extension.

To **Go to** a field that is on the worksheet, enter the field mnemonic in the **Go to** data box. This option is useful with multiple page worksheets. The system will open the worksheet page where the field is located.

To create or modify an Adhoc extension, use the **or Adhoc Extension** checkbox. If the worksheet has no existing Adhoc extension, the system will provide a list of database fields that are not already displayed in the worksheet. The selected fields will be used to create an Adhoc extension to the worksheet. The user will have access to the fields on the Adhoc extension while using the worksheet for the session.

If there is already an Adhoc extension defined for the worksheet, the user has the choice of displaying the current extension; adding more fields to the extension; deleting the current extension; or replacing the extension with a new extension.

1 Highlight **Go to**, and press **<Enter>**.

The system opens the Go to data box at the bottom of the screen. The **Go to** data box has two prompts: the **Mnemonic** prompt and data box and the **or Adhoc Extension** prompt and checkbox.

Go to by Mnemonic is not available with this release.

To go to a field available on the worksheet

1 Type the database field mnemonic in the data box, and press **<Enter>**.

MINISIS mnemonics can be up to 16 characters long. The mnemonic entered in this data box must be a valid mnemonic for the active database.

If the mnemonic entered is not a valid field name for the selected database, the system displays the message, **Mnemonic not validated**. A **Validated Field** list displays. Select the required mnemonic from the list. Otherwise, the system positions the cursor on the requested field in the worksheet. If the mnemonic is not on the displayed page of the worksheet, the system clears the screen and opens the worksheet page where the mnemonic is located.

To go to a field that is in the database but not on the worksheet

1   Press **<Tab>**.

The system positions the cursor in the **or Adhoc Extension** checkbox.

2   To specify an Adhoc extension to the worksheet, type an **X** in the checkbox, and press **<Enter>**.

If there is no existing Adhoc extension the system opens the **Available Fields** list.

To select fields to create an Adhoc extension

3   Press **<F7>**.

The system opens the **Select** menu.

4   Select the fields to be included on the Adhoc extension.

The system clears the screen and displays the Adhoc extension created using the selected fields.

If there is already an Adhoc extension for the worksheet

The system displays an **Adhoc Worksheet Extension** menu. The menu has four options: **Display Current Extension**, **Add to Current Extension**, **Remove Current Extension**, and **Start New Extension**.

To display the existing extension

1   Highlight **Display Current Extension**, and press **<Enter>**.

The system clears the screen and displays the current **Adhoc Worksheet** extension.

To add more fields to the existing extension

2   Highlight **Add to Current Extension**, and press **<Enter>**.

The system displays an **Available Fields** list. If all fields in the database record are available in the worksheet or the **Adhoc Worksheet Extension**, the system displays an error message stating that there are no fields left.

3   Press **<F7>**.

The system displays the **Select** menu.

4   Select the fields to be added to the **Adhoc Worksheet Extension**, and press **<Enter>**.

The system clears the screen and redisplays the **Adhoc Worksheet Extension** with the selected fields added.

To delete the current extension

5   Highlight **Remove Current Extension**, and press **<Enter>**.

The system prompts, **Do you wish to destroy the current adhoc worksheet extension?** If the user selects **YES**, the system deletes the current Adhoc Worksheet Extension and refreshes the screen with the worksheet.

To replace the current extension with a new extension

6   Highlight **Start New Extension**, and press **<Enter>**.

The system prompts, **Do you wish to destroy the current adhoc worksheet extension?** If the user selects **YES**, the system deletes the existing extension and displays the **Available Fields** list for creating the new extension.

7   Press **<F7>**.

The system displays the **Select** menu.

8   Select the fields to be added to the **Adhoc Worksheet Extension**, and press **<Enter>**.

The system clears the screen and displays the new **Adhoc Worksheet Extension** with the selected fields.

To accept the Adhoc Worksheet Extension

1   Press **<Enter>**.

Hold/Clear Value

The **Hold/Clear Value** option is used to control the contents of field defaults, local hold fields, and the MINISIS Clipboard.

To add many records with the same value in a particular field, the **Hold as Field Default** option is useful. The user can enter the data in the field once and select the **Hold as Field Default** option. Then, when the user adds a new record, the entered value automatically displays in the specified field and does not need to be re-entered. After entering all the records with the field default in the field, the user can select **Clear Field Default**. If the field has a field default defined in the database, the field default is set to the database value, otherwise, the field default is cleared.

To display a value on multiple pages of the worksheet or on different worksheets, he can use the **Hold in Local Hold Field** option. As long as the other worksheets are defined to display the local hold field, the value will be automatically displayed.

To insert the contents of a field multiple times, the **Hold on Clipboard** option may be used.

1   Highlight **Hold/Clear Value**, and press **<Enter>**.

The system displays the **Hold/Clear Value** menu. The **Hold/Clear Value** menu has 7 options: **Hold as Field Default, Hold in Local Hold Field, Hold on Clipboard, Clear Local Hold Fields, Clear MINISIS Clipboard, Clear Local Hold Field**, and **Clear Field Default**.

To designate the current field value as a default

1   Highlight **Hold as Field Default**, and press **<Enter>**.

The system stores the value of the current field as a temporary field default. When the user adds a new record, the system will display the field with the selected field default.

To store the contents of the current field in a local hold field

1   Highlight **Hold in Local Hold Field**, and press **<Enter>**.

The system displays the **Select Local Hold Field** data box.

2   Type the name of the local hold field or press **<F1>** to display a list of available hold fields.

The system copies the contents of the current field into the specified hold field.

To store the contents of the current field in the MINISIS Clipboard

1   Highlight **Hold on Clipboard**, and press **<Enter>**.

The system copies the contents of the current field into the MINISIS Clipboard. This option is like the **Move Text to Clipboard** option of the **Extract/Delete Text** option, but it moves the entire contents of the field. The **Move Text to Clipboard** option lets the user move part of the contents of the field to the MINISIS Clipboard.

To re-initialize the local hold fields to spaces

1   Highlight **Clear Local Hold Fields**, and press **<Enter>**.

The system clears the contents from all the local hold fields and displays the message **Operation complete**.

To re-initialize the MINISIS Clipboard to spaces

1   Highlight **Clear Clipboard**, and press **<Enter>**.

The system clears the contents from the MINISIS Clipboard and displays the message **Operation complete**.

To re-initialize an individual local hold field to spaces

1   Highlight **Clear Local Hold Field**, and press **<Enter>**.

The system displays the **Select Local Hold Field** data box.

2   Type the name of the local hold field or press **<F1>** to display a list of available hold fields.

The system clears the contents of the specified local hold field.

To re-initialize the temporary field default to spaces

1   Highlight **Clear Field Default,** and press **<Enter>**.

The system clears the temporary field default. If a field default has been declared in the database, the field is reset to the system default.

Delete Field

The **Delete Field** option clears the contents of the current field. If the field is repeatable, only the current occurrence of the field is removed. To remove all occurrences of a repeatable field, the **Delete Field** option must be selected for each occurrence.

1   Highlight **Delete Field**, and press **<Enter>**.

The system deletes the contents of the current field. If the field is repeatable, the system removes the current occurrence of the field.

Replace Field

The **Replace Field** option clears the contents of the current field and allows the user to enter new data in the field. If the field is repeatable, the current occurrence is emptied and the user can enter new data in the occurrence.

1   Highlight **Replace Field**, and press **<Enter>**.

The system clears the contents of the current field and allows the user to enter new data in the field. If the field is repeatable, the system does not remove the current occurrence. It just empties the occurrence and allows the user to enter new data in the occurrence.

Move Field

The **Move Field** option allows the user to replace the contents of the current field with the contents from another database field, a local hold field, or another data box in the worksheet.

If the user wants to move the contents of a repeatable field to the current field, both the field mnemonic and the occurrence path must be entered. The path can have up to four levels for a grouped field or a Virtual group.

The contents of a hold field, including the MINISIS Clipboard, can be used to replace the contents of the current field.

If the user is more familiar with the data box names than the field mnemonics, or if the data required is displayed in a data box but is not stored in a database field, (for example, a local hold field), the user can use the **or Data Box** data box to move data from the data box into the current field.

1   Highlight **Move Field**, and press **<Enter>**.

The system prompts, **Do you wish to replace the current value?** If the user enters **YES,** the system displays the **Move** data box, which has four prompts: **From Mnemonic**; **Occurrence**; **or Local Hold Field**; and **or Data Box**.

To move data from another field in the database

1   Type a valid database mnemonic in the **From Mnemonic** data box, and enter an occurrence number if appropriate. Then press **<Enter>**.

MINISIS mnemonics can be up to 16 characters long. The mnemonic entered in this data box must be a valid mnemonic for the active database.

The system moves the contents of the specified field into the current field. There is Context-sensitive help available on this field. To display a list of available field mnemonics for the selected database, press **<F1>**.

If you do not type an occurrence number and the source field is a repeatable field, the first occurrence is used as the source for the data.

To move data from a local hold field

1   Press **<Tab>** twice.

The system positions the cursor in the **or Local Hold Field** data box.

2   Type the name of the local hold field, and press **<Enter>**.

To display a list of the available local hold fields, including the
MINISIS Clipboard, press **<F1>**.

The system moves the contents from the local hold field into the
current field.

To move data from another data box on the worksheet

1   Press **<Tab>** three times.

The system positions the cursor in the **or Data Box** data box.

2   Type the data box name, and press **<Enter>**.

The system moves the contents from the data box into the current
field.

To display a list of the data box names and their contents, press
<F1>. If a data box displays a repeatable field by showing multiple
occurrences on the worksheet at the same time, the data box
name will repeat with the data box occurrence number in brackets.

Example

If the repeatable field, Area_of_interest, was displayed in sets of three in the
Researcher data box, the first occurrence of the data box name would be
displayed as Areas_I (1); the second occurrence as Areas_I (2), and so on.
The occurrence numbers refer to the number of repeats of the data box on the
screen, not to the occurrence number of the field; so the sixth occurrence of
Area_of_Interest would be displayed in Areas_I (3) data box, not Areas_I (6)
which does not exist.

This option provides a way of accessing the data stored in temporary
fields displayed on the worksheet.

Copy Field

The **Copy Field** option works the same way as the **Move Field** option above. The only difference is that the **Copy Field** option leaves the source of the data unchanged, while the **Move Field** option empties the source field of the data. Both options place the data from the source field into the current field.

1   Highlight **Copy Field**, and press **<Enter>**.

The system prompts, **Do you wish to replace the current value?** If the user enters **YES**, the system displays the **Copy** data box, which has four prompts: **From Mnemonic; Occurrence; or Local Hold Field;** and **or Data Box**.

To copy data from another field in the database

1   Type a valid database mnemonic in the **From Mnemonic** data box, and enter an occurrence number if appropriate. Then press **<Enter>**.

MINISIS mnemonics can be up to 16 characters long. The mnemonic entered in this data box must be a valid mnemonic for the active database.

The system copies the contents of the specified field into the current field. To display a list of the available field mnemonics for the selected database, press **<F1>**.

If you do not type an occurrence number and the source field is a repeatable field, the first occurrence is used as the source for the data.

To copy data from a local hold field

1   Press **<Tab>** twice.

The system positions the cursor in the **Or Local Hold Field** data box.

2   Type the name of the local hold field, and press **<Enter>**.

To display a list of the available local hold fields, including the MINISIS Clipboard, press **<F1>**.

The system copies the contents from the local hold field into the target field.

To copy data from another data box on the worksheet

1   Press **<Tab>** three times.

The system positions the cursor in the **or Data Box** data box.

2   Type the data box name, and press **<Enter>**.

The system copies the contents from the data box into the current field.

To display a list of the data box names and their contents, press **<F1>**. If a data box displays a repeatable field by showing multiple occurrences on the worksheet at the same time, the data box name will repeat with the data box occurrence number in brackets.

Example

For example, if the repeatable field, Area_of_interest, was displayed in sets of three in the Researcher data box, the first occurrence of the data box name would be displayed as Areas_I (1); the second occurrence as Areas_I (2), and so on. The occurrence numbers refer to the number of repeats of the data box on the screen, not to the occurrence number of the field, so the sixth occurrence of Area_of_Interest would be displayed in Areas_I (3) data box, not Areas_I (6) which does not exist.

This option provides a way of accessing the data stored in temporary fields displayed on the worksheet.

Insert Occurrence

The **Insert Occurrence** option is used to insert a new occurrence prior to the current occurrence in a repeatable field.

1   Highlight **Insert Occurrence**, and press **<Enter>**.

If the cursor is located on a non-repeatable field, the system displays the error message, **Field in current data box is not repeatable**. If the field is repeatable, the system inserts a blank occurrence prior to the current occurrence and positions the cursor in the new occurrence. For example, if the user is positioned on the second occurrence of a field when he selects **Insert Occurrence**, the system moves the data in the second occurrence to the third occurrence position and inserts a blank occurrence for the second occurrence.

2   Type data in the new occurrence.

Data must be entered before the new occurrence can be saved.

To accept the new occurrence

1   Press **<Enter>**.

To abandon the changes

1   Press **<F8>**.

Find Occurrence

The **Find Occurrence** option is used to find an occurrence in a repeatable elementary field or grouped field.

To find an occurrence of a repeatable elementary field, use the **By Value** data box.

To find an occurrence of a grouped field based on the value of a sub-field, specify the text string in the **By Value** data box and the subfield mnemonic in the **in Sub-field** data box.

To find a specific occurrence number, enter the occurrence path in the **or Occurrence** data box. For example, to find the fifth occurrence of a repeatable elementary field, the user would enter **5**.

1   Highlight **Find Occurrence**, and press **<Enter>**.

The system displays the **Find Occurrence** worksheet. The data box has three prompts and data boxes: the **By value** prompt and data box; the **in Sub-field** prompt and data box; and the **or Occurrence** prompt and data box.

To find an occurrence based on a text search

This feature is not available with this release.

1   Type the text string to be searched for in the **By Value** data box and press **<Enter>**.

The system searches the occurrences for the text string. If no match is found, the system displays an error message. If the text is found, the system opens that occurrence and positions the cursor on the first letter of the matching text.

To find an occurrence based on the value of a sub-field

1   Type the text string to be searched for in the **By Value** data box.

2   Press **<Tab>**.

The system positions the cursor in the **in Sub-field** data box.

3   Type the sub-field mnemonic, and press **<Enter>**.

MINISIS mnemonics can be up to 16 characters long. The
mnemonic entered in this data box must be a valid mnemonic for
the active database.

The system searches the sub-field for the specified text string. If the
text string is not found, the system displays an error message. If
the text is found, the system displays the group field and positions
the cursor on the first letter of the matching text within the sub-field.

To find an occurrence based on the occurrence number

1   Press **<Tab>** twice.

The system positions the cursor in the **or Occurrence** data box.

2   Type the occurrence number and press **<Enter>**.

If the occurrence does not exist, the system displays an error
message. If the occurrence does exist, the system displays the
occurrence and positions the cursor on the first letter of the
occurrence. If the required occurrence is a repeatable sub-field,
the path must be entered.

Example

To retrieve the second occurrence of the sub-field XXX, in the third occurrence
of the group YYY, the user enters "3.2".

Show

The Show option is used to display the current database records; the field defaults for the current database; the contents of the local hold fields; and the history of incomplete changes.

The **Show Record** option of the **Show** option displays the current database record using a Report Specification. The Report Specification is either selected using the Report Specification option of the **Edit Options** menu or is defaulted to the Report Specification defined for the database.

The **Default** option of the **Show** option displays the same record layout as the **Show Record** option. Instead of displaying the contents of the current record, the **Default** option displays a record structure which is blank, except for the fields with defaults defined for them. If user wants to add a new record and accept the default value for a particular field, he can just <Tab> past the field and the system will keep the default value.

The **Hold Fields** option of the **Show** option displays the hold fields, including the MINISIS Clipboard, and their current values.

The **History** option of the **Show** option provides a list of incomplete changes to occurrences on the current record. For example, if an **Insert Text** operation fails to be completed for some occurrences of a repeatable field, the **Incomplete Changes** list displays a list of occurrence numbers and occurrence ranges where the text string failed to be inserted. The user can use the list to edit the occurrences as required.

1   Highlight **Show**, and press **<Enter>**.

The system displays the **Show** menu which has four options: Record, Hold Fields, History, and Default.

To display the record using the selected Report Specification

1   Highlight **Show Record**, and press **<Enter>**.

The system displays the current record using the Report Specification selected using the **Report Specification** option of the **Edit Options** menu. If the Report Specification option was not specified, the system displays the record using the default Report Specification for the database.

To display the contents of the hold fields

1   Highlight **Hold Fields,** and press **<Enter>**.

The system opens the **Show Hold Fields** data box which displays the names and values of the hold fields.

To display the history

1   Highlight **History**, and press **<Enter>**.

The system opens the **History** menu. The History menu has one
option: **Incomplete Change**.

To display the list of occurrences where a change could not be implemented

2   Highlight **Incomplete Changes**, and press **<Enter>**.

If there are no changes outstanding, the system displays the
message, **There is no history of changes for the current field
name**. If there are changes that could not be implemented by the
system, (for example, an **Insert Text** operation failed where there
was not enough room to do the insert), the system displays a list of
occurrences and occurrence ranges where the change failed.

To display the record default values

This feature is not available with this release.

1   Highlight **Default**, and press **<Enter>**.

The system displays the record structure with the default values
using the Report Specification selected using the Report
Specification option of the **Edit** menu. If the **Report Specification**
option was not specified, the system displays the record using the
default Report Specification for the database.

Adding Records

This chapter explores the methods for adding information in order to create a record (field by field) in an interactive session.

MINISIS creates records using worksheets. These worksheets present a series of prompts to the user. The default values for fields can be set both at the database level and at the Update session level. The information entered into the worksheet is checked by MINISIS before the record is written to the database.

Worksheets are created either by the system or Database Manager. These worksheets can be selected and changed during an **Update** session. Adhoc, or temporary, worksheets can be created during an **Update** session to add information to fields not normally presented.

The system creates data entry worksheets using the database specification. The system-generated data entry worksheet prompts for all mandatory fields in the order in which they are stored in the database definition or in the order specified by the Database Manager. The Database Manager can cue the system to include fields that are optional in the system-generated data entry worksheet by adding these field mnemonics to a list.

Each worksheet has a different presentation. Different fields are included and a different arrangement or order of prompting marks one worksheet from another. Worksheets can also include processing statements. This allows the Database Manager to generate secondary information from the data entered at the keyboard.

Users can activate Adhoc Worksheets, either from the Specification option on the Update menu, or from the Edit Option menu (activated by the <F7> key) while working in a pre-defined worksheet. These Adhoc Worksheets allow users to specify a set of fields for data entry that may not be conveniently arranged or available in other worksheets.

Preliminary Information

To add records to a database, the user must have access to the **Add** option. This is defined in their user profile.

This chapter assumes that the database is open and that the user has the **Update** module open. The steps begin at the **Update** menu.

Expected Results

When a record has been accepted, MINISIS will have verified that the data:

- is entered into mandatory fields
- matches the data type and length of the field, and
- has a matching entry in the Validation Table, if the field is validated.

The database is updated. If there are fields in the database that are associated with a Fast Access Table, and that are indexed online, the Fast Access Table is updated. If duplicate checking is enabled, the database will be checked for duplicate records.

Adding Records

1 Highlight the **Add** option on the **Update** menu, and press **<Enter>**.

The system opens the **Add** menu.

2 Highlight the **Do It** option, and press **<Enter>**.

The system opens the active data entry worksheet with any default values in place. The cursor is positioned in the first data box.

Adding Data to a Field

There are two topics covered in this group: adding data to elementary fields, and creating a new occurrence of a repeatable field.

Adding Data to an Elementary Field

1 Move the cursor to the data box.

2 Press **<F7>**.

The system opens the **Edit Options** menu.

3 Highlight the **Insert Text** option, and press **<Enter>**.

The system opens the **Insert Text** data box.

4 Type the text to be added, and press **<Enter>**.

The system will place the text in the worksheet data box at the cursor.

DOS
Data can be typed directly into the data box.

Working in Full Screen Mode

There are two types of elementary field displays: non-scrolling and scrolling.

When working with the non-scrolling data boxes, both platforms (DOS and MPE/iX) respond the same. If there is no data in the data box, type directly into the data box. If the information is longer than the data box length (the data box length corresponds to the field length), the last character is overwritten with each additional keystroke. You cannot add more data than there is room for.

When working in a scrollable data box, the two platforms respond differently.

DOS

The DOS platform allows users to use either word and character wrap. Word wrap breaks the lines of data based on the word (text surrounded by blank spaces) boundary. If the text entry exceeds the width of the data box display the system starts a new line. If the line break comes in a word, the system moves the whole word to the next line. Character wrap breaks the lines of data without regard for the integrity of words. The system allows users to type up to the last character of the line and then begins a new line with the next character.

MPE/iX

The MPE/iX platform supports only character wrap. Character wrap breaks the lines of data without regard for the integrity of words. The system allows users to type up to the last character of the line and then begins a new line with the next character.

Working in Scroll Mode

When working in Scroll mode, the prompts are rolled up from the bottom of the screen. If there is no data in the field, type the information on the same line as the prompt. If the information is longer than the field, MINISIS truncates the data before saving it to the record. The truncation cuts off any information beyond the field length.

Adding an Occurrence to a Repeatable Field

For the first occurrence, or for a data box that displays multiple occurrences, repeatable fields respond in the same manner as an elementary field. If the data box for the repeatable field is in a list format, use the cursor keys to move between occurrences and type the information. If the number of occurrences exceed the boundaries of the data box displayed, use the **Edit Options** to refresh the display and add occurrences. There are two situations where the boundaries of the data box displayed could be exceeded: when the number of occurrences is greater than the number of list entries and when the display is a single data box.

1   Move the cursor to the repeatable field data box.

2   Type data into the first occurrence of the repeatable field.

3   To add an occurrence, press **<F5>**.

    The system opens a new occurrence of the repeatable field.

4   Type data into the new occurrence of the repeatable field.

Data must be entered in the field for the new occurrence to be saved by the system. MINISIS will not save empty occurrences of a repeatable field.

Copying Information from Another Field

Copy allows users to copy data into the active data box from another field in the database, from a local Hold field, or from another data box on the worksheet.

1   Position the cursor in the target field data box.

2   Press **<F7>**.

The system opens the **Edit Options** menu.

3   Highlight the **Copy Field** option, and press **<Enter>**.

The system opens the **Copy Field** worksheet.

The Copy Field Worksheet prompts the user for the source field. The source field can be a non-repeating field, a repeating field in the database, a local Hold Field, or another data box on the worksheet.

The data type must match in both the source and target fields.

Copying Data From Another Field

1   Type the mnemonic of the field in the **From Mnemonic** data box, and the occurrence number where applicable.

MINISIS mnemonics can be up to 16characters long. The mnemonic entered into this data box must be a mnemonic from the active database. This option does not allow users to transfer field data between databases.

If the target field is a repeatable field, a new occurrence is created and the information is inserted.

If you do not type an occurence number and the source field is a repeating field, the first occurence is used as the source for the data.

Copying Data From a Hold Field

The Hold field keeps a field value during a MINISIS session. This field value can then be inserted into Query Worksheets and data entry worksheets.

1   Type the mnemonic of the Hold Field in the **Hold Field** data box.

MINISIS mnemonics can be up to 16 characters long. The mnemonic entered into this data box must be a mnemonic from the active database. This option allows users to create default values and transfer field data between databases.

To display a list of available Hold fields, press **<F1>**.

Copying Data From a Data Box

1   Type the data box name in the **or Data box** data box.

The system copies the contents from the source data box into the target field.

To display a list of available data box names and their contents, press **<F1>**. If a data box displays a repeatable field by showing multiple occurrences on the worksheet at the same time, the data box name will repeat with the data box occurrence number in brackets.

To accept the operation

1   Press **<Enter>**.

The system copies the data element from the field identified into the active worksheet field.

To abandon the operation

1   Press **<F8>**.

Adding Fields that are not Displayed (Using an Adhoc Worksheet)

Not all database fields appear on every data entry worksheet. To access the fields not represented on the worksheet, users can create an Adhoc Worksheet. The Adhoc Worksheet appears as a plain screen with the title **Adhoc Worksheet** just below the status line. Fields from the active database can be inserted into the worksheet. The field mnemonics identify the fields for the worksheet. The system uses the field mnemonic or field prompt (if one has been defined) and presents the fields in a very simple format.

When an Adhoc worksheet extension is opened as an additional form in a worksheet, it is active for one record only. If the Adhoc worksheet is the session worksheet, then all records are gathered using the Adhoc worksheet.

Users can add data to the fields identified and any necessary verification will be performed as is usual.

Adhoc worksheets are not available in Scroll mode systems.

These worksheets do not allow users to access forbidden or system-generated fields.

1   Press <F7>.

    The system opens the **Edit Options** menu.

2   Highlight **Go to**, and press <Enter>.

    The system opens the **Go to** data entry form, which has two prompts: **Mnemonic**, and **or Adhoc Extension**.

3   To open an Adhoc worksheet extension, type an **X** in the **or Adhoc Extension** checkbox, and press <Enter>.

    The system opens the **Available Fields** list.

4   Press <F7>.

    The system opens the **Select** menu.

5   Select the fields to be included on the Adhoc worksheet extension.

6   Press <Enter>.

    The system refreshes the screen with the requested field prompts and data boxes. The system uses the field mnemonics or field prompts defined in the database definition.

7   Type the data elements into the data boxes for each field.

    After entering the data, the system will return to the original worksheet.

To accept the data and complete the record changes

1   Press <Enter>.

To abandon the changes

1   Press <F8>.

Setting the Default Values for a Session

This chapter explains how to open up a model of the database record and enter default values. These default values are only valid during the current session.

The chapter covers the process of saving, clearing or resetting the default values.

Any records entered during the rest of the **Update, Add** session will have these default values in place.

Preliminary Information

To be able to set the default values for the session, the user must know the data type and what kind of duplicate checking, if any, is used. Choose an appropriate worksheet, one that shows all the required fields, before setting the default values.

When the default record is first opened, the defaults defined in the database specification are listed. The presentation of the fields for the record will match the active worksheet.

This chapter assumes that a database has been opened and **Update, Add** has been selected. At this point, the system opens the **Add** menu.

To set a default value for the field, or to change a default value that already exists, follow the steps for *Setting Default Values.* To remove a default value at any time during a session, follwo the steps for *Clearing Default Values.*

Expected Results

At the end of Setting the Default Record Values, a mask of default values will exist. When data entry is initiated, during the current session, these default values will be inserted into the appropriate fields of each new record.

Setting Default Values

The following steps should be used to set default values for an **Update, Add** session. If at any point during an **Update** session you want to change the default values, repeat this procedure.

1　Highlight the **Set Default** option from the **Add** menu, and press **<Enter>**.

　　The system opens the **Query Statement** data box.

2　Enter a query statement to select a record that will be used as a model for the default data.

　　For details about selecting records, refer to the *MINISIS Query* chapters.

3　Press **<F8>**.

　　The system displays a list of fields.

4　Highlight the field for the Default value, and press **<F7>**.

　　The system opens the **Select** menu.

5　Highlight the **Select/Clear** option, and press **<Enter>**.

　　The system clears the **Select** menu and places a plus sign **+** to the left of the field selected.

6　To select other fields as Default values repeat steps 4 and 5.

7　When all required fields are selected, press **<Enter>**.

　　The system clears the Field List, sets the default values for the session and returns the cursor to the Add menu.

8　To add records using the Default values, highlight **Do It**, and press **<Enter>**.

　　The Update data entry worksheet will be opened with any default values entered in the relevant fields.

Clearing Default Values

If at any point during an **Update** session you want to clear the default values follow this procedure:

1　Highlight the **Clear Default** option from the **Add** menu, and press **<Enter>**.

　　The system will display the message **All temporary default value(s) have been cleared**.

2   Select another menu option, or press **<F8>**.

The message will be cleared, and if **<F8>** was pressed the system
will clear the **Add** menu and place the cursor in the **Update** menu.

Resetting Default Values

To reset default values during an Update session follow the same procedure
as *Setting Default Values*.

Creating a Query Strategy for Selecting Records

A Query Strategy consists of Query Statements grouped together to select records based on the contents of fields in each record. A Query Statement uses field mnemonics, operators, and values to determine which fields meet the selection criteria. When statements are gathered together into more complex strategies, subsequent statements may eliminate records chosen. A refining process can be instituted, allowing the final set of records to be defined by a very specific set of requirements.

A Query Statement usually takes one of the following formats:

- field identifier   operator   value
- field identifier   operator   field identifier
- field identifier   value   operator   value

where

A field identifier can be either a field mnemonic or a field alias. A field can have one mnemonic of up to 16 alphanumeric characters. A field may have from zero to five different aliases. An alias, like a mnemonic, can be up to 16 alphanumeric characters.

The Query operators are comparison operators and keywords. The comparison operators are:

Operator	Name	Description
=	equal·to	selects records where the key extracted from the search field matches the search value (or the contents of the field identified by the To Mnemonic) exactly
<>	not equal to	selects records where the key extracted from the search field does not match the search value (or the contents of the field identified by the To Mnemonic)
>	greater than	selects records where the key extracted from the search field has a greater numeric value

Operator	Name	Description
>=	greater than or equal to	selects records where the key extracted from the search field matches or has a greater numeric value
<	less than	selects records where the key extracted from the search field has a lesser numeric value
<=	less than or equal to	selects records where the key extracted from the search field matches or has a lesser numeric value

The keywords are:

Keyword	Name	Description
@	Truncation search	A truncation search uses either the opening or closing set of characters or numerals in a search value to indicate a range of possible correct results. Truncation searches use a few characters of a search value either followed by or preceded by the @ sign to indicate that there are one or more additional characters possible in the position indicated.
PAT	pattern search	A pattern search returns records when the field value contains the set of characters included in the pattern. The pattern search uses a set of value indicators to create a model for the search.
ALL level #	thesaurus table levels	A Thesaurus Table search can be restricted by level.
BT NT RT	thesaurus level names	These keywords are used in conjunction with the level (above) to indicate which category of Thesaurus term can be included in the search. Only one category of Thesaurus term can be used in each statement.
ANY	Any Table search	An Any Table search relates a Main Term to a list of related terms. Unlike a Thesaurus Table search, an Any Table search is not restricted because the terms are not in different categories and levels.

Keyword	Name	Description
ADJ WORD# DIST#	proximity search	The proximity search selects records where the two search values are found within a given distance of each other. The ADJ keyword indicates they must be adjacent to each other in the order they are given. The WORD# keyword is actually two values, the keyword WORD and a number. This keyword selects records where the two values occur in the same field this number of words apart in the order they are given. The DIST# keyword is actually two values, the keyword DIST and a number. This keyword selects records where the two values occur in the same field this number of words apart in any order.
IGN	ignore search	The ignore search and the ignore adjacency search are a restricted type of truncation search. This type of truncation search selects all records where the truncated value is found and then eliminates all records with the ignore value. The ignore value may be a value that matches the truncation pattern but one which should not be selected.
/	range search	The range search selects all records where the field value falls within the scope of the two values given.
. -	dot search	A dot search is used when the field contains both primary and secondary keys. The dot search either searches the primary keys or the secondary keys. The primary keys precede the break sequence and the secondary keys follow the break sequence. The period indicates that the search uses the primary keys. The dash indicates that the search uses the secondary keys.
PRESENT ABSENT	presence searching	The presence search selects records based on the presence or absence of data in the field identified. The keyword PRESENT retrieves records where the field has data. The keyword ABSENT retrieves records where the field does not have data.
SAME	Boolean searching on the same field	The SAME keyword is an optional part of a Boolean search statement. This keyword indicates that the statement uses only one field.

Keyword	Name	Description
AND OR XOR NOT	Boolean searching	These Boolean operators work either within a single field or between statements. The AND operator requires that both query statements be true for a record to be selected. The OR operator requires that either one or both query statements be true for a record to be selected. The XOR operator requires that either one or the other query statement be true, but not both, for a record to be selected. The NOT operator requires that the query statement be false for a record to be selected.
( )	grouping	Brackets affect the order of operation when joining statements. The brackets are usually associated with a strategy that joins several statements using Boolean operators. The order of operation for Boolean operations is affected by the brackets. The searches in the innermost brackets are done first.

Changing Records

This chapter explores the methods available for changing the contents of records (field by field) in an interactive session. MINISIS allows users to select and change one or more records during an interactive session. The full range of **Query** options are available within the **Update** module. The chapter begins with the steps for changing pre-selected records, then selecting records and changing them in one series of steps. The steps for changing **Query Worksheets** and **Query** mode follow the set of steps on selecting and changing records. The steps conclude with a long series of options for changing records.

Records are selected using **Query**. The **Query** options are explained in the chapters:

- *Selecting a Query Mode*
- *Selecting Records Using a Query Worksheet*
- *Selecting Records Using Query Statements and Strategies*
- *Other Query Options*

There are two possible situations for selecting records for change: using pre-selected records and selecting records.

If a Query session has been run in Line mode, during the Update session, the last set of records found is tracked. When Query is activated again, the system will prompt the user, **Use Previous Query.** If **YES** is selected the result of the last query statement will be displayed in the **Query Statement Results** data box. If **NO** is selected a new query session will be initiated.

Preliminary Information

To change records in a database, the user must have the access to Change Records option defined in their profile. The user profile is defined by the System Manager. The record(s) must not be locked against change.

This chapter assumes that the database is open and that the user has the **Update** module open. The steps begin at the **Update** menu.

Expected Results

At the end of accepting the changes made to a record, MINISIS verifies that the data:

- matches the data type and length of the field, and
- has a matching entry in the Validation Table, if the field is validated.

The database is updated. If the fields changed are associated with a Fast Access Table, and are indexed online, the Fast Access Table is updated. If duplicate checking is enabled, the database is checked for duplicate records.

Retrieving Pre-selected Records

1   Highlight **Change**, from the **Update** menu, and press **<Enter>**.

The system opens the default Query Worksheet for the database (or
the last used Query Worksheet or Statement data box). A
confirmation data box prompts the user to confirm using the results
of the last Query.

2   Highlight **Yes**, and press **<Enter>**.

The system displays the results of the last query in the **Query
Statement Results** data box.

3   Press **<F8>**.

The system opens the active data entry worksheet. All the records
selected through the last query result are displayed sequentially.

Selecting Records

1 Highlight **Change**, from the **Update** menu, and press **<Enter>**.

The system opens the Default Query Worksheet (or the last used
Query Worksheet or Statement data box). A confirmation data box
prompts the user to confirm using the results of the last Query.

2 Highlight **No**, and press **<Enter>**.

3 Fill in the data boxes to select the record(s).

4 Press **<Enter>**.

The system conducts the search and shows the number of records
selected.

To accept the records

1 Press **<F8>**.

Changing Selected Records

Use the instructions listed under these headings to change the record data:

- *Adding Data to a Field*
- *Changing the Data in a Field*
- *Moving Data from One Field to Another*
- *Copying Data from One Field to Another*
- *Deleting Data in a Field*
- *Moving Fields in the Worksheet*
- *Changing Fields that are not in the Worksheet*

To accept the changes

1 Press **<Enter>**.

To terminate this action and reject the changes to the record

1 Press **<F8>**.

If there are more records, the system opens the next record in the
sequence. If there are no more records in the sequence, the
system closes the worksheet and returns to the **Update** menu.

During the Query session, use the Query Options menu to change forms or Query mode.

Adding Data to a Field

There are three topics covered in this group: adding data to empty elementary fields, creating a new occurrence of a repeatable field, and adding data to a field with data in it.

Working in Full Screen Mode

There are two types of elementary field displays: non-scrolling and scrolling. Inserting information into fields that already have data has two modes: overwrite and insert.

When working with the non-scrolling data boxes, both platforms (DOS and MPE/iX) respond the same. If there is no data in the data box, type directly into the data box. If the information is longer than the data box length (the data box length corresponds to the field length), the last character is overwritten with each additional keystroke. You cannot add more data than there is room for.

When working in a scrollable data box, the two platforms respond differently.

DOS
The DOS platform allows users to use either word or character wrap. Word wrap breaks the lines of data based on the word (text surrounded by blank spaces) boundary. If the text entry exceeds the width of the data box display the system starts a new line. If the line break comes in a word, the system moves the whole word to the next line. Character wrap breaks the lines of data without regard for the integrity of words. The system allows users to type up to the last character of the line and then begins a new line with the next character.

MPE/iX
The MPE/iX platform supports only character wrap. Character wrap breaks the lines of data without regard for the integrity of words. The system allows users to type up to the last character of the line and then begins a new line with the next character.

Both platforms respond the same way when working in overwrite mode. Any text under the cursor is replaced with the new information being typed.

When working in insert mode, the two platforms respond differently.

DOS
The DOS platform wraps text, in scrollable data boxes, onto the next line. In non-scrolling data boxes, any information inserted into

the existing data pushes the contents to the right. If the data added to a field forces the field data to exceed the maximum field length, the data is truncated.

MPE/iX
The MPE/iX platform does not wrap text. When text is inserted using insert mode and the information exceeds the line length, the field data is not wrapped to the next line. Information is lost.

To insert data into a field, use the **Edit Options**, **Insert Text** option.

Working in Scroll Mode

When working in scroll mode, the prompts are rolled up from the bottom of the screen. If there is no data in the field, type the information on the same line as the prompt. If the information is longer than the field, MINISIS truncates the data before saving it to the record. The truncation cuts off any information beyond the field length.

If there is data in the field, any information typed after the prompt will overwrite the data in the field.

Adding Data to an Empty Field

1   Move the cursor to the data box.

2   Type the data element(s) directly into the data box.

To Add an Occurrence to a Repeatable Field

When working with repeatable fields, either elementary or grouped, an occurrence is added after the last occurrence. To insert an occurrence in a specific position follow the steps under *Changing Records: To Insert an Occurrence in a Repeatable Field.*

1   Move the cursor to the data box.

2   To go to the last occurrence, press **<F4>**.

The system will place the cursor in the last occurrence of the repeatable field.

3   To add an occurrence, press **<F5>**.

The system will add an occurrence to the repeatable field.

4   Type the data element(s) directly in the field.

Data must be entered in the field for the new occurrence to be saved by the system. MINISIS will not save empty occurrences of a repeatable field.

To Insert an Occurrence in a Repeatable Field

When working with repeatable fields, either elementary or grouped, an occurrence can be inserted in a specific position in a sequence. To add an occurrence in a specific position:

1   Move the cursor to the data box and select an occurrence.

2   Press <F7>.

     The system opens the **Edit Options** menu.

3   Highlight **Insert Occurrence**, and press <Enter>.

     The system opens a new occurrence of the repeatable field before
     the selected occurrence. For example, if the cursor was placed in
     3 of 5 the new occurrence will be inserted at 3, and 3 of 5 will
     become 4 of 6 etc.

4   Type the data element(s) directly into the field.

To Insert Data into a Field

1   Move the cursor to the data box.

2   Position the cursor where the new data should start.

3   Press <F7>.

     The system opens the **Edit Options** menu.

4   Highlight **Insert Text**, and press <Enter>.

     The system opens the **Insert Text** data box.

5   Type the new data into the data box.

DOS
In DOS, it is more direct to toggle the <Insert> key and insert data directly into the data box.

To accept the data

1   Press <Enter>.

     The system inserts the data into the field and refreshes the
       worksheet display.

To reject the changes

1   Press <F8>.

Changing the Data in a Field

This activity can include selecting the field occurrence, if the field is a
repeatable field. The system allows users to change part of the data in a field.
To change the entire field, use the *Replace the Whole Field* instructions.

Selecting the Field Occurrence

1   Press <F7>.

2   Highlight **Find Occurrence**, and press <Enter>.

     The system opens the **Find Occurrence** worksheet.

3   To select the field occurrence by value, enter a search value in the
       By Value data box, and press <Enter>.

     or

4   To select the field occurrence by occurrence number, enter the
       occurrence number in the **or Occurrence** data box, and press
       <Enter>.

     The system searches the repeatable field for the value or
       occurrence number.

Using Change Text

The Change Text option replaces one string of characters in a field with
another.

Select the field to be changed.

1   Press <F7>.

     The system opens the **Edit Options** menu.

2   Highlight **Change Text,** and press **<Enter>.**

The system displays the message, **Put cursor under the start of string and press <ENTER>. To cancel press <F8>.**

3   Use the arrow keys to position the cursor at the start of the text to be changed in the target field, and press **<Enter>.**

The system displays the message,"**Put cursor under the end of string and press <ENTER>. To cancel press <F8>.**

4   Use the arrow keys to position the cursor at the end of the text to be changed, and press **<Enter>.**

The system opens the **Change Text** data box, which has three prompts: **New Text, Change all Instances,** and **Change all Occurrences.**

5   Enter the replacement text in the **New Text** data box.

This text will be inserted, replacing the marked field data. If this text forces the field to exceed its maximum length, the field data is truncated.

6   To change all instances of the selected text, place an **X** in the **Change all Instances** checkbox.

7   To change the selected in all occurrences of a repeatable field, place an **X** in the **Change all Occurrences** checkbox.

To accept the changes

1   Press **<Enter>.**

The system refreshes the worksheet display, with the new text replacing the old.

To reject the changes

1   Press **<F8>.**

Replacing the Whole Field

The **Replace.Field** option deletes any data in the field and substitutes the new text.

1   Position the cursor in the field to be replaced.

If the field is a repeating field, be sure to position the cursor in the correct occurrence of the repeating field.

2   Press **<F7>**.

      The system opens the **Edit Options** menu.

3   Highlight **Replace Field**, and press **<Enter>**.

      The system removes the contents of the target field and allows the
      user to enter new data in the field.

4   Enter the new field value.

To accept the changes

1   Press **<Enter>**.

To abandon the operation

1   Press **<F8>**.

Moving Data from One Field to Another

Move allows users to move data form one field to another field in the database.

1   Position the cursor in the target field.

      If the field is a repeating field, be sure to position the cursor in the
      correct occurrence of the repeating field.

2   Press **<F7>**.

      The system opens the **Edit Options** menu.

3   Highlight **Move Field**, and press **<Enter>**.

      The system opens the **Move Field** worksheet.

4   Enter the mnemonic of the source field.

      The source field can be a repeating or non-repeating field in the
      database, a local hold field, or a field on the current worksheet.

To move from a non-repeatable field

1   Enter the mnemonic of the field in the **From Mnemonic** data box,
    and press **<Enter>**.

2   To move past the next option, press **<Tab>** twice.

To move from a repeating database field

1   Enter the mnemonic of the field in the **From Mnemonic** data box, and press **<Tab>**.

    The system positions the cursor in the **Occurrence** data box.

2   Type the occurrence number of the source field, and press **<Enter>**.

To move from a local hold field

1   Press **<Tab>** twice.

    The system places the cursor in the **or Local Hold Field** data box.

2   Enter the name of the local hold field for the data to be moved.

To move data from another field on the worksheet

1   Press **<Tab>** three times.

    The system places the cursor in the **or Data box** data box.

2   Enter the data box name that holds the data to be moved.

To activate the move operation

1   Press **<Enter>**.

To abandon the operation

1   Press **<F8>**.

Copying Data from One Field to Another

Copy allows users to copy data into the active data box from another field in the database or from the Hold field.

1   Press **<F7>**.

    The system opens the **Edit Options** menu.

2   Highlight **Copy Field**, and press **<Enter>**.

    The system opens the **Copy Field** worksheet.

The **Copy Field** worksheet prompts the user for the source field. The source field can be a non-repeating field, a repeating field in the database, a Local Hold Field, or another data box on the worksheet.

To copy from a non-repeatable database field

1   Enter the mnemonic of the field in the **From Mnemonic** data box.

To copy from a repeatable database field

1   Enter the mnemonic of the field in the **From Mnemonic** data box.

2   Press **<Tab>**.

    The system places the cursor in the **Occurrence** data box.

3   Enter the occurrence number of the source field.

To copy from a local hold field

1   Enter the name of the Local Hold Field in the **or Local Hold Field** data box.

To copy data from another data box on the worksheet

1   Press **<Tab>** three times.

    The system places the cursor in the **or Data box** data box.

2   Enter the data box name that holds the data to be copied.

To activate the operation

1   Press **<Enter>**.

To abandon the operation

1   Press **<F8>**.

Deleting Data in a Field

The system deletes the entire field or part of the field data.

To Delete the Entire Field

1   Press **<F7>**.

    The system opens the **Edit Options** menu.

2   Highlight **Extract/Delete Text**, and press **<Enter>**.

    The system removes all data from the active field and refreshes the data entry worksheet screen. If the field is repeatable, the system removes the current occurrence of the field.

To Delete Part of the Field

1   Press <F7>.

The system opens the **Edit Options** menu.

2   Highlight Extract/Delete Text, and press <Enter>.

The system opens the **Extract/Delete Text** menu.

3   Highlight Delete Text, and press <Enter>.

The system displays the prompt **Put cursor under start of string and press <Enter>. To cancel press <F8>.**

4   Use the arrow keys to position the cursor where you want to start deleting text, then press <Enter>.

The system displays the prompt **Put the cursor under the end of string and press <Enter>.**

5   Move the cursor to the end of the text to be deleted, then press <Enter>.

The system removes the selected data and refreshes the worksheet screen.

Moving to Fields in the Worksheet

This feature is not available with this release.

1   Press <F7>.

The system opens the **Edit Options** menu.

2   Highlight Go to, and press <Enter>.

The system opens the **Go to** data entry worksheet.

3   Enter the mnemonic of the field in the Mnemonic data box.

The system moves the cursor to the data box for the field, if the field is represented on the active worksheet.

If the field is not represented on the active worksheet, use the instructions for *Changing Fields that are not in the Worksheet* (Using an Adhoc Worksheet Extension).

Changing Fields that are not in the Worksheet

Not all database fields appear on every data entry worksheet. To access the fields not represented on the worksheet, users can create an Adhoc Worksheet. These worksheets do not allow users to access forbidden or system-generated fields.

1   Press **<F7>**.

    The system opens the **Edit Options** menu.

2   Highlight **Go to**, and press **<Enter>**.

    The system opens the **Go to** data entry worksheet.

3   Press **<Tab>**.

    The system positions the cursor in the **or Adhoc Extension** checkbox.

4   To open the Adhoc Worksheet, place an **X** in the **or Adhoc Extension** checkbox, and press **<Enter>**.

    The system opens the **Available Fields** list.

5   Press **<F7>**.

    The system opens the **Select** menu.

6   Select the fields to be included on the Adhoc Worksheet Extension.

7   Press **<Enter>**.

    The system refreshes the screen with the requested field prompts and data boxes.

8   Type the data into the fields.

To accept the data and complete the record changes

1   Press **<Enter>**.

To abandon the changes

1   Press **<F8>**.

Deleting Records

This chapter explains how to delete one record or a group of records. The Query session described in this chapter is a basic session and more detailed explanations on selecting records can be found in the *Selecting Records using MINISIS Query* chapters.

Preliminary Information

This chapter assumes that the user has an open database and has the Update module open. The steps begin at the **Update** menu. To delete pre-selected records, run a **Query** session before entering into the **Change Status** menu.

To confirm deletion of the selected records set **Confirm** to **ON**. For details on this system option refer to *System Options: Using the Confirm Option*.

Expected Results

When the records have been selected and deletion has been confirmed, the system removes the pointers to the records.

☞ **When records have been deleted, the only way to un-delete is to restore a previous backup of all data storage and cross-reference files associated with the database.**

If records are accidentally deleted contact your Database Manager immediately.

Change Status Options

The change status options are used to: specify the Report specification that
will be used to show records that have been selected, identify the listing file for
the status report and indicate whether a status report listing should be
generated.

1   Highlight **Change Status**, from the **Update** menu, and press
     <Enter>.

     The system opens the **Change Status** menu.

2   Highlight **Option**, and press **<Enter>**.

     The system opens the **Status Options** worksheet, with the cursor in
     the **Report Spec Name** data box.

3   Enter the name of a Report Specification, and press **<Tab>**.

     The system moves the cursor to the **List File ID** data box.

4   Enter the name of the **List File ID**, and press **<Tab>**.

     The system moves the cursor to the **Suppress Listing** checkbox.

5   To suppress the listing, place an **X** in the checkbox and press
     <Enter>.

     The system will save the options, close the **Status Option**
     worksheet and return the cursor to the **Change Status** menu.

Selecting and Deleting Records

1   Highlight **Change Status**, from the **Update** menu, and press
    <Enter>.

    The system opens the **Change Status** menu.

2   Highlight **Delete Records**, and press **<Enter>**.

    The system opens the Default Query Worksheet (or the last used
    Query Worksheet or Statement data box).

    If a query has been requested earlier, you can highlight **YES** in the
    confirmation box. If you did not specify a query earlier, build a
    query in the normal manner.

    The system displays the results of the last query session in the
    Query Statement Results data box.

To delete the records selected in the last query session (Confirm off)

1   Press **<F8>**.

    All records selected in the last query statement will be deleted

To delete the records selected in the last query statement (Confirm on)

1   Press **<F8>**.

    The system opens the **Show Records** data box, with the first
    selected record displayed. At the bottom of the data box there is a
    horizontal menu with four options: **NO, YES, CANCEL** and **ALL**.

2   To delete the record highlight **YES** and press **<Enter>**.

3   To skip the record without deleting, highlight **NO** and press **<Enter>**.

4   To exit without deleting any records, highlight **CANCEL** and press
    <Enter>.

5   To delete all selected records, highlight **ALL** and press **<Enter>**.

Locking and Unlocking Records

This chapter explains how to prevent changes to records and how to release locked records. Records that are locked cannot be modified during a regular Update session. Unlocking records allows users to make changes to the records during an Update session.

The chapter presents two sets of steps: *Locking Records*, and *Unlocking Records*.

If the Fast Access fields in a record are set to index on release, they are saved to the database, but they are not indexed until they are unlocked. Locked records cannot be deleted.

Before locking or unlocking records, the system displays the selected records sequentially using the default Report Specification.

Preliminary Information

To be able to lock and unlock records, the user must have the access to these options defined in their profile. The user profile is defined by the System Manager.

This chapter assumes that the database is open and that the user has the **Update** module open. The steps begin at the **Update** menu. To lock or unlock pre-selected records, run a **Query** session before entering into the **Change Status** menu.

Expected Results

After *Locking Records*, a set of records is locked against changes. If the records have Fast Access Fields that are indexed on lock, the Fast Access Table associated with the fields will be updated when the records are locked. Locked records cannot be changed or deleted.

After *Unlocking Records*, a set of previously locked records will be unlocked. These records can then be indexed, changed, or deleted.

Locking Records

1　Highlight **Change Status** from the **Update** menu and press **<Enter>**.

　　The system opens the **Change Status** menu.

2　Highlight **Lock Records**, and press **<Enter>**.

　　The system opens the default **Query** worksheet for the database (or
　　the last used **Query** worksheet or **Statement** data box).

　　If a query has been previously formulated, the system opens the
　　Confirmation data box. This data box prompts the user to confirm
　　the use of the results of the last Query. To use these results,
　　highlight **YES**, and press **<Enter>**.

　　In any case, one can continue to refine the Query at this time. Refer
　　to the earlier section, *Selecting Records using MINISIS Query*, for
　　information.

3　Press **<F8>** when the records to be locked have been selected in
　　the **Query**.

　　The system opens the **Lock Records** screen. All the records
　　selected through the Query are displayed sequentially in the upper
　　portion of the screen. The system displays the records using the
　　default Report Specification. The lower portion of the screen
　　displays a **Confirmation** data box. This data box prompts the user
　　to confirm whether the record displayed should be locked.

To lock the record

1　Highlight **YES**, and press **<Enter>**.

To bypass the record

1　Highlight **NO**, and press **<Enter>**.

To lock this record and all following records

1　Highlight **ALL**, and press **<Enter>**.

To bypass this record and all following records

1　Highlight **CANCEL**, and press **<Enter>**.

　　Records that are locked are not shown. Instead, the system displays
　　the message **Record ## is already locked** at the top of the
　　screen.

After displaying all the records, the system closes the **Lock Records** screen and displays the **Lock Records** display. The **Lock Records** display shows the number of records selected and the percentage of records locked.

2   To complete this action, press **<F8>**.

Unlocking Records

1 Highlight **Change Status** from the **Update** menu and press **<Enter>**.

The system opens the **Change Status** menu.

2 Highlight **Unlock Records**, and press **<Enter>**.

The system opens the default Query worksheet for the database (or the last used Query worksheet or **Statement** data box).

If a query has been previously formulated, the system opens the **Confirmation** data box. This data box prompts the user to confirm the use of the results of the last Query. To use these results, highlight **YES**, and press **<Enter>**.

In any case, one can continue to refine the Query at this time. Refer to the earlier section, *Selecting Records using MINISIS Query*, for information.

3 Press **<F8>** when the records to be unlocked have been selected in the Query.

The system opens the **Unlock Records** screen. All the records selected through the Query are displayed sequentially in the upper portion of the screen. The system displays the records using the default Report Specification. The lower portion of the screen displays a **Confirmation** data box. This data box prompts the user to confirm whether the record displayed should be unlocked.

To unlock the record

1 Highlight **YES**, and press **<Enter>**.

To bypass the record

1 Highlight **NO**, and press **<Enter>**.

To unlock this record and all following records

1 Highlight **ALL**, and press **<Enter>**.

To bypass this record and all following records

1 Highlight **CANCEL**, and press **<Enter>**.

Records that are not locked are not shown. Instead, the system displays the message **Record ## is already unlocked** at the top of the screen.

After displaying all the records, the system closes the **Unlock Records** screen and displays the **Unlock Records** display. The **Unlock Records** display shows the number of records selected and the percentage of records unlocked.

2   To complete this action, press **<F8>**.

Global Change Specifications

Global change specifications are not available with this release.

Producing MINISIS Reports

Introduction to MINISIS Report

This part explains how to set up a Report Specification, which defines the layout and presentation of data, and how to generate a report.

The chapters start with an overview of the report function, explain how to define specifications, and finally detail how to send a report to a specific output device for viewing.

Chapter List

The MINISIS Report Function

This chapter gives an overview of the MINISIS Report module.

Adding, Changing, Deleting, and Copying Report Specifications

This chapter describes how to add, change, delete and list Report Specifications.

Defining the Page Options of a Report

This chapter describes how to define the page level options of a report, which includes page layout, headers and footers, and page numbering.

Defining the Field Level Attributes for a Report

This chapter describes how to set the field options of a report, which define the way that data is extracted, sorted and printed in a report.

Adding a Description to the Report Specification

This chapter describes how to add a description to the Report Specification, which will be used by the MINISIS on-line help system.

Importing and Exporting Report Specifications

This chapter describes how to import and export Report Specifications.

Running a Report

This chapter describes how to select a Report Specification, select records and send the report to an output device.

The MINISIS Report Function

The MINISIS Report function is used to add and define Report Specifications, import and export Report Specifications, and generate reports. A MINISIS Report Specification defines how data is displayed and formatted when extracted from a MINISIS database and output to either the terminal, a file, a table, or a printer. The first step in defining a Report Specification is to either add a name, identify an existing specification that will be changed, or copy an existing specification and give it a new name.

There are two levels of attributes in a Report Specification: page level, and field level. The page level describes the overall layout of the page, which include headers, footers, columns, page size, spacing, and the report destination. The field level describes how the data is extracted from the database, and presented in the report.

There is a Report Specification Description to document the report.

There is an import/export feature to allow Report Specifications to be moved from earlier versions of MINISIS and to share Report Specifications between platforms.

Reports are generated using a Report Specification, selecting records to be included and executing the report. The Report Specification used could be one that is predefined. Alternatively, an Adhoc specification could be used. Records are selected from the database, using the Query function, and the data is extracted and manipulated according to the instructions in the Report Specification. The resulting report can be first viewed on the screen, using Trial, and finally sent to the selected output device.

Adding, Changing, Deleting, and Copying Report Specifications

To meet both new and changing output requirements Report Specifications may have to be added, changed and sometimes deleted. When naming Report Specifications it is important to use meaningful names to ensure that the user can identify the correct specification for the required report format.

Report Specifications can be associated with more than one database. Care must be taken to ensure that if a specification is modified that there is no impact on the use of the specification on other associated databases. **If in doubt** - copy the specification to a new name and then change the page options, fields and description.

A Report Specification would be added if a new format is required. There are two methods of adding a new specification: creating a completely new specification, or copying an existing specification to a new name and then changing the page and field options, and description.

When adding or copying specifications ensure that the name given is meaningful. This will help users to quickly identify the specification they require for a specific output format. The specification name should always be supplemented with a good description. Refer to the chapter *Adding a Description to the Report Specification.*

Specifications can be deleted from the system when they are no longer required. Although a specification can be associated with more than one database, when it is deleted only the reference to the open database is removed. The specification is only deleted from the system when the last reference is removed.

The List feature is used to output a line listing of a Report Specification to either a printer or disk file.

Preliminary Information

Before adding, changing or deleting a Report Specification the associated database must be open. The steps in this chapter start at the **Report** menu which is opened from the **Report** option on the **SMA** main menu.

Expected Results

A new specification will be added, an existing one copied and/or changed, or a specification that is no longer required, for the active database, will be deleted.

Adding a new Report Specification

You must have selected a database before you can add a Report Specification.

1   Highlight **Edit**, from the **Report** menu, and press **<Enter>**.

The system opens the **Edit** menu with four options: **Add**, **Change/Show**, **Delete**, and **Copy**.

2   Highlight **Add**, and press **<Enter>**.

The system opens the **Add** data box.

3   Type the name of the new Report Specification.

A Report Specification name must be unique and may be up to 30 characters long.

4   Press **<Enter>**.

The system will initialize the Report Specification, display **Spec= <name>** at the top of the screen, and open the **Define** menu with three options: **Page Options**, **Field Options**, and **Description**.

5   Refer to the following chapters for details on defining a Report Specification:

Page Options: *Defining the Page Options of a Report*

Field Options: *Defining the Field Level Attributes for a Report*

Description: *Adding a Description to the Report Specification*

Changing an Existing Report Specification

You must have selected a database before you can change a Report Specification.

1   Highlight **Edit**, from the **Report** menu, and press **<Enter>**.

The system opens the **Edit** menu with four options: **Add**, **Change/Show**, **Delete**, and **Copy**.

2   Highlight **Change/Show**, and press **<Enter>**.

The system opens the **Change/Show** data box.

3   Type the name of the required Report Specification, and press **<Enter>**.

The system closes the data box and displays the name of the selected Report Specification at the top of the screen. The **Define** menu is opened with three options: **Page Options**, **Field Options**, and **Description**.

4   Change the Report Specification as required. Refer to the following chapters for further information:

Page Options: *Defining the Page Options of a Report*

Field Options: *Defining the Field Level Attributes for a Report*

Description: *Adding a Description to the Report Specification*

Deleting Report Specifications

You must have selected a database before you can delete one or more Report Specifications.

If a Report Specification is associated with more than one database, the association to the database will be deleted. A Report Specification will be deleted only when it is no longer associated with any other database.

To delete one specification

1   Highlight **Edit**, from the **Report** menu, and press **<Enter>**.

   The system opens the **Edit** menu with four options: **Add**, **Change/Show**, **Delete**, and **Copy**.

2   Highlight **Delete**, and press **<Enter>**.

   The system opens the **Delete** data box, which displays a list of Report Specifications associated with the active database.

3   Highlight the Report Specification name that is to be deleted.

4   Press **<Enter>**.

   The system opens the **Delete** confirmation form.

To delete the specification

1   Highlight **YES**, and press **<Enter>**.

   The system will delete the specification and return to the **Edit** menu.

To return to the Edit menu

1   Highlight **NO**, and press **<Enter>**.

   The system will return to the **Edit** menu without deleting the specification.

To delete multiple specifications

1   Highlight **Edit**, from the **Report** menu, and press **<Enter>**.

   The system opens the **Edit** menu with four options: **Add**, **Change/Show**, **Delete**, and **Copy**.

2   Highlight **Delete**, and press **<Enter>**.

The system opens the **Delete** data box, which displays a list of
Report Specifications associated with the active database.

3   Highlight a Report Specification that is to be deleted.

4   Press **<F7>**.

The system opens the **Select** menu with five options: **Select/Clear**,
Find, **Select All**, **Clear All**, and **Show Full Value**.

5   Use the **Select** options to mark the specifications to be deleted.

Select/Clear: Selects the highlighted specification for deletion. If the
highlighted specification has a **+** in the left margin this menu item
will clear the selection.

Find: Used to locate a specification name in the list. The system
opens the **Find** data box. Type one or more of the initial
characters of the Report Specification, and press **<Enter>**.

Select All: Will select all specifications in the list.

Clear All: Will clear all selections.

Show Full Value: Will display the full specification name.

6   Repeat step 3 - 5 until all of the Report Specifications to be deleted
have been selected.

7   Press **<Enter>**.

The system opens the **Delete** confirmation form. This data box will
repeat for all specifications selected.

To delete the specification

1   Highlight **Yes**, and press **<Enter>**.

The system will delete the specification, and then prompt for
confirmation to delete the next selected specification. When the
last specification has been deleted the system will return to the
Edit menu.

To continue without deleting

1   Highlight **NO**, and press **<Enter>**.

The system will prompt for confirmation to delete the next selected
specification. If there are no more specifications selected the
system will return to the **Edit** menu.

Copying a Report Specification

You must have selected a database before you can copy a Report Specification.

1 Highlight **Edit**, from the **Report** menu, and press **<Enter>**.

The system opens the **Edit** menu with four options: **Add**, **Change/Show**, **Delete**, and **Copy**.

2 Highlight **Copy**, and press **<Enter>**.

The system opens the **Copy** form, and places the cursor in the **From** data box.

3 Type the name of the Report Specification to be copied, and press **<Tab>**.

The system will validate the name and move the cursor to the **To** data box. If the name entered is not a valid Report Specification a list of valid names is opened.

4 Type the new name for the Report Specification, and press **<Enter>**.

The system will compile the Report Specification under the new name and return to the **Edit** menu.

Defining the Page Options of a Report

The page options of a Report Specification control the appearance or presentation of information. These options control the width and height of the page. A page can be displayed on the screen, sent to another table, or printed on paper. These options also control the spacing and column formatting for the page. A displayed page can have a single column of information, or it can wrap the information onto multiple columns. Within these columns, field definitions can control where the information from each field is positioned.

The page display includes a header, a continuation header, and a footer. A header appears at the top of each display page, unless a continuation header is used. A continuation header replaces the standard header when a record spans more than one page of display. A footer appears at the bottom of each display page. These formatting options allow users to position standard text, such as a report title, and dynamic items, such as computed values or dates. A dynamic item is one that can change based on changing report values or report dates.

This chapter describes the steps for completing the **Page Options** worksheet. This worksheet has five forms. Each form in the worksheet is described separately. Each section describes the form, the steps for completing the form, and gives a summary of the prompts on the form. It is not necessary to complete each form in the worksheet. Forms two through five are activated using the checklist on the first form.

The first form sets the page length and width, the record and line spacing, the starting position for printing, and the destination for the report.

The second form defines the printing mode, columns, and the record arrangement; this form also identifies a Substitution Table or pre-requisite Report Specification. The printing mode controls how accented characters are displayed.

The third form defines the header to be used. A header appears at the top of the page. The header can include text (which does not change each time the Report is generated), database fields, computed fields, the date, and page numbers. This form can also be used to specify the date and page numbering directly, rather than in a header or footer.

The fourth form defines the continuation header. A continuation header replaces the regular header when the display of a record spans more than one page.

The fifth form defines the footer. A footer appears at the bottom of the page. The footer can include text (which does not change each time the report is generated), database fields, computed fields, the date, and page numbers.

For information about listing the definitions of Report Specifications, see *Adding, Changing, Deleting, Copying and Listing Report Specifications*. For information on how to use a Report Specification to generate a report, see *Running a Report*. Several sample Report Specifications are included at the end of this part.

Edit Options Menu (<F7>)

Use these **Edit Options** when adding or changing information in the data boxes of the **Page Options** worksheet.

DOS
Use the **<Insert>** key to toggle between insert and typeover modes. Use the **<Delete>** key to delete a character at the cursor location. Use the **<Backspace>** key to delete a character to the left of the cursor location. It is not necessary to use the **Options** menu to insert text entered from the keyboard, or to delete text.

• **Insert Text**

This edit option is used to insert text from the MINISIS Clipboard into the current data box. Position the cursor at the starting position for the insertion, then press **<Enter>**. This option then opens a data box for the text to be inserted. You can type information to be entered in the field, or request that the contents of the MINISIS Clipboard be inserted. When completed, the system inserts information into the selected field definition at the cursor position. The system refreshes the worksheet display.

• **Extract/Delete Text**

This option is used to copy or delete text from the current data box. Choose **Delete Text** to remove text from the current data box, **Copy Text to Clipboard** to make a copy of selected text from the data box, or **Move Text to Clipboard** to delete selected text from the data box, but keep it in the MINISIS Clipboard. Then, when prompted, place the cursor at the starting position of the text to be deleted, copied or moved, and press **<Enter>**. Lastly, the system prompts for the end position of the text to be selected. When the end position is entered (by positioning the cursor and pressing **<Enter>**), the system deletes information from the field definition if you requested **Delete Text** or **Move Text to Clipboard**, and adds the selected text to the MINISIS Clipboard if you requested **Copy Text to Clipboard** or **Move Text to Clipboard**. The system refreshes the worksheet.

• **Change Text**

This option is used to replace a string of characters with another, either once or in all instances in which the string appears, and optionally in all occurrences of the field. The system prompts for the starting position of the

string to be replaced. Move the cursor as required, and press **<Enter>**. Similarly, when prompted, move the cursor to the ending position of the string to be replaced, and press **<Enter>**. This option then opens a data box for the replacement text. Optionally place an **X** after the **Change All Instances** prompt to change all instances of the selected string with the replacement string. Similarly, place an **X** after the **Change All Occurrences** prompt to change the selected string with the replacement string in every occurrence of the field. The system then refreshes the worksheet display.

- **Shift Right**

  This option is not available with this release.

- **Shift Left**

  This option is not available with this release.

- **Add**

  This option is used to specify dynamic data, such as computed values or dates, to be used in the header, continuation header, or footer. You will be asked to move the cursor to the place in the header, continuation header, or footer where the data is to be inserted. Then press **<Enter>**. The system opens a worksheet for adding a field from the database record in the header, continuation header, or footer field. You can specify a field expression, a field literal to be printed if the field is present, and one or more alternate field expression. The system then refreshes the worksheet display.

- **Change/Show**

  This option is used to change the field expression, field literal and alternate field expressions used in the header, continuation header, or footer. The user is requested to select from a list of defined field expressions. The system opens a worksheet for changing the field expression, field literal to be printed if the field is present, and alternate field expression. The system then refreshes the worksheet display.

- **Delete**

  This item is used to delete a field from the header, continuation header, or footer. The user is requested to select from a list of defined field expressions. After selecting the field, the user can verify that the field can be deleted from the header, footer, or continuation header. The system then refreshes the worksheet display.

- **Move**

    This item is used to change the location of a field in a header, continuation header, or footer. The user is requested to select from a list of defined field expressions. After selecting the field, the user moves the cursor in the data box to the new location for the field, and presses **<Enter>**. The system then refreshes the worksheet display.

Preliminary Information

The user must have access to the Report module and to the database associated with the Report Specification.

Before a Report Specification can be created or changed, the appropriate database must be open. Each Report Specification is associated with a particular database and uses the fields from that database.

This chapter describes the steps to add or change the Page Options of a Report Specification. After identifying the Report Specification, continue with the worksheet instructions.

The steps in this chapter assume that the Report module is active and the Report Specification has been named (if creating a Report Specification) or selected (if changing a Report Specification.) The instructions begin at the **Define** menu of the **Edit** menu in **Report**.

Expected Results

After completing the **Page Options** worksheet, the system returns to the **Define** menu under the **Edit** menu in **Report**. For users adding a Report Specification, the field level attributes of the Report Specification can be defined.

Defining the Page Options

Use the **Page Options** worksheet to define the basic characteristics of the report page. These options include: setting the page size, identifying the default output device, and a checklist of subsequent forms. Each of these additional forms defines related page options.

> Only enter the information that this Report Specification requires. When a data box is completed, press **<Tab>** to move to the next data box. If a prompt is to be left blank, or to accept the default, press **<Tab>** to move to the next data box.

1   Highlight **Page Options**, and press **<Enter>**.

The system opens the first form of the **Page Options** worksheet.

2   Type the number of **Lines per Page**, and press **<Tab>**.

The default value is 58. This value reflects the standard number of lines on a US Letter size page (8.5 x 11 inches). MINISIS can accommodate up to 1000 lines per page. Use 20 if the report is designed for a screen.

3   Type the number of **Characters per Line**, and press **<Tab>**.

The default value is 78. This value works well for the US Letter size page and the terminal screen. MINISIS can accommodate up to 1000 characters per line. This value combined with the starting position given in the **Left Margin** data box gives the system the margins for the page. Some suggested values are:

- Screen width - 78 characters
- US Letter - 80 characters
- A4 - 75 characters
- Computer paper (wide) - 132 characters
- File on disk - 1000 characters

4   Type the number of **Spaces Between Records**, and press **<Tab>**.

You can separate records with one or more spaces, or start new records on new lines with optionally one or more extra lines inserted between records.

To format records side by side on the same line, specify a value between 1 and 9999, but in any case less than the number of characters on a line. When the report is produced, if the spacing forces the next record to a new line, the record is formatted at the left margin of the new line.

To format records on a new line, specify a value between 1L and 999L. L indicates that MINISIS is to insert the specified number of lines. The default, 1L, starts each record on a new line; it does not insert extra lines between the records. When the report is produced, if the spacing forces the next record to a new page, the record is formatted at the top of the page.

5   Type a value for the **Default Spacing**, and press **<Tab>**.

The line spacing sets the distance between each line printed in a record. Choose from **SINGLE**, **DOUBLE**, or **TRIPLE**. The default, SINGLE, does not insert any additional lines between each line of text.

6   Type a value for the **Left Margin**, and press **<Tab>**.

The left margin is the starting character position on the physical page. This value can be between 1 and 255, but must be less than the page width. MINISIS starts printing at this position and continues for the number of characters given in the **Characters per line** data box.

Ensure that the **Left Margin** and **Characters per Line** do not exceed the page width.

7   Type the name of the **Default Output Device**, and press **<Tab>**.

This option identifies the destination of the display or result of the report. The **Default Output Device** can be a printer, a terminal, a disk file, or a table. Each of these devices has a logical name defined for the system. These logical names can be up to 30 characters long.

8   Activate any or all of the optional attributes.

This checkbox list activates the subsequent forms in the worksheet.

- **Mode, Page Columns, Record Arrangement, and Miscellaneous**

  Mode sets how the accented characters are displayed. Page column sets the attributes of a page with multiple columns. Record arrangement controls the display of records on a page; this

includes options such as widows and orphans, the maximum
number of records per page, and the number of lines reserved for
each record. An **X** in this checkbox activates this option.

- **Header Lines**

  This form collects the information necessary to create lines that
  appear at the top of each page of the report. An **X** in this checkbox
  activates this option.

- **Continuation Header Lines**

  This form formats header lines that appear only when a record
  requires more than one page to print. An **X** in this checkbox
  activates this option.

- **Footer Lines**

  This form collects the information necessary to create lines that
  appear at the bottom of each page of the report. An **X** in this
  checkbox activates this option.

- **All of the above**

  An **X** in this checkbox activates all the optional forms in the **Page
  Options** worksheet.

If any of the Optional Attributes have been selected

1   To go forward to the next form, press **<F3><F5>**.

    The system opens the next selected form.

To accept the defined Page Options without activating the Optional Attributes

1   Press **<Enter>**.

    The system closes the **Page Options** worksheet and returns to the
    Define menu.

To exit to the Page Options worksheet without saving the values entered

1   Press **<F8>**.

    The system closes the **Page Options** worksheet and returns to the
    Define menu.

Mode, Page Columns, Record Arrangement, and Miscellaneous

This form displays the following information from Form 1:

- Lines per Page
- Characters per Line

Only enter the information that this Report Specification requires. When a data box is completed, press <Tab> to move to the next data box. If a prompt is to be left blank, or to accept the default, press <Tab> to move to the next data box.

Setting the Mode Options

1   Type one of the **Printing Mode** options, and press **<Tab>**.

The **Printing Mode** option indicates how MINISIS will handle accented characters during display. In particular, it instructs MINISIS how to deal with accented characters that are represented as combinations of two or three characters. For example, "é" may be represented in the database as "e'" or "e|'". There are five options:

- **AS_IS**

    This mode prints the accented characters exactly as they are keyed into the MINISIS database. This mode can be used to provide a proof list to check data entry.

- **OVERPRINT**

    This option removes the vertical bar and prints the diacritic over the alphabetic character. **OVERPRINT** is used to send the accented data to the line printer. This mode prints a line of data and then overprints the line with the diacritic characters.

- **BACKPRINT**

    This option is used to print the diacritic over the alphabetic character when accented characters are represented without a vertical bar.

- **CHAR_PAIR**

    This option removes the vertical bar but prints the diacritic after the alphabetic character instead of over it. There is no overstrike.

- **STRIP**

    This option removes all diacritic characters and vertical bars.

2   If the report destination is a disk file or a table, place an **X** in the
        Suppress Page Breaks checkbox, and press **<Tab>**.

        This prevents the system from inserting page eject control codes in
        the output. If this option is active when printing the report, the
        printing is continuous and does not stop at the end of each
        physical page.

Setting up Multiple Columns

1   Type the **Number of Columns/page**, and press **<Tab>**.

        The default value is 1, indicating one broad stream of text within the
        page margins. To have more than one column, type the number of
        columns. MINISIS will create that number of equally-spaced
        columns. The maximum number of columns per page is nine.

2   Type the **Column Width**, measured in characters, and press **<Tab>**.

        Each column will be the same width.

3   Type the number of **Spaces between Columns**, and press **<Tab>**.

        This is the number of characters that will be left blank between each
        column. The maximum number of spaces between columns is nine.

> These values combined together must not exceed the **Characters per line**.

Setting the Record Arrangement Options

1   Type the **Number of Pages to Skip** when the value in a field with
        equal suppression changes, and press **<Tab>**.

        MINISIS allows users to set equal suppression on fields. This is a
        field-level option. The field-level option prevents the display of field
        values in all but the first record of a sequence when that field value
        does not change from one record to the next. This page-level
        option instructs MINISIS to insert the specified number of page
        eject control codes into the report when the value in a field
        changes. This forces records with new values to start on a new
        page. The maximum value is 99.

        If the page has more than one column, use an **L** after the number to
        skip the requested number of columns rather than pages. The
        maximum value is 9L.

2   To allow records to be printed on more than one page, place an **X** in
     the **Split Records between Pages** checkbox, and press **<Tab>**.

     If this option is active (has an **X** in the checkbox), then MINISIS will
     start records on the current page even if the page does not have
     enough lines left to print the entire record. If this option is left
     inactive, MINISIS will not allow page breaks in the middle of a
     record display. If records are not allowed to split across pages,
     MINISIS will start the record on a new page when the current page
     does not have sufficient space for the record.

3   Type the minimum number of lines remaining on the current page to
     print the record on the current page, and press **<Tab>**.

     The **Page Threshold** value prevents "widows" in the output. A
     widow is a line that is printed at the end of a page or column and is
     separated from the rest of the record, which continues on the next
     page or column.

     The **Page Threshold** value indicates how many lines are the
     minimum required for the record. The system compares this value
     to the lines left on the current page or column. If there are at least
     as many lines as the **Page Threshold** value, the system begins
     printing the record on the current page or column. If there are
     fewer lines left, the system begins printing the record on the next
     page or column.

4   Type the **Maximum Number Records/page**, and press **<Tab>**.

     The maximum number of records per page controls how many
     records can be output in sequence before a new page is started.
     This option has two extremes: a value of 1 puts each record on a
     separate page, the maximum value of 9999 is used when a report
     is sent to a disk file or table.

5   Type the **Maximum Number of Lines/record**, and press **<Tab>**.

     This option reserves a fixed block of lines to print for each record.
     The system adds blank lines if necessary to fill the number of lines
     specified.

Using Substitution Tables

1   If data must be converted, type the **Name of Substitution Table**,
     and press **<Tab>**.

A Substitution Table is used to convert data in a report. For example, a substitution table can be used to replace **<165>** with Ñ, or to replace **Jan** with **January**. The Table name may be up to 30 characters long.

This feature is not available with this release.

Using Sequences of Reports

1   If this report relies on information from another report, type the name of the required report in the **Name of Pre-requisite Specification** data box.

The system will stream the report named here before running this report. Reports can be used to update tables with calculated values. In such a situation, it would be required that the table be updated with the calculated values before a second or dependent report is run. To ensure that the table is updated before this report is run, type the name of the earlier report.

Passing Run-time Parameters to the Report

1   Specify any **User-Defined Parameters** to be used with the report. This feature permits applications to pass parameters to a report.

The text entered here is passed to the application exactly as entered.

To go forward to the next form

1   Press **<F3><F5>**.

The system opens the next selected form.

To accept the defined Page Options

Press **<Enter>**.

The system closes the **Page Options** worksheet and returns the user to the **Define** menu.

To exit to the Page Options worksheet without saving the values entered

1   Press **<F8>**.

The system closes the **Page Options** worksheet and returns the user to the **Define** menu.

Header, Continuation Header, and Footer Lines

This form displays the following information from Form 1:

- Lines per Page
- Characters per Line

Only enter the information that this Report Specification requires. When a data box is completed, press **<Tab>** to move to the next data box. If a prompt is to be left blank, or to accept the default, press **<Tab>** to move to the next data box.

Setting the System Formatting Options - Page Numbers and Date

These options eliminate the need for inserting these values as a field in the header itself. Use either the system page numbering or page numbering in the header. The same is true for the date; use either the system date or a date field in the header. If the header includes either page or date fields, these header fields override any attributes given in this section.

1   To use the system page numbering, type the **Location of Page Number**, and press **<Tab>**.

This positions the page number on the page. MINISIS supports eight positioning options: **TOP_RIGHT, TOP_LEFT, TOP_CENTER, BOT_RIGHT, BOT_LEFT, BOT_CENTER, TOP_ALT** (top right corner for odd-numbered pages, and top left corner for even-numbered pages), and BOT_ALT (bottom right corner for odd-numbered pages, and bottom left corner for even-numbered pages).

2   Type the first page number in the report in the **Starting Page Number** data box, and press **<Tab>**.

This value can be a number between 1 and 9999. The system begins page numbering with this value and increments it by one for each page in the report.

3   Type the numbering style in the **Page Number Format** data box, and press **<Tab>**.

MINISIS supports three types of page number formats : **ARABIC** (1,2,3,...), **ROMAN** (I,II,III,...), and **LOCAL** (specific character set).

4   To use the system date, type the location for the date in the .
    Location of Date data box, and press **<Tab>**.

    Each time the report is run, the current date will be displayed in this
    location. The same eight location choices for page numbers are
    available for the system date.

    If you use both the system date and page numbering options, do not
    use the same page location for both.

5   If you are printing the system date in the report, type a **Date**
    Format, and press **<Tab>**.

    MINISIS supports five date formats: **DD/MM/YY**, **MM/DD/YY**,
    YYYY-MM-DD, **SYS_FULL**, and **SYS_BRIEF**. **SYS_FULL** and
    SYS_BRIEF are formats specified in the configuration format by
    the System Manager.

Header Lines

Header lines display at the top of the formatted page, except when
continuation header lines have been defined and a record spans more than
one page.

The **Header Lines** data box is displayed in an 80 column format. If the page
width defined in the **Characters per Line** data box exceeds 80 characters, the
screen can be scrolled to view the full width of the page. Text can be
positioned in the data box, and the number of header lines is only restricted by
the number of lines set for the page. Type text directly into the data box or
press **<F7>** for **Edit Options**.

Values extracted from system and database fields can also be included in the
header lines. For information on using fields in a header refer to the section
Using Fields in a Header, Continuation Header, or Footer.

    Do not press **<Enter>** while working in the **Header Lines** data box.
    Pressing **<Enter>** indicates that the entire **Page Options** worksheet
    is complete and ready to be saved.

Continuation Header Lines

Continuation header lines are displayed at the top of the second and
subsequent pages when a record spans more than one page. If continuation
header lines are not defined, normal header lines will be displayed.

The **Continuation Header Lines** data box is displayed in an 80 column format. If the page width defined in the **Characters perLline** data box exceeds 80 characters, the screen can be scrolled to view the full width of the page. Text can be positioned in the data box, and the number of continuation header lines is only restricted by the number of lines set for the page. Type text directly into the data box or press **<F7>** for **Edit Options**.

Values extracted from system and database fields can also be included in the continuation header lines. For information on using fields in a continuation header refer to the section *Using Fields in a Header, Continuation Header, or Footer.*

Do not press **<Enter>** while working in the **Continuation Header Lines** data box. Pressing **<Enter>** indicates that the entire **Page Options** worksheet is complete and ready to be saved.

Footer Lines

Footer lines display at the bottom of each formatted page.

The **Footer Lines** data box is displayed in an 80 column format. If the page width defined in the **Characters per Line** data box exceeds 80 characters, the screen can be scrolled to view the full width of the page. Text can be positioned in the data box, and the number of footer lines is only restricted by the number of lines set for the page. Type text directly into the data box or press **<F7>** for **Edit Options**.

Values extracted from system and database fields can also be included in the footer lines. For information on using fields in a footer refer to the section *Using Fields in a Header, Continuation Header, or Footer.*

Do not press **<Enter>** while working in the **Footer Lines** data box. Pressing **<Enter>** indicates that the entire **Page Options** worksheet is complete and ready to be saved.

Using Fields in a Header, Continuation Header, or Footer

Values extracted from system and database fields can be included in header, continuation header and footer lines. The fields available are:

- database fields
- computed fields and compute statements
- sorted field results
- system-generated values (date and page numbers)

The position of the field is indicated in the header, continuation header, or footer lines data box by an exclamation point (!).

Adding a Header/Footer Field

1   To activate the **Edit Options** menu, press **<F7>**.

    The system opens the **Edit Options** menu with options for inserting, changing, deleting and moving header and footer text and fields.

2   Highlight **Add**, and press **<Enter>**.

    The system displays the message **Put cursor under start of field and press <Enter>. To cancel, press <F8>.**

3   Position the cursor in the **Header/Footer** data box at the point where the field data is to be displayed, and press **<Enter>**.

    The system opens the **Header/Footer field** worksheet.

4   Complete the **Header/Footer field** worksheet.

    The following sections provide details on completing the worksheet:

    - *Header/Footer Field Worksheet - Form 1*
    - *Header/Footer Field Worksheet - Form 2*
    - *Header/Footer Field Worksheet - Form 3*

Changing a Header/Footer Field

1   To activate the **Edit Options** menu, press **<F7>**.

    The system opens the **Edit Options** menu with options for inserting, changing, deleting and moving header and footer text and fields.

2   Highlight **Change/Show**, and press **<Enter>**.

The system displays a list of fields defined for the current header/footer.

3   Highlight the field definition to be changed, and press **<Enter>**.

The system opens the **Header/Footer field** worksheet - form 1.

4   Modify the **Header/Footer field** worksheet as required.

The following sections provide details on completing the worksheet:

- *Header/Footer Field Worksheet - Form 1*
- *Header/Footer Field Worksheet - Form 2*
- *Header/Footer Field Worksheet - Form 3*

Deleting a Header/Footer Field

1   To activate the **Edit Options** menu, press **<F7>**.

The system opens the **Edit Options** menu with options for inserting, changing, deleting and moving header and footer text and fields.

2   Highlight **Delete**, and press **<Enter>**.

The system displays a list of fields defined for the current header/footer.

3   Highlight the field definition to be deleted, and press **<Enter>**.

The system opens the delete confirmation form, asking if you wish to keep the field.

To delete the field

1   Highlight **NO**, and press **<Enter>**.

The field is deleted from the header/footer and the system returns to the **Page Options** worksheet.

To return to the Page Options worksheet without deleting the field

1   Highlight **YES**, and press **<Enter>**.

The system returns to the **Page Options** worksheet without deleting the Header/footer field.

Moving a Header/Footer Field

1   To activate the **Edit Options** menu, press **<F7>**.

The system opens the **Edit Options** menu with options for inserting, changing, deleting and moving header and footer text and fields.

2   Highlight **Move**, and press **<Enter>**.

The system displays a list of fields defined for the current header/footer.

3   Highlight the field definition to be moved, and press **<Enter>**.

The system returns to the **Header/Footer** data box and displays the message **Put cursor under start of field and press <Enter>. To cancel press <F8>**.

4   Move the cursor to the new position for the **Header/Footer** field, and press **<Enter>**.

The system moves the **Header/Footer** field to the new location.

Header/Footer Field Worksheet

The **Header/footer Field** worksheet for adding or changing a database field, computed fields or compute statement, sorted field results, or system-generated values (date and page number) in a header, continuation header, or footer has three forms.

The first form sets up the field expression, literal, and an alternate field expression.

The second form defines the literals in more detail.

The third form defines the display attributes of the field expression value and identifies any User Routines required.

Header/Footer Field Worksheet - Form 1

1   Type a database field mnemonic, a temporary field mnemonic, a compute statement, or a system field name in the **Field Expression** data box, and press **<Tab>**.

- If a database field mnemonic is used, the value from that field is displayed in the header or footer. Press **<F1>** to select from a list of available mnemonics.

- If a temporary field mnemonic is used, the result of the compute operation or sort operation stored in that field is displayed in the header or footer.

- If a compute statement is used, the statement is executed and the result is displayed in the header or footer.

- If a system field name is used, the date ($DATE) or page number ($PAGENO) is displayed in the header or footer.

When using compute statements with database fields, the system uses data from the first record on each page for the field display in the header, or data from the last record on each page for the field display in the footer.

2   To have text appear to the left of the field data, type a text label in the **Field Literal1** data box, and press **<Tab>**.

    The text for the literal can be up to 50 characters long. If the literal and field value do not fit on the header or footer line, the system wraps the line. This gives unpredictable results in the display.

3   To have another value appear when there is no data in the field identified by the **Field Expression**, type a database field mnemonic, a temporary field mnemonic, a compute statement, or a system field name in the **Alternate Field Expression** data box.

    The values available for this option are the same as the **Field Expression** values with the addition of text. This value is displayed when the **Field Expression** does not result in data.

    There can be more than one Alternate field expression. The first alternate field expression that contains data will be used.

To enter another Alternate Field Expression

4   Press **<F5>**.

    The system opens a new occurrence of the **Alternate Field Expression** data box.

5   Repeat step 3.

To go forward to the next form

1   Press **<F3><F5>**.

    The system opens the next form.

To accept the defined Header/Footer field

1   Press **<Enter>**.

The system closes the **Header/Footer Field** worksheet and returns
to the **Page Options** worksheet.

To exit to the Header/footer field worksheet
without saving the values entered

1   Press **<F8>**.

The system closes the **Header/Footer field** worksheet and returns
to the **Page Options** worksheet without saving any values entered.

Header/footer Field Worksheet - Form 2

This form allows users to fine tune the display of the field literals. The second
form displays the **Field Expression** from Form 1.

1   To have text appear next to the field data, type a text label in the
Field Literal1 data box, and press **<Tab>**.

The value entered in this data box is copied to the **Field Literal1**
data box on form 1.

The text for the literal can be up to 50 alphanumeric characters long.
If the literal and field value do not fit on the header or footer line,
the system wraps the line. This gives unpredictable results in the
display.

2   Type the position of the literal in the **Literal Type** data box, and
press **<Tab>**.

There are two positions for a literal: **PRE** and **POST**. Pre-literals are
displayed in front of the field value. Post-literals are displayed after
the field value.

3   If the literal displays only when the field expression value displays,
place an **X** in the **Conditional Literal** checkbox, and press **<Tab>**.

Activating this option prevents the literal from appearing when there
is no data resulting from the **Field Expression** or **Alternate Field
Expression**.

4   If the **Field Expression** or **Alternate Field Expression** results in a
repeating field and the literal repeats for each occurrence of the
field display, place an **X** in the **Repeating Literal** checkbox, and
press **<Tab>**.

Activating this option causes the literal to display once for each field
expression result. If left inactive, the literal is displayed for the first
occurrence only.

5   If the pre-literal should be displayed for every occurrence but the
first, or if the post-literal should appear only with the last
occurrence, place an **X** in the **Suppress Repeating Literal**
checkbox, and press **<Tab>**.

The **Suppress Repeating Literal** is only applied if the **Repeating
Literal** option is activated. This option suppresses the display of
the literal before the first occurrence of a pre-literal, or after all but
the last occurrence of a post-literal.

A more complete discussion about the combined use of **Literal
Type**, **Conditional Literal**, **Repeating Literal**, and **Suppress
Repeating Literal** is given with the **PRINT** statement, form 2, in the
chapter on *Defining the Field Level Attributes for a Report* later in
this manual.

6   If the literal is not to be displayed if the field is logically absent, place
an **X** in the **Conditional Display** checkbox, and press **<Tab>**.

This ensures that literals and spacing parameters are applied only
when data is present.

7   Type the **Equal Suppression** desired, and press **<Tab>**.

There are three options for equal suppression:

- **NONE**: Every value of the field expression will be displayed
- **OCC**: If the field expression repeats, it will not be displayed if the
  value is the same as the previous occurrence
- **RECORD**: The field expression will not be displayed if it is the
  same as in the previous record

8   To have a second string of text appear next to the field data, type a
text label in the **Field Literal2** data box, and press **<Tab>**.

If the **Literal1 Lliteral2**, and field value do not fit on the header or
footer line, the system wraps the line. This gives unpredictable
results in the display.

9   Provide the appropriate values for **LiteralTtype**, **Conditional
     Literal**, **Repeating Literal**, and **Suppress Repeating Literal**.

These four options are applied to the **Field Literal2** in the same
manner as the corresponding options for **FieldLliteral1**.

The following points should be kept in mind if two literals are used
with a field expression:

- if both literals are designated as pre-literals, **Literal1** will display
  followed by **Literal2**
- if both literals are designated as post-literals, **Literal1** will display
  followed by **Literal2**
- if **Literal1** is conditional and **Literal2** is not, **Literal1** will only
  display when there is field data but **Literal2** will always display
- if **Literal1** is not conditional but **Literal2** is, **Literal1** will always
  display but **Literal2** will only display if there is field data

To go forward to the next form

1   Press **<F3><F5>**.

The system opens the next form.

To accept the defined Header/Footer field

1   Press **<Enter>**.

The system closes the **Header/Footer field** worksheet and returns
to the **Page Options** worksheet.

To exit to the Header/Footer field worksheet
without saving the values entered

1   Press **<F8>**.

The system closes the **Header/Footer field** worksheet and returns
to the **Page Options** worksheet without saving any values entered.

Header/Footer Field Worksheet - Form 3

This form allows users to define the display attributes of the field data and
identify any User Routines required. The Field Expression is displayed.

1   Type the font attributes for the data into the **Character Font** data
    box, and press **<Tab>**.

    If available for the display device, MINISIS supports three types of
    display:

    - **NORMAL** displays the characters using the standard printer or
      screen font size
    - **HALF** displays the characters compressed to half the size of the
      normal font
    - **DOUBLE** displays the characters twice the size of the normal font

2   Type the display attributes for the data into the **Display
    Enhancement** data box, and press **<Tab>**.

    If available for the display device, MINISIS supports four types of
    display: **NORMAL, REVERSE** video, **BOLD**, and **UNDERLINE**.

3   Set the justification of the data in the field in the **Justification** data
    box, and press **<Enter>**.

    This option has three possible positions for the data in the field:
    LEFT, RIGHT, and **CENTER**.

    - **LEFT** starts the data at the start of the field position (using the
      maximum length of the field)
    - **RIGHT** pads the field data so that the data is displayed in the
      terminating position of the maximum length of the field
    - **CENTER** pads the field data so that the data is displayed with
      equal spaces to the right and left

4   To have the field data displayed in all uppercase, place an **X** in the
    Upshift Field checkbox, and press **<Tab>**.

    If this option is active, MINISIS forces the data in the field to display
    in all uppercase. If this option is left inactive, MINISIS displays the
    data exactly as it is stored.

5   Type the maximum length for the field data in the **Maximum Length**
    data box, and press **<Tab>**.

    This sets the upper limit on the length of the field data both for
    storing computed and sorted values and for displaying database
    fields. The date formats default to the correct length. The

maximum value for this option is 32766. This also works in
conjunction with the right justification to determine the location of
the end of the field.

6   To begin the display at a specific position in the field, type the
    starting character position in the **Offset to Field** data box, and
    press **<Tab>**.

    This offset is the character position in the field data at which the
    system will begin the display. The default of 1 forces the system to
    begin printing at the first character in the field. This is useful if the
    data is stored with a literal inserted at the start.

7   To have the display of field data end after a certain number of
    characters, type the numeric value for the character length in the
    Truncate Field After data box, and press **<Tab>**.

    This forces the display to abbreviate the field data. The next prompt
    gives the truncation marker.

8   Type the indicator for truncated fields in the **Field truncation Literal**
    data box, and press **<Tab>**.

    This text appears at the end of the truncated field value. This is
    helpful for showing that the field data is truncated.

9   To change the starting position in the header, continuation header,
    or footer from the cursor position, type a numeric value in the
    Starting Column data box, and press **<Tab>**.

    This is the column value at which the field data will begin to display.
    The system inserts the column position the cursor was at when the
    Field worksheet is opened. If the field data extends past the length
    of the line or space allotted, it will wrap to the next line and start
    again at this column position.

10 To set an ending position, different from the maximum length and
    the page width, type a numeric value into the **Ending Column**
    data box, and press **<Tab>**.

    This position constrains the display of the field data by setting an
    ending position. The data will wrap onto the next line and continue
    from the **Starting Column** position. This allows the system to
    format the fields as columns within the header, continuation
    header, or footer.

11 To skip one or more occurrences of the field, type a value in the
    Select Occurrence From data box, and press **<Tab>**.

    The display will commence with the occurrence specified.

    Optionally, you can type **LAST** and a number. For example, LAST 5
    will display the last five occurrences.

12 To limit the number of occurrences of the field, type a value in the
    To data box, and press **<Tab>**.

    If there are more occurrences of the data field than specified, they
    will not be displayed in the header/footer.

Compute Constraints and User Routines

13 If the field expression is a compute statement, type a number
    between 0 and 10 for the number of decimal places allowed into
    the **Decimal Place for Computation** data box, and press **<Tab>**.

    This forces the system to keep its computation results within a range
    of accuracy. The more decimal places the computation allows, the
    more accurate the resulting value.

14 If the field expression is a compute statement, type a number
    between 0 and 10 for the number of decimal places to be
    displayed into the **Decimal Place for Output** data box, and press
    <Tab>.

    The display of the computed result will be truncated to the number
    of decimal positions shown.

15 To force the displayed result to be rounded up, place an **X** in the
    Round up Computation Result checkbox, and press **<Tab>**.

    This brings the computation results up to the nearest decimal place
    value before being displayed.

16 To use a user-written compute routine, type the name of the User
    Routine in the **Name of Compute User Routine** data box, and
    press **<Tab>**.

    User Routines must be registered in the Configuration before they
    can be used. User Routine Names can be up to 30 characters
    long. Each User Routine has a unique name.

17 To use a user-written routine for displaying or manipulating data in
the field, type the name of the User Routine in the **Name of
Report User Routine** data box.

User Routines must be registered in the Configuration before they
can be used. User Routine Names can be up to 30 characters
long. Each User Routine has a unique name.

To accept the defined Header/footer field

1 Press **<Enter>**.

The system closes the **Header/Footer** field worksheet and returns
to the **Page Options** worksheet.

To exit to the Header/footer field worksheet without saving the values entered

1 Press **<F8>**.

The system closes the **Header/Footer field** worksheet and returns
to the **Page Options** worksheet without saving any values entered.

Defining a Report for Input to another Software.

MINISIS provides a considerable repertoire of formatting features, but it will
not do everything one would expect of a desktop publishing software. If the
MINISIS report is intended for a publication, you may prefer to send the report
to a file, for further processing by another software. The following are
recommended values for some of the page options in the Report Specification
which will simplify the final formatting of the data:

- Set **Characters per Line** to the maximum (1000).
- Set **Default Spacing** to **1**.
- Set **Left Margin** to **1**.
- Set **Suppress Page Break** to **X**.
- Set **Number of Columns/page** to **1**.
- Do not specify a **Location of Page Number**, **Location of Date**, **Header
  Lines**, **Continuation Header Lines**, and **Footer Lines**. Instead, format
  headers and footers in the final software.

Defining the Field Level Attributes for a Report

A MINISIS Report Specification is composed of three parts: the Page Level Options that control the appearance of the report; the Field Level Attributes that manipulate and display the information contained in the report; and the Report Specification Description that documents the report.

To learn more about formatting the report layout, see the chapter, *Defining the Page Options of a Report*, earlier in this manual.

For suggestions on the kind of information to enter in the Report Specification Description, see the chapter, *Adding a Description to the Report Specification*, later in this manual.

This chapter describes how to create the body of a report.

MINISIS supports three report formats: Linear, Columnar, and Mixed.

A Linear report has fields printing sequentially across the line. When MINISIS gets to the end of the line, the fields wrap onto the following line, between words. This is a good report format for printing long text fields, especially if the amount of information in a field can vary greatly. The Linear report format is the default for MINISIS.

A Columnar report is either a Field Columnar report or a Page Columnar report. A Field Columnar report prints the specified field as a column in the report. This report format is suitable for printing shorter fields, especially when the amount of information in a field is fairly consistent. A Page Columnar report divides each physical page into two or more logical pages. For more information about defining logical pages within a physical page, see the chapter, *Defining the Page Options of a Report*, earlier in this manual.

The Columnar report format is not available with this release.

A Mixed report is a combination of Linear and Columnar report formats within the same report. For more information on defining a Mixed report, see the COLUMN and CONTROL statements discussion later in this chapter.

The Mixed report format is not available with this release.

The body of a report is defined using a number of statements. The statements available for defining Field Level Attributes are as follows:

PRINT – which outputs a field or text string to the printer, the screen, a table, or a file.

SORT – which sequences records for further processing, such as computing, or for printing.

COMPUTE – which performs arithmetic calculations on numeric fields.

SORT PRINT – which sequences and prints fields in one statement. This statement is useful if a sorted field requires no further processing prior to printing.

EXTRACT – which extracts data from fields and creates a temporary file. This statement has all the functionality of the SORT statement, except no sequencing is performed.

GROUP – which causes MINISIS to handle grouped fields' subfields as units. The subfields are kept together as an occurrence of the grouped field.

COLUMN – which sets column boundaries for the field at any point within the Report Specification. A Linear report can have a section within it defined to print as columns.

CONTROL – which changes the report format; force a line, page or column feed; or change the printing direction of the report at any point within the Report Specification.

COMMENT – which allows a line of documentation to be entered within the Report Specification.

STEP – which provides a way to control the order in which MINISIS executes the statements within a Report Specification.

BREAK – which defines break fields for computing. Break field totals are computed when the values in sort fields change.

CONDITION – which selectively processes records based on whether they satisfy a specified condition.

ELSE CLAUSE – which specifies how to process records if they fail to satisfy the selection criteria specified in the CONDITION statement.

These statements can either be entered directly in the Attribute screen in Line Mode or by using the **Edit Options** menu <F7> in Form Mode. This chapter discusses adding statements to the Report Specification using Form Mode.

The application of some of the options associated with the definition of a field depends on the logical and physical presence of the field. A field is physically present if it exists in the record (and for the

occurrence) being processed. An example of a logically absent field is one with the same value as that of a previous occurrence or record, when equal suppression is on. On the other hand, a computed value is logically present (if not suppressed) even though it is not physically present.

MINISIS processes all **SORT** statements first, then all **COMPUTE** statements, and then all **PRINT** statements. Within that, all statements are executed in the order presented. The **STEP** statement can be used to control the order of execution.

Line mode is not available with this release.

Edit Options Menu (<F7>)

The sequencing of records and the retrieval of information into a report is defined by a selection of statements. Use these **Edit Options**, available by pressing **<F7>**, to add, delete, change, move or copy statements in the Attribute screen in Form Mode. To edit a statement in the Attribute screen, first highlight the statement, then press **<F7>**.

- **Add·**

  Select this to add a new statement after the last statement in the Attribute screen. The **Add** menu is opened, from which the desired statement can be selected.

  Add is automatically selected when the **Edit Options** menu is requested for a report with no defined field level attributes.

- **Change/Show**

  Select this to bring up the worksheet associated with the statement highlighted in the Attribute screen. For example, if a PRINT statement is highlighted, Selecting Change/show will activate the **Print** worksheet showing the print attributes defined for the field or text to be printed. The attributes can be edited.

- **Insert**

  Select this to insert a new statement immediately before the highlighted statement in the Attribute screen. The **Add** menu is opened, from which the desired statement can be selected.

- **Delete**

  Select this to delete the highlighted statement in the Attribute screen.

- **Find**

    Select this to locate a statement directly in the Attribute screen. This is
    particularly useful for locating information in a complex report. A statement
    can be found by the value in the statement (for example, by the field in a
    PRINT statement), or by the statement number.

- **Move**

    Select this option to move a statement to a different location. The
    highlighted statement will be moved. After selecting this option, move up or
    down to the location in the Attribute screen to receive the statement. Press
    <Enter> to perform the move.

- **Move Last**

    Select this option to move the highlighted statement to the end of the
    statement list in the Attribute screen.

- **Copy**

    Select this option to make a copy of the highlighted statement at a different
    location. After selecting this option, move up or down to the location in the
    Attribute screen to receive the copy of the statement. Press **<Enter>** to
    perform the copy.

- **Copy Last**

    Select this option to make a copy of the highlighted statement at the end of
    the statement list in the Attribute screen.

- **Mode**

    Select this option to toggle between Line mode and Form mode. The
    Mode/Form menu opens. Select either Line mode or Form mode.

    Line mode is not available with this release.

Preliminary Information

If a new Report Specification is being created, the steps for opening the
Attribute screen are to select the **Edit** option of the **Report** menu, then select
Add. Enter a unique name for the new Report Specification. The **Define** menu
opens. Select **Field Options** from the **Define** menu. The **Attribute Screen**
opens. For a new Report Specification, the **Add** option is automatically
selected. Otherwise, to add statements to the Report Specification, press
<F7>, and then select **Add**. The list of available statements opens. When a
statement is selected, MINISIS opens the appropriate worksheet. After the
information is entered into the worksheet, MINISIS creates and displays the
statement on the Attribute screen.

If an Adhoc Report Specification is being created, the steps for opening the Attribute screen are to select the **Format** option of the **Report** menu, then select **Adhoc**. The **Define** menu opens. From here the steps are the same as for creating a new Report Specification.

Some of the statements, such as PRINT and SORT, have more than one worksheet for entering information. MINISIS worksheets are sequenced so the first worksheet form for any statement is sufficient for entering uncomplicated statements. To specify more statement options, checkboxes at the bottom of the first form can be used to open additional forms, as required. The last checkbox, **All of the above**, is used to open each form, one after the other.

Expected Results

After information is entered into the worksheets for a statement, MINISIS displays the statement on the Attribute screen.

Statements can be added, changed, moved or deleted from the Attribute screen, using the **Edit Options** menu (**<F7>**). The resulting statements, combined with the Page Level options, create a MINISIS Report Specification. The Report Specification Description is an optional long text field used to document the Report Specification. After the Report Specification is created, it can be executed to produce a report or to create a file or table.

PRINT statement

The **PRINT** statement outputs a field or text string to the printer, the screen, or to a file or table. The first **PRINT** statement worksheet form has two separate areas for entering information. The top of the form is for specifying the information to print. To specify more print options, there is a series of checkboxes in the bottom half of the screen. The following optional forms are available:

- Literal, display, sorting and edit mask - Form 2 of 5
- Spacing, appearance, and extraction - Form 3 of 5
- Alternative, computation, user routine and miscellaneous - Form 4 of 5
- User-defined parameters - Form 5 of 5

PRINT - Form 1 of 5

The first form can be used to print a database field, a temporary field, or a text string (called a literal).

If a database field mnemonic is specified, a literal can be printed by entering text in the **Field Literal1** data box. This literal prints prior to the field value. Enter any spaces necessary to separate the literal from the field contents. For example, to print the AGENCY field from the IDRIS database with an identifying literal of "Participating agency: ", enter "AGENCY" in the **Field Expression** data box, and "Participating agency: " in the **Field Literal1** data box. If AGENCY contains "IDRC", "Participating agency: IDRC" will print.

Alternatively, enter text that you wish to see appear with the display of every record in the **Unconditional Literal** data box. This should not be used in conjunction with a field, as the unconditional literal will be ignored.

Literal, Display, Sorting and Edit Mask - Form 2 of 5

This form can be used to specify up to two literals; to control the printing of literals, repeatable fields, and repeating field values; and to insert special characters into a field value before printing.

Printing Literals

MINISIS supports a maximum of two literals for each field expression. These literals can be entered in the **Field Literal1** and **Field Literal2** data boxes.

The **Literal Type** data box is used to specify whether the literal prints before or after the field. PRE prints before the field and **POST** prints after.

There are also three checkboxes associated with each literal: **Conditional Literal**, **Repeating Literal**, and **Suppress Repeating Literal**.

The **Conditional Literal** checkbox controls whether or not the literal will print if the field is empty. If activated, the literal will display only if the field is logically present.

The **Repeating Literal** checkbox indicates whether to print a literal for each occurrence of a repeatable field. If not activated, the literal will only print with the first occurrence of a repeatable field.

The **Suppress Repeating Literal** checkbox works in conjunction with the Literal type, and Repeating literal. For a repeating pre-literal, the literal will be displayed before all but the first occurrence of the field. For a repeating post-literal, the literal will only be displayed after the last or only occurrence of the field. For example, to print the repeatable field APPLIC in the IDRIS database as a list separated with commas and ending with a period, set all the above checkboxes. If a record has the following occurrences of applications, "CHECKIN", "ILS", "SMA", and "MTM", entering the following:

```
Field literal1: ,
Field type: PRE
Conditional literal: X
Repeating literal: X
Suppress repeating literal: X
Field literal2: .
Field type: POST
Conditional literal: X
Repeating literal: X
Suppress repeating literal: X
```

produces the following:

```
CHECKIN, ILS, SMA, MTM.
```

This combination of options causes **Field Literal1**, ", ", to display in front of all but the first occurrence of APPLIC and **Field Literal2**, ".", to display only once after the last occurrence of APPLIC.

The following table summarizes the effect of the combination of settings of **Literal Type**, **Conditional Literal**, **Repeating Literal**, and **Suppress Repeating Literal** on the display of the literal.

Checkbox	Conditional literal		X		X		X		X
	Repeating literal			X	X			X	X
	Suppress repeating literal					X	X	X	X
Action Literal type: **PRE**	Literal prints before first occurrence	yes	yes	yes		yes	yes	yes	
	Literal prints before all occurrences				yes				
	Literal prints before all but the first occurrence								yes
Action Literal type: **POST**	Literal prints after first occurrence	yes	yes	yes		yes	yes	yes	
	Literal prints after all occurrences				yes				
	Literal prints after the last occurrence								yes

Printing Empty Fields

The **Conditional Display** checkbox is used to indicate whether literals and spacing are to be applied conditionally or unconditionally. If activated, the literals for the field, and the spacing after the field (described in **Spaces after Field** in form 3 below) will be displayed only when the field is logically present. If not activated, the literals and spacing are displayed even if the field is logically absent.

Printing Repeatable Fields

The **Sort Occurrences** checkbox is used to display occurrences of a field either in the order they appear in the database or in ascending or descending order. Type **AS_IS** to leave the fields in their original order, **ASC** to display them in ascending order, or **DESC** to display them in descending order.

Suppressing Printing of a Field if the Value is the Same as the Previous Field

Equal suppression causes MINISIS to suppress printing a field if it's value is the same as for the previously-displayed record or occurrence. This option is used for sorted fields. You have three choices:

- **NONE**

  All values of all occurrences of the field expression will be printed.

- **RECORD**

  A value of a field will not be printed if it is identical to the value of the same field in the previous record printed.

- **OCC**

  A value of a field will not be printed if it is identical to the value of the same field in the previous occurrence of the field in the same record.

If multiple fields have **Equal Suppression** activated, then a change in value in one such field will be assumed to be a change in value in any other field in all subsequent **PRINT** statements.

For example, if the USERS database is sorted by country and by last name and the two fields are displayed, the results appear as follows:

```
CANADA              Gavin
CANADA              Paul
CANADA              Zielinska
EGYPT               Zabidi
MALAYSIA            Abd Rahman
MALAYSIA            Ashaari Abu Baker
MEXICO              Licea de Arenas
NETHERLANDS         Leemreize
POLAND              Kuta
SINGAPORE           Menon
SUDAN               Bakour
TUNISIA             El Amin
UNITED STATES       McCaffrey Mackie
UNITED STATES       Ramaswamy
UNITED STATES       Sarasan
UNITED STATES       White
```

If **Equal Suppression** is set to RECORD for the country field, the same report is formatted as follows:

```
CANADA              Gavin
                    Paul
                    Zielinska
```

```
EGYPT                           Zabidi
MALAYSIA                        Abd Rahman
                                Ashaari Abu Baker
MEXICO                          Licea de Arenas
NETHERLANDS                     Leemreize
POLAND                          Kuta
SINGAPORE                       Menon
SUDAN                           Bakour
TUNISIA                         El Amin
UNITED STATES                   McCaffrey Mackie
                                Ramaswamy
                                Sarasan
                                White
```

Country only prints when the value is different from field's value in the previous record.

Printing a Suppressed Field at the Start of a Page

The Repeat Equal Values at New Page checkbox works in conjunction with the Equal Suppression. If this option is active, MINISIS prints a suppressed field value when starting a new page.

For example, the above report with Repeat equal values at new page activated and page breaks displays as follows:

```
CANADA                          Gavin
                                Paul
                                Zielinska
EGYPT                           Zabidi
MALAYSIA                        Abd Rahman
-----------------------------
MALAYSIA                        Ashaari Abu Baker
MEXICO                          Licea de Arenas
NETHERLANDS                     Leemreize
POLAND                          Kuta
SINGAPORE                       Menon
-----------------------------
SUDAN                           Bakour
TUNISIA                         El Amin
UNITED STATES                   McCaffrey Mackie
                                Ramaswamy
                                Sarasan
-----------------------------
UNITED STATES                   White
```

MALAYSIA and UNITED STATES are printed at the top of the new page.

Inserting Special Characters in a Printed Field

The **Edit Mask** data box is used to insert special characters in a field or to suppress printing a zero-valued numeric field. For more information on the **Edit Mask** options available, see the context-sensitive help.

Suppressing the Display of Delimiters in a Field

Delimiters can be defined with a field to identify terms to be indexed. Activating the **Strip Term Delimiter** checkbox removes the delimiters from the display of the field value. For example, a descriptor field containing /INFORMATION SYSTEMS/, /MINISIS/ would display as INFORMATION SYSTEMS, MINISIS when strip term delimiter is activated.

Spacing, Appearance, and Extraction - Form 3 of 5

This form provides control over the spacing and appearance of the printed field.

Indentation

The first two data boxes, **First Line Indentation** and **Subsequent Line Indentation**, are used to control indentation. A value of 0 (the default) means that there will be no indentation. First line indentation applies only when the information to be printed will start on a new line. Setting the Subsequent line indentation differently from the First line indentation can indicate that the field has continued printing on another line. For example, if the INFO field from the USER database is printed and the First line indentation is "0", the Subsequent line indentation is "3", and the Line width is "50", the first two INFO fields prints as follows:

```
The Agricultural University at Wageningen, the
   Netherlands, is one of the oldest MINISIS user
   sites, and the first MINISIS user to be
   established outside North America. The MINISIS
   users at this site have developed the CARDEX
   application for serials registration.  They
   have donated this system to the MINISIS
   User-contributed Library for distribution free
   of charge to developing-country MINISIS users,
   since Version E of MINISIS was released.  These
   users have also developed a MINISIS-related
   circulations module called LOANS.
```

```
This organization is the MINISIS Resource Centre
    for Arab-speaking countries. ALDOC has
    developed Arab-language terminal and output
    device handlers, translated the MINISIS
    documentation into Arabic, and created an
    Arabic version of the CARDEX module, called
    AL-CARDEX, for the benefit of the MINISIS
    users in Arab-speaking countries.
```

Word wrap is automatic.

Controlling Spacing around the Printed Field

The next three data boxes, **Spaces Before Field**, **Spaces after Field**, and **Spaces between Occurrences**, are used to control the spacing around the printed field. The default spacing is to skip to the next line prior to printing a field, but there is no spacing by default between occurrences of a field.

To leave spaces without forcing a line break, enter a number. To force a line-break, enter the letter "**L**", with or without a preceding number.

For example, to leave two blank spaces after the field value, enter "**2**" in the Spaces after field. Any spaces that would print on a new line will be ignored. To print a field with a blank line between, enter "**2L**" in the Spaces after field. MINISIS prints the field and then moves down two lines. Any blank lines at the top of a new page or column are ignored.

Spaces before a field precede any pre-literals associated with the field, and spaces after a field follow any post-literals associated with the field. The **Spaces between Occurrences** data box is used to control the spacing between repeatable field occurrences.

Field Threshold

The **Field Threshold** option causes the field to print entirely on the next page if the number of lines left on the page is less than the field threshold value, and the field requires more than the available number of lines. For example, if the field is going to require 4 lines to print but the Field threshold is set to "3", and there are 3 or fewer lines left on the page, MINISIS performs a page break before printing the field.

Forcing a Page or Column Break

The **Start New Page** checkbox forces MINISIS to perform a page break before printing the field. The **Start New Column** checkbox forces MINISIS to go to the next page column prior to printing the field.

For more information on Page columns, see *Defining the Page Options of a Report*, earlier in this manual.

📖 *The Start new column option is not available with this release.*

Special Printing and Special Display

The **Character Font** data box controls the appearance of the field on the page. The characters in the field can either be compressed by entering **HALF** or expanded by entering **DOUBLE**.

The **Display Enhancement** data box controls the appearance of the field on the screen. The Display options are **NORMAL**, **BOLD**, **UNDERLINE**, and **REVERSE**.

📖 *These options are not available with this release.*

Justification

Justification aligns the field. The options are **LEFT**, **RIGHT**, and **CENTER**. If justification is not specified, character fields default to left justification, and numeric fields default to right justification. If the requested justification is not possible on the current line, a new line is started. For example, two fields in a project database are being printed: IDENTIFIER, right justified; and STATUS, left justified, in that order. STATUS will start on a new line.

Printing the Field in UPPERCASE

The **Upshift Field** checkbox causes the field to display in uppercase.

Field Truncation

A field can be truncated at the start of the field, using the **Maximum Length** and **Offset to Field** data boxes, or at the end of the field, using the **Truncate Field After** and **Field Truncation Literal** data boxes. Only one pair of options can be used at a time.

The **Maximum Length** data box is used to limit the number of characters of a field to print. This is useful for long text fields. For some reports it may only be necessary to print a small part of the field to determine what is in it, without printing the entire field. For example, the INFO field of the USERS database is 1500 characters long. If the **Maximum Length** data box is set to "30", the INFO field prints as follows:

```
The Agricultural University at
This organization is the MINIS
One of the earliest users of M

   .
   .
   .
```

The **Offset to Field** can be used in conjunction with the **Maximum Length**. To start printing at a point other than the beginning of the field, specify a value in characters in the **Offset to Field** data box. For example, if setting the **Maximum Length** to "30" and the **Offset to Field** to "10", MINISIS will print the field from the 11th character to the 40th.

To truncate a field at the end of the field, use the **Truncate Field After** data box. The value entered specifies the number of characters to print before a line is truncated. The **Field Truncation** literal of up to five characters can be used to indicate that part of the field is missing. For example, if the Truncate field after option is set to "20" and the **Field Truncation** literal is set to " ...", the INFO field of the USERS database prints as follows:

```
The Agricultural Uni ...
 This organization is ...
 One of the earliest  ...

   .
   .
   .
```

Limiting the Number of Occurrences to Print

The **Select Occurrences from** and **To** data boxes provide a way of limiting the number of occurrences of a repeatable field to print. A range can be specified; some of the first occurrences can be suppressed; or the last occurrences can be printed.

To specify a specific range of occurrences to print, enter a number in the **Select Occurrences from** data box and a higher number in the **To** data box. For example, to print the first five occurrences of a repeatable field, enter "1" in the **Select Occurrences from** data box and "5" in the **To** data box.

To skip the first four occurrences and print from the fifth occurrence to the end of the occurrences, enter "FIRST 4" in either the **Select Occurrences from** data box or the **To** data box.

To print the last two occurrences of a repeatable field when the number of occurrences is unknown or varies, enter "LAST 2" in either the **Select Occurrences from** or the **To** data box.

> FIRST is used to specify occurrences to skip, and LAST is used to specify occurrences to be printed.

Alternative, Computation, User Routine and Miscellaneous - Form 4 of 5

This form allows the printing of alternative fields; to print field information at a precise location on a form or page; to specify decimal places for computed fields; and to execute Compute and Report user routines.

Alternative Field Expression

This is a repeatable data box used to specify **Alternative Field Expression** to print if the field specified in the **Field Expression** data box is empty. Several Alternative field expressions can be specified but MINISIS only prints the first that is not empty.

For example, if a database contains several title fields, such as BOOK_TITLE, JOURNAL_TITLE, SERIAL_TITLE, specify BOOK_TITLE as the primary field in the **Field Expression** data box. JOURNAL_TITLE can be specified as the first alternative field expression and SERIAL_TITLE can be specified as the second alternative field expression. If BOOK_TITLE has data, MINISIS prints BOOK_TITLE and ignores the alternative fields. If BOOK_TITLE is absent, MINISIS checks JOURNAL_TITLE for data, and prints it if present. If both BOOK_TITLE and JOURNAL_TITLE are empty, MINISIS prints SERIAL_TITLE if there is data in the field.

Printing on a Form

Absolute Line and **Absolute Column** are used for printing on pre-defined forms. The **Absolute Line** value refers to the precise line on the form where the field will print. The **Absolute Column** value refers to the precise column on the form where the field will start printing. Column values are measured in characters.

Defining a Field Column

Starting Column and **Ending Column** are used together to display a field within a specified column. For example, if a **Starting Column** of "1" and an **Ending Column** of "31" is set for printing the INFO field of the USERS database, the first record prints as follows:

```
The Agricultural University at
Wageningen, the Netherlands, is
one of the oldest MINISIS user
sites, and the first MINISIS
```

> user to be established outside
> North America. The MINISIS
> users at this site have
> developed the CARDEX
> application for serials
> MINISIS was released. These
> ...

Decimal Places for Computed Print Fields

The **Decimal Place for Computation** data box, the **Decimal Place for Output** data box, and the **Round up Computation Result** checkbox are options for computed fields.

The **Decimal Place for Computation** value determines how many decimal places are used for computing the print field value. The **Decimal Place for Output** value determines how many decimal places are displayed. The **Round up Computation Result** checkbox determines whether the computed value is rounded up or truncated.

For example, if the **Decimal Place for Computation** value is "3" and the **Decimal Place for Output** value is "2", the result "3.447" displays as as "3.45" if **Round up Computation Results** is active, and "3.44" if the checkbox is inactive.

Computed fields are not available with this release.

Show File Contents

The **Show file Contents** checkbox is used to print the contents of text file. A database field can be used to identify a text file, such as a memo. If this option is selected, the contents of the text file are printed. If the option is inactive, the file name will be printed.

User Routines

The **Name of Compute User Routine** and the **Name of Report User Routine** data boxes are used to specify external routines to manipulate the field. A compute user routine can be used to perform numeric computations beyond the direct abilities of MINISIS. A report user routine can perform final formatting to the data before display. User routines must be registered to MINISIS before they can be used. Press **<F1>** to select from a list of available user routines.

User-Defined Parameters - Form 5 of 5

This form has only one data box, which is used to specify **User-defined Parameters** if the **Report User Routine**, specified in form 4, requires one or more parameters.

SORT statement

The SORT statement sequences data prior to computation or display. The first worksheet form has two separate areas for entering information. The top of the form is for specifying the information to sort. To specify more sort options, there is a series of checkboxes in the bottom half of the screen. The following optional forms are available:

- Length, Sort, Stripping and Validation - Form 2 of 4
- Extraction, User Routine and Output - Form 3 of 4
- Computation and Miscellaneous - Form 4 of 4

Sort - Form 1 of 4

The first form can be used to sort records based on the contents of a field. The field mnemonic is entered in the **Field Expression** data box. A temporary name for the sorted field must be entered in the **Variable Name** data box. To refer to the sorted field in subsequent commands, use the **Variable Name**. For example, if the mnemonic for last name, LNAME, from the USERS database is entered in the **Field Expression** data box, a name such as SORT_LNAME must be entered in the **Variable Name** data box. To print the sorted last names in a heading, or even in the record if the field value has been changed (e.g., upshifted) for the sort, enter "PRINT SORT_LNAME", not "PRINT LNAME".

If **Field Expression** and **Variable Name** are the only data boxes used in the **Sort** worksheet, then MINISIS sorts the selected records in ascending sequence by the field values.

Specifying a Hierarchical Sort Sequence

To specify the sort based on a hierarchy of fields, enter more than one SORT statement. The first SORT statement entered is the primary sort, the second SORT statement entered sorts within the primary sort, and so on. There is a limit of ten sorts in the sort hierarchy that can be entered.

The USERS database can be sorted by COUNTRY. If the variable name is SORT_COUNTRY, the statements:

```
SORT COUNTRY
PRINT SORT_COUNTRY
PRINT LNAME
```

produce the following results:

CANADA	Paul
CANADA	Zielinska
CANADA	Gavin
EGYPT	Zabidi
MALAYSIA	Abd Rahman
MALAYSIA	Ashaari Abu Baker
MEXICO	Licea de Arenas
NETHERLANDS	Leemreize
POLAND	Kuta
SINGAPORE	Menon
SUDAN	Bakour
TUNISIA	El Amin
UNITED STATES	White
UNITED STATES	Ramaswamy
UNITED STATES	Sarasan
UNITED STATES	McCaffrey Mackie

The countries are in sorted sequence, but the user names are in the sequence they are found in the database. In order to sort the last names alphabetically within the countries, LNAME needs to be entered in a second SORT statement. Enter another SORT statement with LNAME as the Field expression and SORT_LNAME as the Variable name. If the following statements are entered

```
SORT COUNTRY
SORT LNAME
PRINT SORT_COUNTRY
PRINT SORT_LNAME
```

the results are as follows:

CANADA	Gavin
CANADA	Paul
CANADA	Zielinska
EGYPT	Zabidi
MALAYSIA	Abd Rahman
MALAYSIA	Ashaari Abu Baker
MEXICO	Licea de Arenas
NETHERLANDS	Leemreize
POLAND	Kuta
SINGAPORE	Menon
SUDAN	Bakour
TUNISIA	El Amin
UNITED STATES	McCaffrey Mackie

```
          UNITED STATES              Ramaswamy
          UNITED STATES              Sarasan
          UNITED STATES              White
```

Multiple Sources of Data for a Sort

To extract data from more than one field for a single sort, use the **<F5>** key
while in the **Field Expression** data box. The Form number increments in the
upper-right hand corner of the **Field Expression** data box to show how many
source fields have been entered.

For example, if a database has three descriptor fields such PRIMARY_DESC,
SECONDARY_DESC, and GEOGRAPHIC_DESC. Data from all three fields
will be used in the sort.

Defining Alternative Sources for Sort Data

Alternative sources of data can be defined for a sort. Alternative sources of
data are only used if the Field expression specified for the sort does not
retrieve any information from the record. Pressing **<F7>** while the cursor is in
the **Field Expression** data box displays the **Edit** menu. The first three
options, **Insert Text**, **Extract/Delete Text**, and **Change Text**, are used to edit
the existing text in the **Field Expression** data box. The fourth option, **Explore**,
opens the Explore worksheet for entering alternative sources of data for a sort.

Explore - Form 1 of 3

Alternative

The **Alternative** data box can be used to specify alternative sources of data
for a sort.

For example, if a database has several title mnemonics, such as
BOOK_TITLE, JOURNAL_TITLE, and SERIAL_TITLE, and for each record
only one of the three fields has data, it is possible to extract data from the field
that has data and use it in the sort.

Enter the name of the field most likely to have data in the **Field Expression**
data box on the first **Sort** worksheet. For example, if most records in the
database are for books, BOOK_TITLE should be entered. Press **<F7>** to
access the **Edit** menu. From the **Edit** menu, select **Explore**.

If more journal titles exist in the database than serial titles, enter
JOURNAL_TITLE as the first Alternative. Press **<F5>** from within the
Alternative data box. MINISIS increments the display in the upper-right hand
of the **Alternative** data box to "2 of 2". Enter the second alternative field,
SERIAL_TITLE. When MINISIS executes the sort, BOOK_TITLE is checked
for data. If there is data in BOOK_TITLE it is extracted and MINISIS goes to
the next record. If not, the first alternative field, JOURNAL_TITLE, is checked.
If there is data in JOURNAL_TITLE, it is extracted and MINISIS goes to the

next record. If there is no data in JOURNAL_TITLE, the second alternative field, SERIAL_TITLE is checked. With alternative sources of data, as soon as data is found in one of the fields, MINISIS extracts it for the sort and stops checking any other alternative fields.

There are options that can be entered for the Alternative sort field. The options appear at the bottom of the first Explore form and also on an additional 2 forms that can be accessed using **<F3><F5>**.

Type of extraction

Specify whether to extract all the data from the field or just part of the field by using the **Type of Extraction** data box. The options available are: WHOLE to extract the entire field as a sort key; **WORD** to extract anything delimited by spaces as a separate sort key; **TERM** to extract anything between two delimiters as a separate sort key; **TERM_WORD** to extract all words inside term delimiters as sort keys; and **KWIC** to produce a standard Key Word in Context index.

Removing Characters from the Field prior to Sorting

Indicate if any characters should be removed from the sort field prior to sorting by using the **Strip Type** options. Characters are not deleted from the data but they are only not considered in the sorting sequence.

Characters that have been removed are not replaced with spaces, but the remaining information is compressed.

- **NONE**

  No characters are removed from the field.

- **NUMERIC**

  This option removes all non-numeric characters. The numeric characters that are left are character set dependent.

- **ALPHANUM**

  This option removes all non-alphanumeric characters. The alphanumeric characters that are left are character set dependent.

- **XSPACE**

  This option removes all non-alphanumeric characters except spaces.

- **ACCENT**

  This option removes all diacritical indicators and diacritic characters.

- **DELWORD**

  This option removes all the delimiters around terms.

- **ALPHA**

  This option removes all non-alphabetic characters. The alphabetic characters left are character set dependent.

Removing Leading Strings prior to Sorting

Leading strings can be removed from the field prior to sorting. The **Strip Leading String only** checkbox must be active and the **Name of Strip Table** data box is used to enter the name of the table to search. The contents of the Strip table are compared against the start of the field. If there is a match, the data that matches is removed from the field prior to sorting. For example, words such as "The" and "A" can be stripped from title fields prior to sorting.

Explore - Form 2 of 3

Removing Noise Words

Noise words can be eliminated prior to sorting. The words to eliminate are specified in a Stopword Table.

Validation of Sort Keys

A Validation Table can be specified to compare against all generated sort keys. The keys are either accepted or rejected depending on whether the **Select** data box has a value of **MATCH** or **UNMATCH**.

Sorting Fields that Contain Primary and Secondary Keys

Some databases have two keys specified within a single field; a primary key and a secondary key. These keys are separated by a sequence of characters called a Break Sequence. An example of a Break Sequence is the character string " - ". MINISIS gives the option of sorting the field using the entire field or sorting the primary key or the secondary key. The Break Sequence must be specified and the type of extraction to be done must be entered in the **Field Extraction** data box. The **Field Extraction** options are: **WHOLE** to use to entire field for sorting; **BEFORE** to sort the primary key; and **AFTER** to sort the secondary key.

Term Delimiters

If a field is to be extracted and sorted by terms or term_words, use this data box to tell MINISIS how terms are delimited.

External Extraction routines

Executes an external extraction routine.

Explore - Form 3 of 3

Changing the Sort Sequence

The sort sequence can be changed by adding data to the start of the field using the **Prefix** data box or by appending data to the end of the field using the **Suffix** data box. For example, to force the data in SERIAL_TITLE to always sort below the data from BOOK_TITLE and JOURNAL_TITLE, a Prefix of "ZZ" can be added to the SERIAL_TITLE field prior to sorting. Then BOOK_TITLE and JOURNAL_TITLE sort together and SERIAL_TITLE sorts after the other two.

Limiting the Number of Occurrences to Sort

If a repeatable field is going to be sorted, the number of occurrences to sort can be limited by specifying a range using the **Select Occurrences from** and **To** data boxes.

To specify a specific range of occurrences to sort, enter a number in the **Select Occurrences from** data box and a higher number in the **To** data box. For example, to sort the first five occurrences of a group, enter "1" in the **Select Occurrences from** data box and "5" in the **To** data box.

To skip the first 4 occurrences and sort from the fifth occurrence to the end of the occurrences, enter "FIRST 4" in either the **Select Occurrences from** data box or the **To** data box.

To sort the last 2 occurrences of a group when the number of occurrences is unknown or varies, enter "LAST 2" in either the **Select Occurrences from** or the **To** data box.

Length, Sort, Stripping and Validation - Form 2 of 4

Truncating the Field to be Sorted

The **Length** data box can be used to truncate the field to be sorted. If a length is specified, only the specified number of characters are extracted from the field and sorted. This option is useful for sorting long text fields. If the entire field is specified and the field is quite long, the sort might be slow. It might make sense specify a length, such as "15", for sequencing the data.

Type of Extraction

Specify whether to extract all the data from the field or just part of the field by using the **Type of Extraction** data box. The options available are: **WHOLE** to extract the entire field as a sort key; **WORD** to extract anything delimited by spaces as a separate sort key; **TERM** to extract anything between two

delimiters as a separate sort key; **TERM_WORD** to extract all words inside term delimiters as sort keys; and **KWIC** to produce a standard Key Word in Context index.

Sort Order

The sequence of the sorted data can be changed. For example, the default sort for a character field is "ASC", for the data to sort from A to Z in ascending sequence. To change the sort sequence so character data sorts from Z to A, enter "DESC" in the **Sort Order** data box.

Removing Characters from the Field prior to Sorting

Indicate if any characters should be removed from the sort field prior to sorting by using the **Strip Type** options. Indicate if any characters should be removed from the sort field prior to sorting by using the **Strip Type** options. Characters are not deleted from the data but they are only not considered in the sorting sequence.

Characters that have been removed are not replaced with spaces, but the remaining information is compressed.

- **NONE**

  No characters are removed from the field.

- **NUMERIC**

  This option removes all non-numeric characters. The numeric characters that are left are character set dependent.

- **ALPHANUM**

  This option removes all non-alphanumeric characters. The alphanumeric characters that are left are character set dependent.

- **XSPACE**

  This option removes all non-alphanumeric characters except spaces.

- **ACCENT**

  This option removes all diacritical indicators and diacritic characters.

- **DELWORD**

  This option removes all the delimiters around terms.

- **ALPHA**

  This option removes all non-alphabetic characters. The alphabetic characters left are character set dependent.

Removing Leading Strings prior to Sorting

Leading strings can be removed from the field prior to sorting. The **Strip Leading String Only** checkbox must be active and the **Name of Strip Table** data box is used to enter the name of the table to search. The contents of the Strip table are compared against the start of the field to be sorted. If there is a match, the data that matches is removed from the field prior to sorting. For example, words such as "The" and "A" can be stripped from title fields prior to sorting.

Removing Noise Words

Noise words can be eliminated prior to sorting. The words to eliminate are specified in a Stopword Table.

Validation of Sort Keys

A Validation Table can be specified to compare against all generated sort keys. The keys are either accepted or rejected depending on whether the **Select** data box has a value of MATCH or UNMATCH.

Extraction, User Routine and Output - Form 3 of 4

Sorting Fields that Contain Primary and Secondary Keys

Some databases have two keys specified within a single field; a primary key and a secondary key. These keys are separated by a sequence of characters called a Break Sequence. An example of a Break Sequence is the character string " - ". MINISIS gives the option of sorting the field using the entire field or sorting just the primary key or the secondary key. The Break Sequence must be specified and the type of extraction to be done must be entered in the **Field Extraction** data box. The **Field Extraction** options are: **WHOLE** to use to entire field for sorting; **BEFORE** to sort the primary key; and AFTER to sort the secondary key.

Term Delimiters

If a field is to be extracted and sorted by terms or term_words, use this data box to tell MINISIS how terms are delimited.

Limiting the Number of Keys to Create from the Field

The number of sort keys created when extracting terms, words or term-words from a field can be limited by using the **Maximum Number of Keys** data box.

External Extraction routines

An external extraction routine can be specified for use with the field. An external user routine can be run prior to MINISIS' extraction process; after MINISIS' extraction process; or after MINISIS' sort process.

Retaining the Original Field Value

MINISIS shifts all field contents to uppercase for sorting. To retain the original field value for display, activate the **Use Original Value** checkbox.

Show the Source Field for the Sort

This option is useful when alternative sources of data for the sort have been specified. For example, to see which titles came from each field when three fields from a database, BOOK_TITLE, JOURNAL_TITLE, and SERIAL_TITLE have been sorted together, activate the **Show Source Mnemonic** checkbox.

Show the Sorted Field in Uppercase

To display the sorted data in uppercase, activate the **Upshift Output** checkbox.

Repeat Output

This option is useful for generating more than one copy of the sorted output. For example, to print multiple copies of an address for mailing labels.

Computation and Miscellaneous - Form 4 of 4

Controlling the Decimal Places for Computed Sort Fields

The **Decimal Place for Computation** data box, the **Decimal Place for Output** data box, and the **Round up Computation Result** checkbox are options for computed sort fields.

The **Decimal Place for Computation** value determines how many decimal places are used for computing the sort field value. The **Decimal Place for Output** value determines how many decimal places are displayed. The **Round up Computation Result** checkbox determines whether the computed value is rounded up or truncated.

Computed sort fields are not available with this release.

Name of Compute User Routine

Used to execute an external computation routine. The computation routine is used to perform arithmetic calculations on the sort field.

This option is not available with this release.

Sort Sequences

The **Sort Type** data box is used to indicate which sort sequence to use with the field. For example, the Spanish language has a different sort sequence than a Standard ASCII sort as there are extra letters in the Spanish alphabet.

For more information on this option, see the on-line help.

COMPUTE Statement

The **COMPUTE** statement worksheet is used to specify an arithmetic operation on a database field, break field, or temporary field.

The COMPUTE statement is not available with this release.

COMPUTE Statement - Form 1

The first **Compute** worksheet has two data boxes: the **Field Expression** data box for entering the computation to be performed; and the **Variable Name** for defining a temporary field to hold the results of the computation.

To specify more options, press **<F3><F5>** to open the second form.

COMPUTE Statement - Form 2

Show Intermediate Compute Results

The **Show Detail** checkbox causes MINISIS to save intermediate computation results in temporary fields. These temporary fields can be printed.

Controlling the Decimal Places for Computed Fields

The two data boxes, **Decimal Place for Computation** and **Decimal Place for Output**, and the **Round up Computation Result** checkbox control the number of decimal places to use when computing and displaying a computed field.

Name of Compute User Routine

An external computation routine can be specified for use with the field.

Providing Compatibility with MINISISVersion G

For converting applications written in MINISIS Version G to MINISIS Version 8, the **Alias** data box with its **Name** and **Output Field Name** data boxes has been provided. Intermediate computation results fields in Version G have names, such as "Y010". In order to use these fields in Version 8, they can be assigned aliases. The original Version G name is entered in the **Name** data box, and a Version 8 name such as "SUM.FINAL" is entered in the **Output Field Name** data box.

SORT PRINT Statement

The **SORT PRINT** statement is used to sort and output a field using one statement instead of two. This statement is useful if a sorted field does not need any further processing, such as computation, prior to being outputted.

SORT PRINT Statement - Form 1

The SORT PRINT statement combines most of the functionality of the SORT statement with the functionality of the PRINT statement. The **Field Expression** data box is used to enter the name of the database field to be sorted and printed.

> There is no **Variable** name because the sorted field is printed immediately. It is not available for further processing.

The **<F5>** key can be used to enter a hierarchy of fields to sort. The **<F7>** key can be used to indicate alternative sources of data for the sort. For more information on these options, see the section on the **SORT** statement, earlier in this chapter.

The bottom of the form provides a list of checkboxes that can be activated to open additional forms. The list is divided into **Sort Attributes** and **Print Attributes**. The list of forms is as follows:

Sort Attributes

- Length, Sort, Stripping and Validation
- Extraction, User Routine and Output
- Computation and Miscellaneous

Print Attributes

- Literal, Display, Sorting and Edit Mask
- Spacing, Appearance and Extraction
- Alternative, User Routine and Miscellaneous

For more information on the Sort Forms, see the section on the SORT statement earlier in this chapter. For more information on the Print Forms, see the section on the PRINT statement earlier in this chapter.

EXTRACT Statement

The **EXTRACT** statement provides users with a way to extract data and create a temporary data file. The temporary data file can be processed in another step in the Report Specification. This might be particularly useful if there is a need to perform further processing using subfields in a repeatable group.

The forms are identical to the **SORT** statement. For more information on any of the options, see the section on the **SORT** statement earlier in this chapter. However, no sorting is performed by the **EXTRACT** statement.

For more information about sequencing the steps, see the section on the **STEP** statement, later in this chapter.

GROUP Statement

The **GROUP** statement worksheet is used to indicate a group of two or more fields to be handled together. Fields defined within a group are handled individually unless a GROUP statement is used. The values for one occurrence of all the fields in the statements within the **GROUP** statement/**END** statement pair are used before the values of the next occurrence.

GROUP Statement - Form 1 of 2

The first form is used to specify the **Grouped Field ID**, and <F3><F5> can be used to specify additional options for the GROUP statement.

GROUP Statement - Form 2 of 2

The Field Label Option

The **Field Label** data box is used to provide a temporary field for MINISIS to store the occurrence number of the group members. Later, if the **Use Field Label** option is specified, the data in the group can be processed using the occurrence numbers.

For example, a database can have a repeatable group field with subfields of VENDOR and PRICE. The group field can be sorted by VENDOR and then sum up the total price by VENDOR. To do this, assign a **Field Label** such as SORT_VENDOR. Then, sort the group field by the vendor name. Then, the **Field Label** can be used to sum the prices of items purchased from the vendor.

Limiting the Number of Occurrences of a Group to Process

The **Select Occurrences from** and **To** data boxes provide a way of limiting the number of occurrences of a group to print. A range can be specified; some of the first occurrences can be suppressed; or the last occurrences can be printed.

To specify a specific range of occurrences to print, enter a number in the **Select Occurrences from** data box and a higher number in the **To** data box. For example, to print the first five occurrences of a group, enter "1" in the **Select Occurrences from** data box and "5" in the **To** data box.

To skip the first four occurrences and print from the fifth occurrence to the end of the occurrences, enter "FIRST 4" in either the **Select Occurrences from** data box or the **To** data box.

To print the last two occurrences of a group when the number of occurrences is unknown or varies, enter "LAST 2" in either the **Select Occurrences from** or the **To** data box.

Print Options

Controlling Spacing around the Printed Field

The next three data boxes, **Spaces before Field**, **Spaces after Field**, and **Spaces between Occurrences**, control spacing around the group. The default spacing is to skip to a new line prior to printing the group, but there is no spacing by default between occurrences of the group.

To leave spaces without forcing a line break, a number is entered. To force a line-break, enter the letter "L", with or without a preceding number.

COLUMN Statement

The **COLUMN** statement provides fast way to specify Page Columnar formatting within a report. Enter the starting and ending columns for the logical page. MINISIS automatically generates an **END** statement for the statement. All statements entered between the start of the **COLUMN** statement and the **END** statement will be processed as part of the column. If a field is too large to fit within the column, part of the field will wrap to a new page between the same column coordinates.

For information on setting page columns for the entire report, see the chapter *Defining Page Options in a Report* earlier in this manual.

The COLUMN statement is not available with this release.

CONTROL Statement

The **CONTROL** statement performs page formatting changes within the report. It is normally inserted between print statements to force new positioning of information (new page, new line, etc.), or to change the direction of print.

Report Format

The **Field Arrangement** data box is used to specify **LINEAR**, **COLUMN**, or **MIXED** report format. This can be used to change the format for part of the report.

For example, a two column report may be defined in the page options. If **LINEAR** is specified using the **CONTROL** statement, the rest of the formatting for the current record, or until another **CONTROL** statement is issued, will print as one column over the full width of the page.

COLUMNAR and MIXED report formats are not available with this release.

Changing the Page or Column

The **Start New Page** and **Start New Page Column** checkboxes can be used to force the report to skip to a new page or a new column.

The Start new column option is not available with this release.

Forcing Line Feeds

The **Number of Lines to Skip** data box can be used to force MINISIS to skip the specified number of lines in the report before continuing processing.

Skipping Columns

The **Number of Columns to Skip** data box can be used to force MINISIS to skip the specified number of columns in the report before continuing processing.

The Number of columns to skip option is not available with this release.

Changing the Printing Direction

The **Default Printing Direction** data box can be used to change the direction of the data being printed, depending on the language specified.

COMMENT Statement

The **COMMENT** statement worksheet is used to enter a line of text, for documentation purposes, within the Report Specification. A Comment statment is not used in any processing of the Report Specification.

Each comment line can be up to 80 characters. To add a comment that requires more than one line of text use several comment statements.

STEP Statement

The **STEP** statement is used to control the order in which MINISIS processes statements. If **STEP** statements are used, MINISIS will execute Step 1, then Step 2, and so on. If **STEP** statements are not used, MINISIS processes the **SORT** statements first, then the **COMPUTE** statements, and last the **PRINT** statements.

BREAK Statement

The **BREAK** statement worksheet can be used to specify up to 10 break fields. These break fields follow the hierarchy of the sort fields. Specifying break fields allows the system to perform Computes on the fields when the value changes in the sorted field. For example, if the USERS database is sorted by COUNTRY and LAST_NAME, two break fields can be specified, such as BREAK_COUNTRY and BREAK_LNAME. When the value for COUNTRY changes, specific processing for BREAK_COUNTRY can be done, such as printing the number of users in each country. When the value for LAST_NAME changes, processing for BREAK_LNAME can be executed.

The BREAK statement is not available with this release.

CONDITION Statement

The **CONDITION** statement is used to process a set of records based on a selection criteria. The system automatically generates an **END** statement on the line after the **CONDITION** statement. Any statements, such as **PRINT** or **BREAK**, specified between the **CONDITION** statement and the **END** statement are executed only for records that meet the selection criteria in the **CONDITION** statement.

Once a **CONDITION** statement is entered the asterisk next to the **Else Clause** option on the menu disappears. This allows different processing, using the **ELSE CLAUSE** statement, for records that fail to satisfy the **CONDITION** statement.

CONDITION statements can be nested.

Do not enter "IF" prior to the selection criteria in the **Condition** data box. MINISIS automatically preceeds the condition with "IF" when creating the Condition statement.

ELSE CLAUSE Statement

The **ELSE CLAUSE** statement is only available after a **CONDITION** statement has been entered. A **CONDITION** statement must be selected in the Report statement list. This statement does not open any worksheets. Instead, it inserts an **ELSE CLAUSE** statement immediately before the **END** statement associated with the **CONDITION** statement. You must immediately add another statement after adding an **ELSE** statement, or the **ELSE** statement will not be kept.

Any statements, such as **COMPUTE** or **PRINT**, that are specified between the **ELSE** statement and the associated **END** statement are only executed for records that fail to satisfy the selection criteria in the **CONDITION** statement.

END Statement

An **END** statement is created by MINISIS for every **GROUP** statement and every **CONDITION** statement. This statement tells MINISIS that all the statements between the **GROUP** statement and the **END** statement are to be processed as a group, or that all the statements between the **CONDITION** statement and the **END** statement are subject to the criteria specified in the **CONDITION** statement.

Deleting an **END** statement deletes the associated **GROUP** or **CONDITION** statement. If the associated **CONDITION** statement also has an **ELSE CLAUSE** statement, it too will be deleted.

Adding a Description to the Report Specification

The Report Specification description should provide information about both the source database and the output format that will be generated. The description text entered is used by the MINISIS help system.

Preliminary Information

To add, or change, a description of a Report Specification the associated database must be open and the Report module accessed. The Report Specification must be selected through the **Edit** menu: **Add** or **Change/Show** options.

The process of adding a description starts at the **Define** menu.

Expected Results

A description of the Report Specification will be added that can be viewed through the MINISIS help system.

Completing the Description Worksheet

1   Highlight the **Description** option, from the **Define** menu, and press
       <Enter>.

       The system opens the **Report Specification Description** data box.

2   Type the text for the description.

       The description text may be up to 2048 characters long.

To save the description

1   Press **<Enter>**.

       The system saves the description, closes the **Report Specification
       Description** data box and returns to the **Define** menu.

To exit without saving the description

1   Press **<F8>**.

       The system closes the **Report Specification Description** data box
       and returns to the **Define** menu.

Importing and Exporting Report Specifications

Report Specifications can be imported from other versions of MINISIS. Other versions may be either an earlier version, or a version running on a different platform.

To import from an earlier version of MINISIS the Report Specification must first be converted into an ASCII text file using the Report Specification Conversion utilities.

Report specifications can be exported for use with other versions of MINISIS. Other versions may be either later versions, or versions running on different platforms.

Preliminary Information

If importing a specification, the file must be in ASCII format generated either by the MINISIS Conversion utilities or the MINISIS Export function.

The steps in this chapter start at the **Report** menu, which is accessed from the **SMA** main menu **Report** option.

Expected Results

A MINISIS Report Specification will be imported and associated with a database, or exported into an ASCII text file.

Importing Report Specifications

1   Highlight the **Import** option, from the **Report** menu, and press
       <Enter>.

       The system opens the **Import** form and places the cursor in the **File**
       data box.

2   Type the full path and name of the Report Specification ASCII file,
       and press **<Tab>**.

       The system moves the cursor to the **Database** data box.

3   Type the name of the database with which the Report Specification
       will be associated, and press **<Tab>**.

       The name of the database that is currently selected is shown by
       default. Select another database name to associate with the
       imported report. This does not change the currently selected
       database. The system moves the cursor to the **Compile** checkbox.

4   To compile the Report Specification on import, place an **X** in the
       Compile checkbox, and press **<Enter>**.

       The system will import the identified file and compile the Report
       Specification. If the Report Specification is not compiled at this
       time, it must be compiled before it can be used. The **Import** form is
       closed and the cursor returned to the **Report** menu.

Exporting a Report Specification

This feature is not available with this release.

Running a Report

The purpose of running a report is to extract data from a database, format and output to a device.

The data that is included in the report is controlled by the records selected and then the Report Specification identifies the fields that will be included. The Report Specification also defines how the data is presented in the final output. Final output can be directed to the terminal, printer, table or file.

The three main steps to output data from a MINISIS database are:

- Select the records to be included, using **Query**
- Select a Report Specification – **Predefined, System Default,** or **Adhoc**
- Run the report – **Do It**.

Preliminary Information

Before selecting a Report Specification, a database must be opened and the Report module accessed from the **SMA** main menu **Report** option. The procedures in this chapter start from the **Report** menu.

Expected Results

A Report Specification will be selected and the name displayed at the top of the screen. The selected specification will be used to format data during output activities. If an Adhoc specification is defined and saved, the name will be added to the list of predefined Report Specifications for the database.

Data from the selected records will be formatted and output to the selected device.

Selecting Records for the Report

Before a report can be run records have to be selected from the database for inclusion in the report. The data from the selected records is extracted, sorted and formatted according to the selected Report Specification. Records selected from the last Query search will be used. If no search has been performed on the selected database, or if a new search is required, you can request Query directly from the Report function.

1   Highlight the **Query** option, from the **Report** menu, and press **<Enter>**.

    The system will open the MINISIS Query module at either the **Query Statement** data box or a Query Worksheet, depending on the system default.

2   Select records for inclusion in the report.

    For information on selecting records refer to the *Selecting Records Using Query Statements and Strategies.*

3   Press **<F8>**.

    The system will close the Query module and return to the **Report** menu.

Selecting a Report Specification

To format the data in a report, a Report Specification should be selected. If a default Report Specification has been defined for the selected database, it will be used until a different specification is selected. There are three options available: using a predefined specification, building an Adhoc specification, or using the system default specification. An Adhoc specification can be saved for future use. If you request to run a report, and no Report Specification has been selected, the System Default Report Specification will be used.

Using a Predefined Report Specification

1   Highlight **Format** on the **Report** menu, and press **<Enter>**.

    The system will open the **Select** menu.

2   Highlight **Predefined**, and press **<Enter>**.

    The system will open the **Predefined** data box.

3   Type the name of the required Report Specification, and press **<Enter>**, or press **<F1>** to select a Report Specification from the list.

    The system closes the data box and the **Select** menu, and displays the name of the selected Report Specification at the top of the screen.

Building an Adhoc Report Specification

1   Highlight **Format** on the **Report** menu, and press **<Enter>**.

    The system will open the **Select** menu.

2   Highlight **Adhoc**, and press **<Enter>**.

    The system will initialize the Report Specification, display **Spec=<Adhoc>** at the top of the screen, and open the **Define** menu with three options: **Page Options**, **Field Options**, and **Description**.

3   Refer to the following chapters for details on defining a Report Specification:

    Page Options: *Defining the Page Options for a Report*

    Field Options: *Defining the Field Level Attributes for a Report*

Description: *Adding a Description to the Report Specification*

Saving an Adhoc Report Specification

An Adhoc Report Specification can be saved and subsequently used as a predefined specification.

1   Highlight **Format** on the **Report** menu, and press **<Enter>**.

The system will open the **Select** menu.

2   Highlight **Save**, and press **<Enter>**.

The system opens the **Save** data box.

3   Type the name by which the Adhoc specification is to be known, and press **<Enter>**.

The system will save the specification, close the **Save** data box, and display the name that the specification has been saved under at the top of the screen. The cursor will be returned to the **Report** menu.

Using the System Default Report Specification

A **System Default Report Specification** is available for every database. If no Report Specification has been specified when you run the report, the System Default Report Specification will be used. If you have selected a predefined specification or an Adhoc specification, and wish to use the default specification, you must select it.

The System Default Report Specification formats the SISN and every occurrence of a field in the same manner: the field mnemonic is displayed, and the data follows. The field mnemonic is indented when the field is part of a group. The System Default Report Specification is particularly useful for producing a proof report after data entry.

1   Highlight **Format** on the **Report** menu, and press **<Enter>**.

The system will open the **Select** menu.

2   Highlight **System Default**, and press **<Enter>**.

The system selects the System Default Report Specification, and closes the **Select** menu. The cursor will be returned to the **Report** menu.

Running the Report

When a report is generated data will be extracted from the selected records and formatted according to the layout and sorting instructions in the active Report Specification. If a Report Specification has not been selected the System Default Report Specification will be used.

A Trial report can be run and the output viewed on the terminal. When a Final report is run the output can be directed to the terminal, a printer, a table, or to a disk file.

Trial Report

1   Highlight the **Do It** option, from the **Report** menu, and press **<Enter>**.

    The system opens the **Do It** menu, which has two options: **Final** and **Trial**.

2   Highlight **Trial**, and press **<Enter>**.

    If more than one record is selected, the system opens the **Trial Report** form.

3   To display all records, place an **X** in the **All Records** checkbox.

4   Alternatively, to display a selection of records, type a numeric value in one of the following data boxes:

    - **Last n Records**
    - **All but First n Records**
    - **Every n-th Record**

    If 17 records, having SISN 11 to 27, were selected, then the last five records would display records with SISN 23 to 27; all but the first five records would display records with SISN 16 to 27; and every fifth record would display records with SISN 11, 16, 21, and 26.

5   To force the selected records to display in reverse order, place an **X** in the **Reverse Order** checkbox.

6   Press **<Enter>**.

    The system closes the **Trial Report** form, and displays the selected records on the screen in the **Show Record** data box.

Final Report

1   Highlight the **Do It** option, from the **Report** menu, and press
        <Enter>.

        The system opens the **Do It** menu, which has two options: Final and
        Trial.

2   Highlight **Final**, and press **<Enter>**.

        The system opens the **Final Report** form.

Identify the output destination

Only one output device can be identified.

To output to the terminal

1   Place an **X** in the **Terminal** checkbox, and press **<Tab>**.

To output to a printer

1   Type the name of the target printer in the **Printer** data box, and
        press **<Tab>**.

To output to a table

1   Type the name of the target table in the **Table** data box, and press
        <Tab>.

This option is not available with this release.

To output to a disk file

1   Type a logical name for the output file in the **Disk** data box, and
        press **<Tab>**.

        This is the logical name by which the file is known to MINISIS. Enter
        the DOS file name in the **File ID** data box. The cursor moves to
        the **File ID** data box.

2   Type the full path and file name of the destination disk file in the **File
        ID** data box, and press **<Tab>**.

        The cursor moves to the **Number of Copies** data box.

---

3   Enter the number of copies required, and press **<Tab>**.

The cursor moves to the **File Size** data box.

4   Type an estimated output file size.

The estimated file size is used to allocate system resources during the report generation process.

To generate the report

1   Press **<Enter>**.

To exit without generating the report

1   Press **<F8>**.

Print Spooling

DOS

MINISIS does not print a report directly, but rather places it in a temporary file, to be printed off-line by **DOS** using the **PRINT** program.

If you have enabled **PRINT** prior to starting MINISIS, the off-line printing will be initiated by MINISIS.

If the **DOS PRINT** program is not running, MINISIS will create a batch job, called **PRINTSP.BAT**, which you can use to print the reports later. The temporary report files and the batch job are located in the directory identified by the DOS environment variable called **TEMP**. Delete the report files and the batch job after the reports have been printed. Be careful not to exceed the number of reports that can be queued by the **DOS PRINT** program.
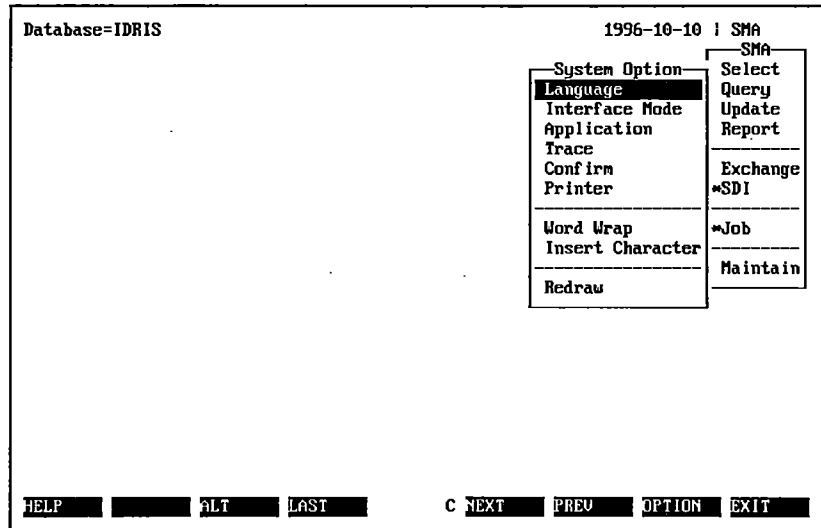
The MINISIS System Options

Using the MINISIS System Options

The MINISIS System Options are used to control the interface environment for the session. The default interface environment is set up in the User Profile by the System Manager. The **System Options** menu can be accessed at any time during a session through **<F3><F7>**.

The options available are:

- **Language**

  Used to change the default language for user interface dialogue, for the session.

- **Interface Mode**

  Used to change the default language for data input, for the session.

- **Application**

  Used to display information about the system.

- **Trace**

  Used to record to a disk file keystrokes and system responses.

- **Confirm**

  Used to set the option for confirming operations during a session. This is particularly useful when deleting records.

- **Printer**

  Used to select a printer for the session.

- **Word Wrap**

  Used to select either word or character wrap for data entry operations for the session.

- **Insert Character**

  Used to set insert or overwrite character mode for the session.

- **Redraw**

  Used to refresh the screen display.

36-1: The MINISIS System Options Menu

Changing the Interface Language

The **Language** option on the **System Options** menu is used to select the dialogue language used for the menus, worksheets, messages etc. The languages available are determined by the system configuration.

1   To open the **System Options** menu, press **<F3><F7>**.

     The system opens the System Options menu.

2   Highlight the **Language** option, and press **<Enter>**.

     The system opens a list of available languages.

3   Highlight the language required, and press **<Enter>**.

     The system resets the interface dialogue language for the session. All menus, worksheets, messages etc. will be displayed in the selected language.

Changing the Data Entry Language

The **Interface Mode** option on the **System Options** menu is used to select the character set used by the system for data entered into the data boxes. The languages and character sets available are determined by the system configuration.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the System Options menu.

2   Highlight the **Interface Mode** option, and press **<Enter>**.

The system opens a list of available languages.

3   Highlight the language required, and press **<Enter>**.

The system resets the language option for the session. Data entry will now accept data in the selected language.

Viewing System Information

The **Application** option is used to display the name of the active application, version number and the license holder. At the bottom of the data box is the copyright of the application.

1 To open the **System Options** menu, press **<F3><F7>**.

The system opens the **System Options** menu.

2 Highlight the **Application** option, and press **<Enter>**.

The system will open the **Application** information data box.

3 To return to the main menu, press **<F8>**.

```
Database=IDRIS                                    1996-10-10 ¦ SMA
                                                        ┌──SMA──
                                        ┌─System Option─┐ Select
                                        │ Language      │ Query
                                        │ Interface Mode│ Update
        ┌──────────────────── Application ─────────────────────┐rt
        ║Name.......... SMA                                     ║────
        ║Version........ A.00.00                               ║ange
        ║Licensed to....                                       ║
        ║Powered by..... MINISIS 8.00.00 (Serial #: MINISIS-XXXXXX)║────
        ║                                                      ║
        ║                                                      ║tain
        ║(C) COPYRIGHT INTERNATIONAL DEVELOPMENT RESEARCH CENTRE,║
        ║1978-1996. ALL RIGHTS RESERVED.                       ║
        ║                                                      ║
        ╚═══════════════════To exit, press <F8>════════════════╝


   HELP            ALT    LAST        C NEXT    PREV    OPTION  EXIT
```

36-2: The Application Information Display

Using the Trace Feature

The **Trace** feature is used to record, to a disk file, the keystrokes and system responses during a data entry session. This file can then be used for troubleshooting purposes.

This option is not available on the MPE/iX version of MINISIS.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the System Options menu.

2   Highlight the **Trace** option, and press **<Enter>**.

The system opens the **Trace** menu. A "+" sign is displayed to the left of the active trace option.

To activate Trace

1   Highlight **On**, and press **<Enter>**.

The system activates the **Trace On** option, and closes the **Trace** and **System Options** menus.

To Deactivate Trace

1   Highlight **Off**, and press **<Enter>**.

The system deactivates the **Trace** option, and closes the **Trace** and **System Options** menus.

Using the Confirm Option

When the **Confirm** option is activated you are asked to confirm (Y/N)
operations that will alter the status of the database (for example, deleting
records, locking/unlocking records etc.). The default for the **Confirm** option is
set by the System Manager. The default may be overridden using the **Confirm**
item on the **System Options** menu.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the **System Options** menu.

2   Highlight the **Confirm** option, and press **<Enter>**.

The system opens the **Confirm** menu. A "+" sign is displayed to the
left of the active confirm option.

To activate Confirm

1   Highlight **On**, and press **<Enter>**.

The system activates the **Confirm On** option, and closes the
Confirm and **System Options** menus.

To Deactivate Confirm

1   Highlight **Off**, and press **<Enter>**.

The system deactivates the **Confirm** option, and closes the
Confirm and **System Options** menus.

Assigning a Printer

The **Printer** option is used to direct output to an alternative printer. The printers available depends on the configuration of your system.

For example, there could be both a line printer (default) and a laser printer. If you want to produce a high quality report you would use the **Printer** option to redirect output to the laser printer.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the **System Options** menu.

2   Highlight the **Printer** option, and press **<Enter>**.

The system opens the **Printer** data box.

3   Type the name of the required printer, and press **<Enter>**.

The system will direct output to the selected printer when a report is generated to print.

Selecting a Printer from a List

If you do not know the name of the required printer or you have entered an unavailable name, the printer can be selected from a list using the following steps:

1   Complete steps 1 and 2 above.

2   From the **Printer** data box, press **<F1>**.

The system opens a list of available printers.

3   Highlight the required printer, and press **<Enter>**.

The system places the selected printer name in the **Select Printer** data box.

4   Press **<Enter>**.

The system will direct output to the selected printer when a report is generated to print.

Using the Word Wrap Feature

When entering data and you reach the end of a line partially through a word with the **Word Wrap** option activated the word will be kept together on the next line. If **Word Wrap** is not activated the word will be split across lines. The **Word Wrap** option is used to facilitate reading data on the screen. This option has no impact on the storage or reporting of records.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the **System Options** menu.

2   Highlight the **Word Wrap** option, and press **<Enter>**.

The system opens the **Word Wrap** menu. A "+" sign is displayed to the left of the active word wrap option.

To activate Word Wrap

1   Highlight **On**, and press **<Enter>**.

The system activates the **Word Wrap On** option, and closes the **Word Wrap** and System Options menus.

To Deactivate Word Wrap

1   Highlight **Off**, and press **<Enter>**.

The system deactivates the **Word Wrap** option, and closes the **Word Wrap** and **System Options** menus.

Using Insert Character Mode

The **Insert Character** option is used to switch between insert (ON) and typeover (OFF) modes. When **Insert Character** is set ON and data is typed, characters will be inserted into the text at the cursor position and shift all following characters to the right. If **Insert Character** is set OFF and data is typed, the character at the position of the cursor will be overwritten and the cursor moves one position to the right.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the **System Options** menu.

2   Highlight the **Insert Character** option, and press **<Enter>**.

The system opens the **Insert Character** menu. A "+" sign is displayed to the left of the active **Insert Character** option.

To activate Insert Character

1   Highlight **On**, and press **<Enter>**.

The system activates the **Insert Character** option, and closes the **Insert Character** and **System Options** menus.

To Deactivate Insert Character

1   Highlight **Off,** and press **<Enter>**.

The system deactivates the Insert Character option, and closes the Insert Character and System Options menus.

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Using Screen Redraw

The **Screen Redraw** option can be used to clear unwanted data from external sources or refresh an incomplete screen. For example, if a message is sent over a network which appears in the centre of your screen, you could clear it using the **Screen Redraw** option.

1   To open the **System Options** menu, press **<F3><F7>**.

The system opens the **System Options** menu.

2   Highlight the **Redraw** option, and press **<Enter>**.

The system will close the **System Options** menu and redraw the screen.