

OS-9/68000
SCRED
USER'S MANUAL

Copyright 1984 Microware Systems Corporation, All Rights Reserved. Reproduction of this document, in part or whole, by any means, electrical or otherwise, is prohibited, except by written permission from Microware Systems Corporation.

The information contained herein is believed to be accurate as of the date of publication, however, Microware will not be liable for any damages, including indirect or consequential, from use of the OS-9 operating system or reliance on the accuracy of this documentation. The information contained herein is subject to change without notice.

Revision B
Publication date: July, 1985
Publication Editor: Walden Miller

Microware Systems Corporation
1866 NW 114th Street
Des Moines, Iowa 50322
Tel: (515)224-1929

PMN-SRD68

OS-9 SCRED USER'S MANUAL

TABLE OF CONTENTS

Chapter 1 - An Overview	
A Brief Description	1-1
Some Scred features	1-1
Scred Modes	1-1
Getting Started	1-2
Scred Options	1-2
Chapter 2 - The Termset File	
The Termset File	2-1
The Termset File Format	2-1
Examples	2-4
Chapter 3 - Command, Edit and Insert Modes	
Command Mode	3-1
Entering Edit Mode from Command Mode	3-1
Manipulating the Edit Buffer	3-2
Erasing Text in the Edit Buffer	3-2
Finding Strings	3-3
Changing Strings	3-3
Wild Cards	3-4
Other Commands	3-4
Exiting Scred	3-5
Edit Mode	3-6
Cursor Control	3-6
Scrolling the Screen	3-6
Finding a String	3-7
Deleting Text	3-8
Inserting or Replacing Single Characters	3-8
Long Lines	3-9
Cutting and Pasting	3-9
Replacing Strings	3-10
The Help Display	3-11
The Status Line	3-11
Insert Mode	3-12
Appendix A - Reference Summary	
Scred Syntax	A-1
Command Mode	A-2
Edit Mode	A-4
Control Key Codes	A-5
Insert Mode	A-7

OS-9 SCRED USER'S MANUAL
CHAPTER 1
AN OVERVIEW

A BRIEF DESCRIPTION

Scred is a powerful and simple to use screen-oriented text editor for creating and modifying text files. Scred allows the user to move the cursor to any portion of the text and once there perform any desired operation.

The CRT display is continuously updated to show what additions and deletions are made to the text by providing a "window" into the file you are editing. This window allows you to see as many lines as will fit on your terminal screen at one time. You can edit or review the text by moving the window up or down through the text.

Some Scred Features

Scred's cursor positioning commands move the cursor right or left by characters or words, or up or down one line at a time. The entire screen can be scrolled up or down, and the cursor can be positioned to any specified group of letters or words.

Scred also provides features to "cut" a portion of text from the file and then "paste" it elsewhere. Variations of this feature allow you to duplicate the "cut" portion repeatedly or delete it if desired.

The "change", "find" and "search" commands are used to find or alter any string of displayable characters. The search string may include one or more wild card characters that will match any character in that position.

Scred Modes

Scred has three modes of operation: Command mode, Edit mode and Insert mode. Scred starts in command mode and contains commands that affect files or operate over the entire edit buffer. Edit mode is used for controlling or modifying the edit buffer and terminal display, and insert mode is used to enter new text that is stored exactly as typed.

OS-9 SCRED USER'S MANUAL
CHAPTER 1
AN OVERVIEW

GETTING STARTED

Scred may be entered in one of two ways. The easiest way is to specify the text file to be edited on the command line. The command line would look something like this:

```
scred filename
```

If the file can be found, Scred will immediately go into edit mode and display the beginning of the file you specified. If the file can't be opened, Scred will display an error message and go into command mode.

From the command mode, you may either exit Scred or specify a different file.

The second method is to type "scred" on the command line:

```
scred
```

Scred will then enter the command mode. You can now specify the file you wish to edit.

Either method is acceptable, because files may be written to disk or read into memory by Scred at any time.

SCRED OPTIONS

Several options may be placed on the command line when entering Scred. Scred options generally deal with the specific type of terminal Scred will run on.

Scred uses a special file called "termset" to describe the attributes of a particular terminal. A complete description of how to create a termset file is described in Chapter 2.

The actual syntax to use Scred is

```
Scred [<file name>] [<options>]
```

OS-9 SCRED USER'S MANUAL
CHAPTER 1
AN OVERVIEW

The options available to Scred are:

- ? Displays the usage of Scred.
- b=<num>k Allocates <num>k bytes for Scred's work buffer. Both the "=" and the "k" are optional when using the "-b" option. For example, "-b32" is effectively the same as "-b=32k".
- e Configures terminals that have embedded video attributes (i.e., the attribute start flag uses one character position).
- g Is a special option to be used only by special types of graphics oriented terminals (i.e., terminals that do not support line feeds).
- l=<num> Specifies the number of lines to be displayed on the terminal screen. This parameter may also be set in the termset file.
- t=<term> Specifies the terminal type (if it is other than the default terminal type).
- w=<num> Specifies the maximum number of characters to be displayed per line on the terminal screen. This parameter may also be set in the termset file.
- z=<path> Shows Scred the pathlist in which to find the termset CRT definition file.

Scred reads the specified text file into a memory buffer that has a default size of 16k bytes. The "-b" option is used to specify an alternate buffer size. It is generally used to increase the size of the buffer when the text file is too large to be completely read into memory. If you don't specify a larger buffer size when needed, you may tell Scred to read in more of the file and write what it has in memory back to disk. To create a 20k edit buffer, for example, you would type:

```
scred file1 -b=20k
```

end of chapter 1

**OS-9 SCRED USER'S MANUAL
CHAPTER 1
AN OVERVIEW**

USER NOTES

**OS-9 SCHED USER'S MANUAL
CHAPTER 2
THE TERMSET FILE**

THE TERMSET FILE

For Scred to work properly, it must know what type of terminal it is going to be operating on. Scred reads a text file called "termset" to determine the particular control codes your terminal uses for line delete, cursor positioning, etc.

If one of the entries in the supplied termset file does not describe your terminal's operating characteristics, you will have to create your own.

You may create the termset file by using a text editor, such as "edt" or you can use the "maketerm" utility that comes on your Scred distribution disk or in the 68000 CMDS directory.

Scred will look for the termset file in the directory called "/dd/sys" (where "/dd" is the default device for your system). If it is not found there, it will look in "/h0/sys" and then "/d0/sys".

The "-z=<pathlist>" option can be used to explicitly name a location for the termset file. If this option is not used, Scred will look for an OS-9 environment parameter named DDEV. DDEV can be set to the device on which the SYS directory is located using the "SETENV" command. In the following example DDEV is set to /h0:

```
$ setenv DDEV /h0
```

The Termset File Format

The termset file is a text file that contains control code definitions for one or more types of terminals. Each text line is a complete description list for a particular kind of terminal.

The first line in the file is the default terminal type. This terminal type is assumed if the "-t=<term>" option is not used and the TERM environment parameter is not set. Scred first checks for the "-t=" option and then looks for TERM. TERM can be set in the same manner as DDEV. In the following example TERM is set to ABM85:

```
$ setenv TERM ABM85
```

NOTE:: You can check the values stored in TERM and DDEV (and all other environment parameters) by using the "PRINTENV" command:

```
$ printenv  
TERM ABM85  
DDEV /h0
```

OS-9 SCRED USER'S MANUAL
CHAPTER 2
THE TERMSET FILE

The rest of the line in the termset file consists of a sequence of control code specifications for each control function. Each item in the list is separated by a ":" character. If the terminal can not perform a certain function, the terminating colon must still be present in the correct position.

NOTE: Scred will work on a terminal that has only a basic "position cursor" command, but Scred works more efficiently if most or all of the functions asked for by maketerm can be used.

If a character is an unprintable character (control character), a "\$" followed by two hex digits must be specified. This notation will be interpreted as the hexadecimal code for the character. For example "\$1B" = <esc>.

The fields of a termset file entry are defined as follows:

1. **Terminal Name:** This is the identification name for the terminal described in the line. This name is used when the "-t=<term>" command line option or the TERM environment variable is not used. The terminal name should be capitalized in the termset file, although it doesn't need to be capitalized on the command line.
- 2: **Cursor Control Code:** This code positions the cursor to any location on the screen. This function is mandatory. There are two parts of this item (although they may be intermixed):
 - a) One or more "position cursor" command characters.
 - b) "\X" and "\Y" (or "\X\X" and "\Y\Y") are referred to as cursor coordinates ("X" and "Y" refer to column number and row number, respectively). Their order is dependent on the individual terminal requirements for the cursor coordinates. This information will be supplied in the hardware specifications that come with your terminal.

Examples: \$1b[\Y\Y;\X\XH:
 \$1b\$3d\X\X:
 \$1bR\X\Y:

- 3: **Cursor Offset Value:** This value (in hexadecimal) is always added to the cursor X and Y coordinates. Many terminals use an offset of \$20.

OS-9 SCRED USER'S MANUAL
CHAPTER 2
THE TERMSSET FILE

NOTE: Fields 4-10 can specify from zero to four output control characters.

4. **Delete Line control character(s):** This causes the current line to be deleted and subsequent lines below the deleted line to scroll up.
5. **Delete Character control character(s):** This character erases the character under the cursor and shifts the rest of the line to the left by one character position.
6. **Clear Screen:** This character erases the entire screen and returns the cursor to the home position.
7. **Clear to End of Line:** This character erases all characters on the line from the cursor to the end-of-line. This includes the cursor position.
8. **Insert Line:** This character creates a new blank line by scrolling the current line and lines below down one line.
9. **Start Alternate Video:** This character displays all subsequent characters in reverse video, different intensity or any similar visibly different video mode. This code is used to highlight marked lines.
10. **End Alternate Video:** This character displays all subsequent characters in normal video.
11. **Screen Length (in hexadecimal):** This specifies the number of lines to be displayed on the terminal screen. This field is optional. The default value is 24 lines.
12. **Screen Width (in hexadecimal):** This specifies the number of columns to be used for terminal display. This field is optional. The default value is 80.

OS-9 SCRED USER'S MANUAL
CHAPTER 2
THE TERMSET FILE

Examples:

ABM85:\$1b\$3d\Y\X:\$20:\$1bR:\$1bW:\$1e\$1bY:\$1bT:\$1bE:\$1bj:\$1bk:\$18:\$50:

To create the above termset entry using maketerm, type:

```
$ maketerm
```

Maketerm will then prompt for input. Input is stored exactly as entered. If the termset file does not exist, it will be created. If it does exist, the new entry will be appended at the end of the file.

NOTE: If a particular terminal does not have one of the requested features, simply enter a carriage return at the prompt.

```
$ maketerm
```

```
terminal name: ABM85
cursor positioning sequence: $1b$3d\Y\X
cursor position offset: $20
delete line sequence: $1bR
delete character sequence: $1bW
clear screen: $1e$1bY
clear to end of line: $1bT
insert line: $1bE
alternate video: $1bj
restore normal video: $1bk
screen length: $18
screen width: $50
```

To make "TERM:\$1bR\X\Y:\$00:::\$0e:::\$1bj:\$1bl:::", type:

```
$ maketerm
```

```
terminal name: TERM
cursor positioning sequence: $1bR\X\Y
cursor position offset: $00
delete line sequence:
delete character sequence:
clear screen: $0e
clear to end of line:
insert line:
alternate video: $1bj
restore normal video: $1bl
screen length:
screen width:
```

end of chapter 2

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

COMMAND MODE

Command mode consists of commands that affect files or operate over the entire edit buffer. It is entered automatically when you enter Scred without specifying an input file.

All commands, with the exception of the "g"(oto) command, are at least two characters long to distinguish them from edit and insert mode commands which are exclusively one character. You only need to type the first two letters of any command (again with the exception of "g"(oto) and "dir"). The other characters in the command are optional.

When in command mode, the ">" prompt will be seen in the lower left hand corner of the screen.

NOTE: The usual OS-9 control keys for backspace, line delete, etc., may be used when entering command mode input lines.

Entering Edit Mode from Command Mode

If you did not specify a file to be edited on the command line, you will have to specify a file in command mode:

To edit an existing file, type "ol" or "old" followed by a file name. If the file can be opened, Scred will go into edit mode. For example:

```
> ol filename
```

To create a new file, type "ne" or "new" followed by a file name. If the file can be created, Scred will go into insert mode. For example:

```
> ne newfilename
```

If you have entered the command mode from edit mode and wish to return to edit mode to continue modifying the same file, you may use the edit command "ed"(it), or you may type "<cntrl> E".

You may enter insert mode directly from command mode by using the insert command, "in"(sert).

NOTE: You will not be able to enter insert or edit modes if there is no file in the edit buffer.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

Manipulating the Edit Buffer

When entering edit mode, Scred reads the text file into an edit buffer. By default, the size of the edit buffer is 16k bytes. If your file is larger than 16k, all of the file can not be in this buffer at the same time. In this case, Scred will only read the first 14k bytes of the file and leave 2k bytes free in the buffer for changes and additions.

When you have finished editing a section and wish to edit another section that is still on disk, you can use the "more" command by typing "mo". This command will cause the section of text in memory (from the beginning of the buffer up to the cursor position only) to be written out to disk and the next section to be read in.

The "write" and "update" commands are also used to save text. The write ("wr") command is used to write contents of the edit buffer and the remainder of the input file, if any, to the output file.

When Scred saves a file, it creates a work file called ed.tmp.xxx ("xxx" is the process id number that is assigned by OS-9). If Scred can successfully create and write the entire work file, it deletes the current file and renames the work file to be the old name.

The update command ("up") is used to write the changes that you have made to the edit buffer, then re-enter edit mode.

The "add" command ("ad") is used to insert another file within the text of the edit buffer. The file will be inserted directly before the line the cursor is on. To use the add command, type "ad" followed by the name of the file that you want to insert.

NOTE: There must be enough free space in the edit buffer for the extra file, or the file will not be able to be loaded (no text will be added). If there is not enough space in the edit buffer, Scred will display the message:

file too large to add

Erasing Text in the Edit Buffer

At some point in time you may want to erase text in the edit buffer. Scred allows you to delete text between a certain number of lines or allows you to delete the entire buffer.

The "delete" command exists to delete lines between a starting line number and an ending line number. To use delete, type "de" followed by the appropriate line numbers.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

The "abort" ("ab") and "clear" ("cl") commands erase the entire buffer. Clear will allow you to re-enter the edit buffer after you have erased it. Abort will not only clear the buffer, but close the file.

Finding Strings

There are two methods for searching a file for a particular string: using the "find" ("fi") and "search" ("se") commands.

When you type "fi" followed by a carriage return, Scred will return the prompt: "Search mask: ". Enter the string you are trying to find. If the string can be found, Scred will enter edit mode with the cursor positioned to the beginning of the first occurrence of the string.

The search command is similar to find, but search can optionally take a starting and ending line number to search for the string. For example:

```
> se 25 46
```

If these numbers are omitted, the entire file is searched. Search does not enter edit mode, but instead, it displays all the line numbers and lines where the matches were found.

The goto command ("g") is used to enter edit mode and position the cursor on a particular line in the file. So, if you wanted to position the cursor on line 12 of the file, you would type "g 12".

Changing Strings

The change command is used to replace all occurrences of a string within a specified range of lines or over the entire file.

The change command is executed by typing "ch", optionally followed by a starting and ending line number. If the line numbers are omitted, the change is made over the entire file.

Scred will return the prompt "Search mask: ". You enter the string you want to change. Next, Scred will return the prompt "Change mask: ". You enter the new string.

If the search mask can be found, Scred will display the lines and line numbers where the changes occurred.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

NOTE: The search, find and change commands accept a "match first word" character. By placing a " " as the first character in the search string, Scred will only find a match if the string is found at the beginning of a line.

Wild Cards

The change, find and search commands request a search mask which can be any string of characters. The search mask can also include the wild card character: "?". This wild card character can match any character in that position.

NOTE: Wild cards will match spaces between words.

For example:

m????? matches all strings that begin with "m" and followed by five characters. For example: "millio", "mister", or "my dog".

??_?? matches all strings that contain "_" and are enclosed by two characters on both sides of it. For example: "SS_ID" or "_it"

Other Commands

Command mode contains several additional commands. The "\$" allows Scred to execute a shell command line. This operator allows you to execute any OS-9 command from Scred. For example:

\$!list file! list the contents of file !

\$ <cr> \$ followed by a carriage return starts an OS-9 shell.

Chd and Dir are built-in Scred commands. Chd followed by a directory name will change the current working directory, and dir will display a directory listing of the current directory. It is not necessary to use "\$" with these commands.

The tabs command ("ta"), followed by a number, will set the tab stops to be every <n> characters. The default tab size is 4.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

An additional feature of the tab command is Scred's auto-indent function. Auto-indent is used by Scred automatically after a carriage return to indent the next line. If the previous line begins with a tab of 10 spaces, for example, the next line will also begin with a tab of 10 spaces. Auto-indent mode is automatically on when Scred is entered.

The notab command ("not") is used to disable auto-indent mode. The auto-indent command ("au") turns it back on.

Exiting Scred

A session with Scred is terminated by the exit command ("ex" or "exit"). If a file exists in the edit buffer, Scred will save the file to disk, and then return to OS-9.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

EDIT MODE

Edit mode is used for the control and modification of the edit buffer and the CRT display. Edit mode can be entered from command mode by typing "ed", or "<ctrl> E". Edit mode can be entered from insert mode by typing "<esc>". When you enter edit mode, text of the file to be edited will be displayed on the screen and you will be able to perform several editing functions.

Cursor Control

There are seven keys that control the position of the cursor on the screen:

I
H J K L ;
,

KEY	FUNCTION
---	-----
I	moves the cursor up one line
,	moves the cursor down one line
J	moves the cursor left one character
L	moves the cursor right one character
K	move the cursor alternately to the front or to the end of the line that the cursor is on
H	moves the cursor one word to the left
;	moves the cursor one word to the right

Scrolling the Screen

There are four keys that are used for scrolling the screen up and down. Scrolling, in effect, moves the window through which you are viewing the text. The keys that are used for scrolling are located in the same area that the cursor positioning keys are. The underlined letters below show the position of the scrolling keys respective to cursor positioning keys.

U I O
H J K L ;
M , _

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

KEY	FUNCTION
U	causes the screen to continuously scroll up
M	causes the screen to continuously scroll down

The continuous scroll feature is useful if you wish to quickly scan through the text. The space bar is used to pause and restart the scroll. Any other character that is typed will abort the continuous scroll.

O	scrolls the window up one screen length
	scrolls the window down one screen length

When scrolling down, the line that was at the bottom of the screen will now be at the top. When scrolling up, the line that was at the top will be at the bottom of the screen.

Finding a String

The "f" (find) command is used to position the cursor on a specified string within a file. A string can consist of any number of words or characters (including wild cards).

When you press the "f" key, Scred will display the prompt "Search mask: " in the upper left hand corner of the screen. Type the string to be searched for after the prompt. If the string is found, the cursor will be positioned at the beginning of the string. The line that contains the string will be positioned on the third line of the screen. If the string can't be found, Scred will display the message "find: no match".

To find multiple occurrences of the same string, after the first match is found, simply type "f" and then "<cr>" when prompted for the string. The cursor will be moved to the next occurrence of the string, if it exists.

The "g" (go to) command is used to position the cursor on a particular line within the text file.

When you press the "G" key, Scred will display the prompt "goto:" in the upper right hand corner. Scred will position the cursor at the beginning of the line you specified at the prompt. Scred will position the requested line at the third line from the top of the screen. Line numbers begin with 1. Line 1 is the first line of the file.

"g*" will position the cursor to the end-of-file.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

Deleting Text

Scred contains a number of commands for deleting text. Deletions can be made character by character, by words or by lines. Any character, word or line of text that you enter into the file can be deleted.

To delete single characters, two commands exist:

The backspace key, <bs>, is used to delete the character that is to the left of the cursor.

The delete key, , is used to delete the character that is under the cursor.

Several control keys exist to delete words and lines.

NOTE: In the following descriptions of commands, " " denotes the <ctrl> (control) key.

" A" will delete one word to the left of the cursor.

" D" will delete one word to the right of the cursor.

" C" will erase text from the current cursor position to the end of the line.

" Z" will erase text from the current cursor position to the beginning of the line.

The entire line can be deleted by using " X".

NOTE: If you make a mistake and delete something you shouldn't have, " F" will abort any changes made to the current line.

Inserting or Replacing Single Characters

On many occasions you may find it necessary to insert or replace a single character. You may go into insert mode, make the change, and then re-enter edit mode, or you may use one of the following commands:

type "x", followed by the new character, to replace the character under the cursor.

type "b", followed by the new character, to insert a character and advance the cursor.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

Long Lines

Lines can be any length up to 256 characters. However, you will only see part of the line if it is longer than the width of your screen. Scred does not wrap long lines around to be displayed on the next line.

Two commands exist to assist you in editing long lines:

" B " will split a line into two lines at the cursor position.

" P " will join the current line with the one above it.

Cutting and Pasting

There are many times during a text editing session when you would like to move text from one location in the file to another. Scred allows a section of text to be "cut" out of the file and "pasted" or inserted at another location. Through the use of this "cut and paste" feature, Scred allows text to be moved, deleted, or duplicated.

To move a section of text, it is first necessary to "set" a mark at the starting line of the group of text that is to be moved. You set a line by positioning the cursor on the line and typing "s". To set a portion of the line, you must break the line in two and then set it. If your terminal is equipped, the marked line will appear in reverse video.

Now, move the cursor down the text (using the ", " or "." key, or using a "g"(oto) command) to the last line that you wish to move. When you have the cursor positioned appropriately, you "cut" the text out using the "c" (cut) command. The text is removed from the edit buffer and placed in a new buffer called the "paste" buffer.

It is possible to cut more text out of the file and append it to the end of the paste buffer by using the "a" (append) command instead of the cut command.

To insert the text in the paste buffer, position the cursor one line below the line where you want the text inserted and type "p".

Scred also allows you to duplicate text. Follow the previous instructions for marking the text ("s" and repositioning the cursor), but use the "n" (nondestructive cut) command instead of the "c" command. This makes a copy of the text and places it in the paste buffer.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

A nondestructive append is also available: "v". This allows you to append text to the paste buffer without changing the text in the edit buffer.

Now you may position the cursor to where you want the duplicate text placed and type "p".

Large sections of text can also be deleted. To delete text you cut the portion of unwanted text out of the file in the same way as if you were going to move it to another location. Instead of pasting the text, use the "e" (erase) command to eliminate the paste buffer.

Sections of text may be written out to a file. Simply mark the text to be moved, and press "w" (write) to write the text. Scred will prompt for the output file name in the upper right hand corner. If the file can't be created, Scred will issue an error message. If no text is marked, Scred will write the paste buffer to the output file.

Replacing Strings

One string can be replaced by another string by using the replace command: "r". When you type "r", Scred will return the prompt: "Search string:". You enter the string you want to replace.

Scred will then display the prompt: "Change string:". You will enter the replacement string.

Recursive changes can be made to all occurrences of the search string by typing a "r" and a carriage return for each of the prompts after the first occurrence of the string is found.

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

The Help Display

By typing "?" while in the edit mode, Scred will display a list of commands at the top of the terminal screen. The commands are divided into four small help menus:

cursor control keys

edit buffer controls

cut and paste commands

miscellaneous commands

To review each menu, press any key (except "q"). To return keyboard control to edit mode, type "q" (quit).

The Status Line

By typing "G", the Status Line will be displayed. The Status Line displays the line number, the column number, the free space left in work buffer, the paste buffer size (what is currently in the paste buffer), the file name you are working with and the Scred mode you are currently in.

To resume control (and redisplay the full terminal page), type any character.

The following example Status Line shows line 50, column 0, a work buffer size of 14526 bytes, 51 bytes in the paste buffer, the file name (Example) and the mode (edit mode):

L:50 C:0 MB:14526 CB:51 F:Example edit:

OS-9 SCRED USER'S MANUAL
CHAPTER 3
COMMAND, EDIT AND INSERT MODES

INSERT MODE

Insert mode is used to enter new text that is stored exactly as entered. To enter insert mode from command mode, type "in". To enter insert mode from edit mode, type "<cr>".

When text is inserted, it is placed before the current cursor position. Tab characters are allowed, and it is possible to enter control characters. To enter a control character in the text, type " V" followed by the character you want to enter.

For example, if you want to enter a "control l" into the text, type " V" followed by an "l".

end of chapter 3

OS9/68000/6809 SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

SCRED SYNTAX

SYNTAX: SCRED [<filename>] [<options>]

FUNCTION: SCRED is a screen editor program for creating or modifying text files. It has commands for both line and character-oriented editing.

OPTIONS:

- ? displays the usage of Scred.
- b=<num>k sets the buffer size to <num>k bytes. Both the "=" and the "k" are optional when using the "-b" option. For example, "-b32" is effectively the same as "-b=32k".
- e is a special option that configures terminals with embedded video attributes (i.e., the attribute start flag uses one character position).
- g is a special option to be used by special types of graphics oriented terminals (i.e., terminals that do not support line feeds).
- l=<num> specifies the number of lines to be displayed on the terminal screen. This parameter may also be set in the termset file. Default: 24 lines.
- t=<term> specifies the terminal type if it is other than the default terminal type.
- w=<num> specifies the maximum number of characters to be displayed per line on the terminal screen. This parameter may also be set in the termset file. Default: 80 characters.
- z=<path> shows Scred the pathlist in which to find the termset CRT definition file.

OS-9 SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

COMMAND MODE

Command Mode consists of commands that affect files or operate over the entire edit buffer. Scred automatically enters Command Mode, unless a file name is given on the command line, in which case it goes straight to Edit mode.

Command Mode commands, with the exception of g[oto], are at least two characters long to distinguish them from edit and insert mode commands which are exclusively one character commands.

The usual OS-9 control keys for backspace, line delete, etc. may be used entering Command Mode input lines.

COMMANDS	FUNCTION
ab[ort]	Aborts all changes made to the current file. This command erases the entire work buffer and closes the current file.
ad[d] <file>	Adds text of the specified file to the work buffer, starting at the line below the current cursor position.
au[to indent mode]	Automatically indents new lines after a <CR> if the previous line began with a tab or space. The indentation will be equal to that of the previous line. When Scred is first entered auto-indent mode is on.
cha[nge] <begline#> <endline#>	* Replaces all occurrences of a string within the specified range of the line numbers.
chd <filename>	Changes current working directory.
cl[ear]	Erases all text in the work buffer but keeps the current file open.
de[lete] <begline#> <endline#>	Erases all lines within the specified range of line numbers.

* The "Change", "Find" and "Search" commands will request a search string which can be any string of displayable characters. The search string may include "?" wild card characters which match any character in that position. You must leave a space between beginning and ending line numbers.

OS-9 SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

COMMANDS	FUNCTION
dir	Displays file names in current working directory.
ed[it] or E	Enters Edit Mode.
ex[it]	Saves the work buffer to file and returns control to OS-9.
fl[nd]	Finds the first occurrence of a string.
g[oto] <linenum>	Moves screen window and cursor to <linenum>.
in[sert]	Enters Insert Mode.
mo[re]	Saves current work buffer section to output file, and then fills the buffer with next section of input file.
ne[w] <file>	Creates the specified file and enters insert mode.
not[ab]	Turns off auto indent mode.
ol[d]	Clears the work buffer, opens the old file and enters edit mode.
se[arch] <begline#> <endline#>	* Searches the lines for the string within the specified range.
tabs <n>	Sets tab stops for every <n> character positions.
up[date]	Saves changes and reenter edit mode.
wr[ite]	Writes the work buffer contents and the remainder of input file to the output file.
\$ <command>	Executes shell command line.
G	Displays the Status Line.

* The "Change", "Find" and "Search" commands will request a search string which can be any string of displayable characters. The search string may include "?" wild card characters which match any character in that position. You must leave a space between beginning and ending line numbers.

OS-9, SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

EDIT MODE

Edit mode is used for buffer and display control and modification. The following commands are available in edit mode:

COMMANDS	FUNCTION
i	Moves cursor up one line.
,	Moves cursor down one line.
j	Moves cursor left one character.
h	Moves cursor left one word.
l	Moves cursor right one character.
;	Moves cursor right one word.
k	Moves cursor to the beginning or end of the line.
r	Replaces string.
u	Scrolls the text up. Type <space> to stop/start. Type <any char> to abort.
m	Scrolls the text down. Type <space> to stop/start. Type <any char> to abort.
o	Scrolls text up one screen.
.	Scrolls text down one screen.
g	Moves display window to cursor line number (same as command mode "go to").
f	Finds the first occurrence of a string (same as command mode "find").
x <char>	Replaces the character under the cursor with <char>.
b <char>	Inserts <char> and advances cursor.
<bs>	Deletes character to left of cursor.
	Deletes character under cursor.

OS-9 SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

COMMANDS	FUNCTION
<cr>	Enters insert mode.
<esc>	Returns to Command Mode.
?	Displays Help menu.

CONTROL KEY CODES

COMMANDS	FUNCTION
A	Erases one word to the left of the cursor.
D	Erases one word to the right of the cursor.
F	Aborts changes made to current line.
C	Erases text from the cursor to the end of line.
Z	Erases text from the cursor to the beginning of line.
X	Erases the entire line.
B	Splits the line into two lines at the cursor position.
P	Joins the current line with the line above.
<LF>	Moves the work buffer down one line and enters insert mode leaving you on the same line.
G	Displays the status line.

OS-9 SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

Edit mode also provides the following block marking and moving commands:

COMMANDS	FUNCTION
s (set)	Sets a mark at the beginning of a line for deletion, duplication or movement to another place in the file or another file. If the starting mark is already set, "s" unsets the mark. Moving the cursor marks lines. Marked lines are given a special video attribute if the terminal is able to do so.
c (cut)	Deletes selected lines from buffer and stores them in the paste buffer.
n (nondestructive cut)	Places text in the cut buffer but does not alter text file.
p (paste)	Inserts contents of the paste buffer at the line above the cursor.
a (append)	Deletes the marked lines from the work buffer and appends them to the paste buffer.
v (nondestructive append)	Appends marked text to the paste buffer but does not alter the text file.
e (erase)	Erases the contents of the paste buffer and returns its memory space to the work buffer.
w (write)	Writes marked lines to the output file. If no lines are marked, this command writes the paste buffer to the output file.

OS-9 SCRED USER'S MANUAL
APPENDIX A
REFERENCE SUMMARY

INSERT MODE

Insert mode is used to enter new text. The text is stored exactly as it is typed. Tabs are supported.

It is possible to insert control characters. Type "<ctrl> V" and Scred will accept the next character as a control character. For example:

<ctrl> V l will specify "l" as a control character,
 consequently inserting a line feed.

The <escape> key returns to Edit Mode.

end of appendix a