PRACTICE 450-1021-331
Issued: 90 03 30
Vintage: NSR28-30 01
Standard

NETWORK OPERATIONS SYSTEMS

BUSINESS NETWORK MANAGEMENT

SWITCH/PBX POLLER: ADMINISTRATION AND OPERATION

CONTENTS **PAGE**

Contents continued ------------------

CONTENTS (Continued) **PAGE**

Contents continued ------------------

CONTENTS (Continued) **PAGE**

1. INTRODUCTION

1.01 This publication provides the BNM operator with step-by-step information for configuring node groups and communication ports, scheduling poll jobs, and generating poll variance and history reports, using the Switch/PBX Poller (SPP) feature of Network Software Release (NSR) 28 of the Business Network Management (BNM) application.

1.02 The SPP is a hardware and software package designed to collect call detail record (CDR) data from a variety of types of private branch exchanges (PBXs) or switches, hereafter referred to as nodes. These records are then converted to station message detail record (SMDR) format for downstream processing by the various BNM features.

THE STRUCTURE OF THIS PUBLICATION

1.03 This Northern Telecom Practice (NTP) is divided into the following seven chapters:

(a) ***Introduction.*** Chapter 1 introduces this publication.

(b) ***Switch/PBX Poller Overview.*** Chapter 2 provides: a summary of the procedures for setting up and operating the SPP; an overview of the SPP main menu and menu functions; an explanation of the SPP screen fields; an explanation of the special-function keys; and an explanation of the command line.

(c) ***File Maintenance Menu.*** Chapter 3 includes the step-by-step information for configuring nodes, call collector 3 (CC3) devices, and ports using the File Maintenance option of the SPP main menu. (See Fig. 2-1 for an illustration of the SPP main menu.)

(d) ***System Menu.*** Chapter 4 includes the step-by-step information for activating or deactivating ports, viewing real-time port activity, aborting an active port operation, temporarily disabling a port operation, and enabling a temporarily disabled port.

(e) ***Communications Menu.***Chapter 5 includes the step-by-step instructions for communicating with the CC3 device for the purpose of setting up the device and verifying the CC3 operations.

(f) ***Reports Menu.*** Chapter 6 includes the step-by-step information for generating and retrieving poll variance and poll history reports.

Note: For log and alarm information, refer to Appendix 1 to 450-1021-511.

(g) ***Mapping the Facilities of the SPP Nodes.*** Chapter 7 includes the step-by-step information for updating the facility information database.

RELATED PUBLICATIONS

1.04 The following documents contain further information on the SPP.

DOCUMENT	**DESCRIPTION**
CC3 User Guide	This guide provides a description of CC3 functions, and instructions for the CC3 installation and operation. Please obtain a copy of the *CC3 User Guide* from: TSB International Inc. 115-5399 Eglington Avenue West Etobicoke, Ontario M9C 5K6 CANADA Telephone: (416) 622 7010
450-1021-131	This NTP describes the purpose and functions of the SPP.
450-1021-311	This NTP provides step-by-step instructions for: loading the SPP node information into the BNM node table; defining customers; specifying that SMDR-type records are to be collected by BNM; identifying customer nodes; specifying that SMDR-type records are to be collected for customers; and defining facility ownership.
450-1021-454	This NTP contains customer data-input forms for data entry in the fields of the SPP screens.
Appendix 1 to 450-1021-511	This NTP describes the log subsystems and the SPP log messages.

NOTATIONAL CONVENTIONS

1.05 The following conventions are used in this practice:

(a) ***KEYBOARD*** keys are in uppercase bold italics.

(b) Menu options to be selected are identified by their name in upper-lowercase, for example, the Reports option.

(c) MISCELLANEOUS items, such as prompts and responses, are in upper case.

(d) ==> Results of an action are indicated by an arrow.

2. SWITCH/PBX POLLER OVERVIEW

SUMMARY FOR OPERATING THE SWITCH/PBX POLLER

Configuring the Switch/PBX Poller

2.01 Perform the following Steps 1 through 12 to configure the Switch/PBX Poller (SPP) for the scheduled polling of the call collector 3 (CC3) devices.

(1) ***Identify Nodes, CC3 Devices, and Ports.*** Use the procedure "Creating a Site Information Record," in Chapter 3 of this publication.

(2) ***Configure the Ports.*** Use the procedure "Creating a Port Information Record," in Chapter 3 of this publication.

(3) ***Enable the Ports.*** To enable the ports that you configured in Step 1 , you must activate the SPP manager. Use the procedure "Starting the SPP Manager," in Chapter 4 of this publication. If the SPP manager is already activated, reboot the manager by first using the procedure "Shutting Down the SPP Manager," (also in Chapter 4) followed by the procedure "Starting the SPP Manager."

Note: You must activate or reboot the SPP manager whenever existing nodes are transferred from one polling group to another.

(4) ***Set Up the Operation Parameters of the CC3 Devices.*** To download switch support and dialog with a CC3 device for the purpose of setting up the operations parameters, refer to Chapter 5 of this publication.

(5) ***Update the Business Network Management Node Table.*** For instructions on loading the SPP node information into the Business Network Management (BNM) node table, refer to the node table installation information in 450-1021-311.

(6) ***Define Customers.*** For instructions, refer to the customer table information in 450-1021-311.

(7) ***Specify That SMDR Records Are to Be Collected by BNM.*** For instructions, refer to the feature data table information in 450-1021-311.

(8) ***Identify Customer Nodes.*** For instructions, refer to the customer node table information in 450-1021-311.

(9) ***Specify that SMDR-Type Records Are to Be Collected for the Specific Customers.*** For instructions, refer to the customer feature profile information in 450-1021-311.

(10) ***Define the Ownership of Facilities.*** For instructions, refer to the following information in 450-1021-311:

- facility ownership-attendant subgroups
- facility ownership-customer groups
- facility ownership-trunk translation

(11) ***Map the Facilities of the Nodes.*** Use the procedure "Creating A Facility Mapping," located in Chapter 7.

(12) ***Schedule Polling.*** Once you complete Steps 1 through 11, establish the polling schedule. For instructions on setting up a polling schedule, refer to the scheduling services information in 450-1021-311.

Note 1: A DNC-100 customer can schedule a poll job directly. A DNC-500 customer must have the poll job scheduled by the telco.

Note 2: To generate reports of the polling history of nodes or the volume of reports produced by nodes, refer to Chapter 6 of this publication.

Changing the Poll Schedule

2.02 Once you have set up the polling schedule, the SPP collects call detail records (CDR) on a scheduled basis. You need not interfere until changes occur in terms of customers, facility ownership and mapping, or the poll schedule.

2.03 ***Adding a Customer.*** When you add a customer, complete the previously described Steps 6 through 12 in 2.01 so that the customer receives polled CDR data.

2.04 ***Changing a Facility Mapping.*** When a facility mapping changes, refer to "Changing a Facility Mapping," in Chapter 7.

2.05 ***Changing an Existing Poll Schedule.*** For instructions on changing a poll schedule, refer to the scheduling services information in 450-1021-311.

> ***Note:*** For information on aborting a manual or scheduled poll that is running, refer to the ports menu information in Chapter 4 of this publication.

Log and Alarm Messages

2.06 For information on retrieving log messages and SPP alarm messages, refer to Appendix 1 to 450-1021-511.

SWITCH/PBX POLLER MENU

Accessing the Switch/PBX Poller Main Menu

2.07 To gain access to the SPP functions, first access the SPP main menu; use the following steps:

(1) Sign on at the terminal.
==> The BNM main menu appears.

(2) Select the SPP Operation option. Press ***ENTER***.
==> The SPP main menu appears.

Switch/PBX Poller Menu Structure and Functions

2.08 The SPP main menu is the starting point for all work in the SPP system. The SPP main menu and menu options provide access to the other menus used to enter and retrieve data, print reports, initiate communications, and monitor SPP operations. Figure 2-1 illustrates the SPP main menu. Table 2-A lists the main menu and menu option functions.

Selecting Menu Options

2.09 The following are the two possible methods that can be used to select menu options:

(a) Use the directional arrow keys to move the cursor to the desired menu option, which then appears in reverse video. Press ***ENTER*** to activate the option.

(b) Enter the first unique letter(s) of the option that you wish to select. The SPP activates that option. For example, press the letter F to activate the File Maintenance option.

Exiting the Switch/PBX Poller Main Menu

2.10 To exit the SPP main menu and return to the BNM main menu, select the Exit option of the SPP main menu.

> ***Note:*** Selecting the Exit option does not result in an automatic shut down of the SPP manager. The SPP operations will remain in effect unless the SPP manager is specifically shut down by means of the procedure "Shutting Down the SPP Manager," in Chapter 4 of this publication.

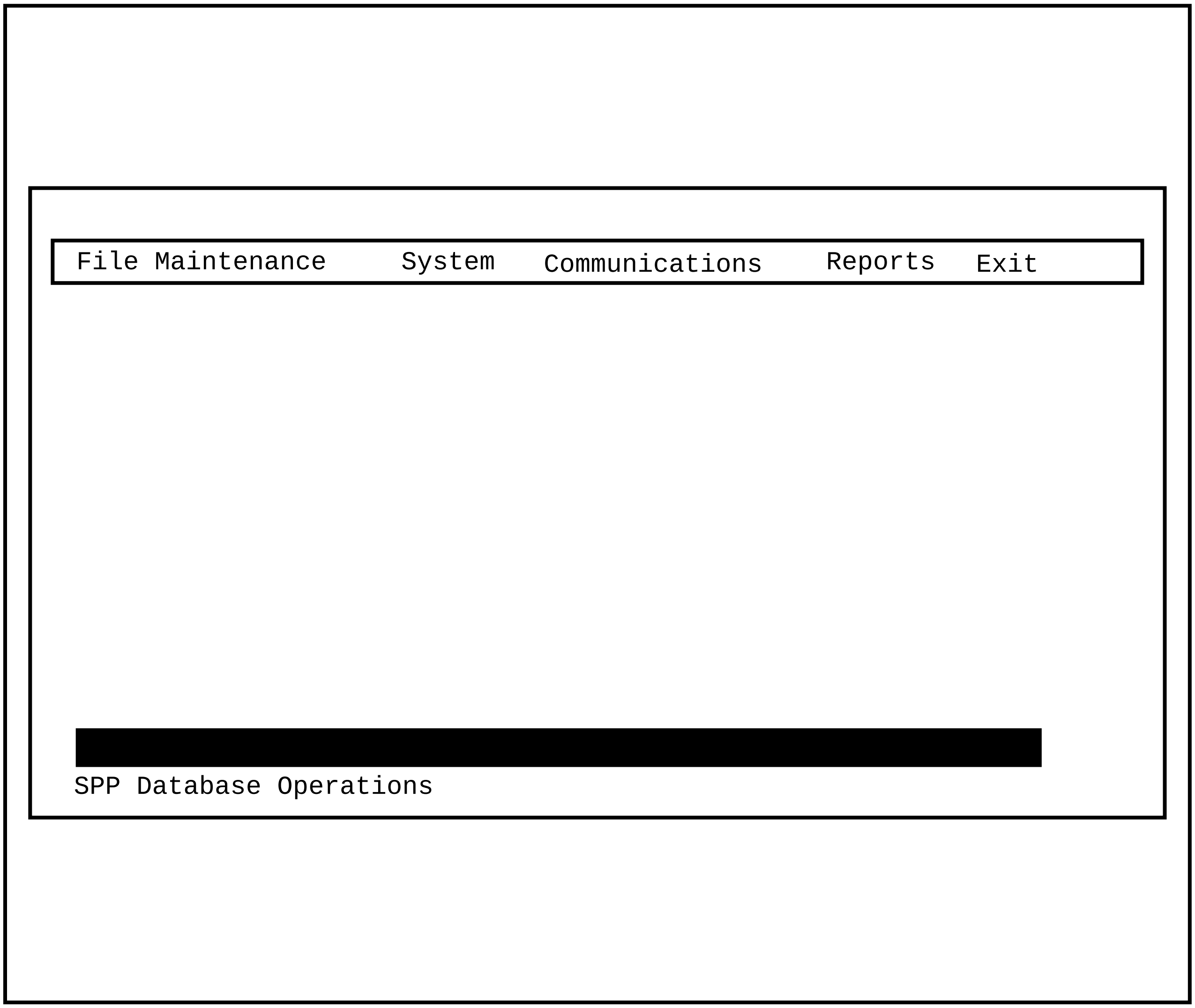


Fig. 2-1
Switch/PBX Poller Main Menu

Table 2-A
SPP MENU FUNCTIONS

MAIN MENU OPTION	SUBMENU OPTION	SCREEN	FUNCTION
File Maintenance		Site Information	• Defines the node. • Defines the CC3. • Defines the node type. • Defines the CC3 phone number. • Defines the polling group number. • Defines the CC3 password. • Defines the timeout threshold.
		Port Information	• Defines the ports. • Defines the port functions. • Assigns ports to polling groups.
		Group Information	Enables and disables polling groups.
		Schedule Information	The SPP schedule information submenu is disabled. Poll scheduling takes place by means of the BNM scheduling services man machine interface (MMI). Refer to NTP 450-1021-311.
System	SPP Manager	Start Manager	Activates the SPP manager to enable all ports.
		Orderly Shutdown	Disables all SPP communications.
	Monitor	View Ports	Accesses the port monitor window to view the status and activity of ports.
		Unview Ports	Closes the port monitor window.

Table Continued --------------------------------

Table 2-A Continued
SPP MENU FUNCTIONS

MAIN MENU OPTION	SUBMENU OPTION	SCREEN	FUNCTION
	Ports	Abort	Cancels the operations of a port.
		Down	Disables a port temporarily.
		Up	Restores a temporarily disabled port to active status.
Communications		Groups	The SPP Groups screen is not relevant to this practice.
		Ports	Dialogues with a CC3 device and performs a remote query of CC3 operations.
Reports		Poll Status	The Poll Status screen is disabled. For log and alarm reports, refer to 450-1021-531.
		Variance Report	Generates reports based on the volume of records collected by the CC3s.
		History Report	Collects reports that detail the polling history of nodes.
Exit			Allows you to quit the SPP main menu and return to the BNM main menu.

FIELDS

2.11 The following four types of fields are data fields on the SPP screens:

(a) ***Display.*** This is an SPP-generated reference-information field. For example, the SPP automatically displays information in the Description field of the Site Information screen, based on the user-entered information in the Site Type field of the Site Information screen.

(b) ***Functional.*** For a functional field, the entry of a value is optional, depending on circumstances. For example, the Password field in the Site Information screen is a functional field. That is, if no password is enabled in the CC3, the password field of the site information screen should be left blank. However, if a password is entered in the CC3, an entry is required in the password field of the site information screen.

(c) ***Informational.*** This is a user-generated reference-information field. You use this field to enter information that is not used as an operating parameter by SPP.

(d) ***Mandatory.*** In a mandatory field, a valid value must be entered or the SPP will not execute the field.

2.12 ***Autotab Feature.*** Generally, the fields in the SPP screens are auto-tabbed, and therefore pressing ***ENTER*** after entering data is not always required. The exceptional conditions are the following:

(a) Press ***ENTER*** after entering data into a field that requires a single-character data entry, for example, a field requiring a Y (Yes) or N (No) as a data response.

(b) Press ***ENTER*** when an entry consists of fewer characters than the maximum allowed.

Note: Press ***ENTER***, as indicated in this practice, for most fields.

SPECIAL-FUNCTION KEYS

2.13 Special-function keys perform specific functions. Table 2-B lists the function keys that are in effect for the MMI screens covered in Chapters 3 through 6 of this publication.

Table 2-B
MENU-FORM FUNCTION KEYS

KEY	KEY NAME	FUNCTION
Down arrow	Down arrow	Moves cursor down the screen to the following item.
Up arrow	Up arrow	Moves cursor up the screen to the preceding item.
Right arrow	Right arrow	Moves cursor to the item to the right.
Left arrow	Left arrow	Moves cursor to the item to the left.
F1	Help	Provides help information.
F2	Choice	In a data form, brings up a window containing a list of the choices that may be selected for a field.
F3	Toggle	Toggles between the bottom portion and top portion of help information text.
F4	Exit	Executes a data-form operation and exits the form.
ENTER	Enter	In a data form, activates the selection and advances the cursor to the next field.
ESC	Escape	In a submenu, pressing the ***ESC*** key twice closes the subscreen and returns you to the root menu; in a data form, pressing the ***ESC*** key twice aborts the current operation and the data form; in a help screen, pressing the ***ESC*** key twice aborts the help screen and returns you to the data form.
Space bar	Space bar	Moves the cursor one space to the right, deleting the character that is there.
TAB	Tab	Advances the cursor to the next field.
<- ***X***	Delete	Moves the cursor one space to the left, deleting the character that is there.

THE COMMAND LINE

2.14 A line of commands appears at the bottom of some SPP screens (see Fig. 2-2). You use commands to specify functions and interact with the database. The commands change in relation to the type of menu that you access. In this publication, an explanation of the commands is provided whenever required.

Selecting Command Line Items

2.15 The following are the two possible methods that can be used to select command line items:

(a) Use the directional arrow keys to move the cursor to the desired command, which then appears in reverse video. Press ***ENTER*** to activate the command.

(b) Enter the first unique letter(s) of the command that you wish to select. The SPP activates that command. For example, press the

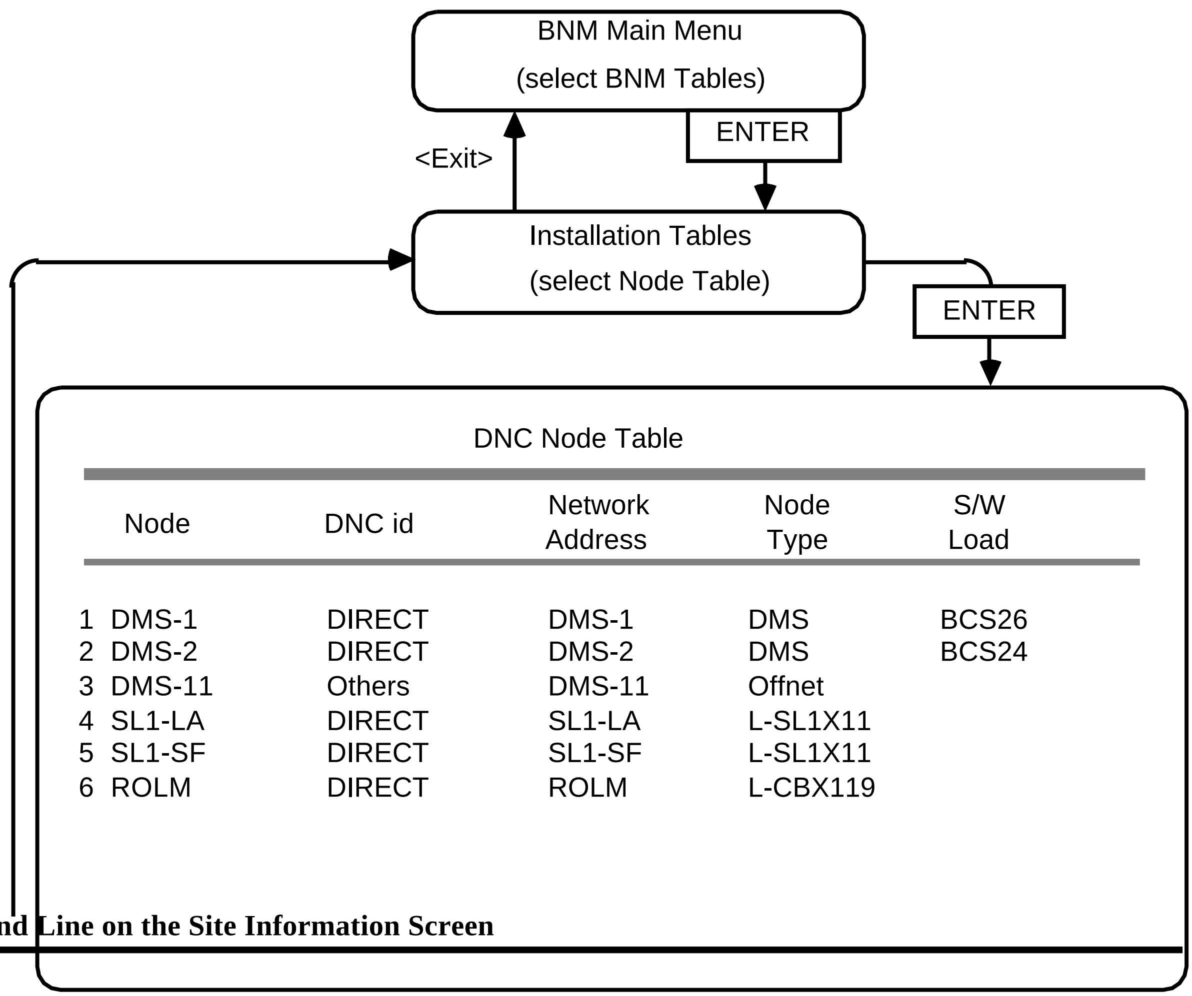


Fig. 2-2
Command Line on the Site Information Screen

3. FILE MAINTENANCE MENU

3.01 The File Maintenance menu is used to configure nodes and call collector 3 (CC3) devices, define the names and functions of communications ports, and enable or disable polling groups and list the nodes assigned to these groups.

3.02 The File Maintenance menu contains the following four options:

(a) ***Site Information.*** The Site Information screen is used to set up nodes and CC3 devices.

(b) ***Port Information.*** The Port Information screen is used to configure the names and functions of communications ports.

WARNING: To ensure that the changes made to the ports configuration are reflected in SPP operations, the reboot routine located in this Chapter must be invoked after ports are configured, changed, or deleted.

(c) ***Group Information.*** The Group Information screen is used to enable or disable polling groups and display the nodes assigned to polling groups.

(d) ***Schedule Information.*** This screen is disabled. For instructions on establishing a polling schedule, refer to the scheduling services information in 450-1021-311.

```
                      System   Communications    Reports   Exit

 Site Information
 Site Name:                                   Status:         U
 Site-Id:         00000000                    Phone Type:     D
 Site Type:                                   Direct Phone:
 Description:                                 Switch Phone:
 CC Model:        CC3                         Poll Group:     01
 Serial #:                                    Poll Format:    1
 Memory Size:     1200                        Password:
 Modem Speed:                                 Timeout Limit:  10
 PROM Version:                                File Format:    A
                                              Switch Ext.:
 Customer:                                    Contact:
 Address:                                     Phone:

      Build   Change  Delete  Exit   First   List   Next  Print  Search
```

Fig. 3-1
The Site Information Screen

CREATING OR CHANGING A SITE INFORMATION RECORD

3.03 ***Field Information.*** The following list describes the information required as data for the fields of the Site Information screen (see Fig. 3-1).

Note: For some fields a list of choices for the field appears when you press the ***F2*** key. Use the directional arrow keys to position the cursor on the desired item in the choice window and press ***ENTER*** twice to populate the field with the selected item.

(a) ***Site Name.*** This mandatory field is the unique name for the node that is connected to the CC3 device. The Switch/PBX Poller (SPP) uses this name when generating file names for data files. A maximum of ten characters of data may be entered.

Note: Press the ***F2*** key for a list of the choices for this field.

(b) ***Site-id.*** This mandatory field is the unique, eight-digit numeric code for a CC3 site. The code must correspond exactly to the site-id that was used in the CC3 device during the initial CC3 setup. The default value is 00000000.

(c) ***Site Type.*** This mandatory field is the two-digit code that identifies the type of node that is supported by the CC3.

Note 1: Table 3-A lists the site-type codes that have been allocated to a number of other vendors switches. A switch identified in this table does not imply that data can be collected from it using the system described in this NTP. Please contact your local NT representative for details on switches that can be interfaced with the CC3.

Note 2: Press the ***F2*** key for a list of the choices for this field. This list includes codes for nodes that are not supported by BNM.

(d) ***Description.*** This display field describes the node type. This corresponds with the code entered in the site-type field. The field contains a maximum of twenty-three characters.

(e) ***AT/CC Model.*** This mandatory field is the code that identifies the type of data acquisition device that is being used to monitor a site. A maximum of four characters of data may be entered. The default value is CC3.

Note: Press the ***F2*** key for a list of the choices for this field.

(f) ***Serial #.*** This information field is the serial number of the CC3. A maximum of 12 characters of data may be entered.

(g) ***Memory Size.*** This information field is a description of the random-access memory (RAM) capacity of the CC3. A maximum of four digits of data may be entered. The default value is 256.

Note: Press the ***F2*** key for a list of the choices for this field.

(h) ***Modem Speed.*** This mandatory field is the value for the baud rate for communications between the poller host and the CC3. A maximum of four digits of data may be entered. The default value is 1200.

Note: Press the ***F2*** key for a list of the choices for this field.

(i) ***PROM Version.*** This four-digit mandatory field is the description of the version of the software that is running on the CC3. For example, enter PROM version 3.7.1 as 0371.

Note: Press the ***F2*** key for a list of the choices for this field.

(j) ***Customer.*** This information field identifies the customer site. A maximum of one line of up to 20 characters of data may be entered.

(k) ***Address.*** This information field contains the customer's address. A maximum of three lines of up to 20 characters of data per line may be entered.

(l) ***Status.*** This mandatory one-character field indicates whether the CC3 should be polled. The data entry is either U (up) or D (down). The default value is U.

Note: These two choices appear for this field when the ***F2*** key is pressed.

(m) ***Phone Type.*** This mandatory one-character field indicates whether the line is D (direct) or S (switchboard). The default value is D.

Note: These two choices appear for this field when the ***F2*** key is pressed.

(n) ***Direct Phone.*** This functional field contains the telephone number that the SPP dials to connect to the CC3. A maximum of 20 characters of data may be entered.

Note: When using a tone phone, prefix the letter T to the telephone number. When using a pulse phone, prefix the letter P to the telephone number. Enter commas in the string to specify delays for access codes and area codes, for example, T9,416,5551212.

(o) ***Switch Phone.*** This field is not relevant. The SPP uses dedicated, direct lines only.

(p) ***Poll Group.*** This mandatory field identifies the polling group number to which the node is assigned. There are 99 preconfigured polling groups, numbered 1 through 99. A maximum of two characters of data may be entered. The default value is 01.

Note: Each polling group can contain an unlimited number of nodes.

(q) ***Poll Format.*** This mandatory field identifies the format to be used when polling data from a CC3. A maximum of one character of data may be entered. For a CC3 device, enter the value 3. The default value is 1.

Note: Press the ***F2*** key for a list of the choices for this field.

(r) ***Password.*** This functional field contains the password that enables access to the CC3. A maximum of seven characters of data may be entered.

Note: The SPP transmits the password to the CC3 when the dial-up connection is made. If a password has been enabled in the CC3 device the identical password must be entered here.

(s) ***Timeout Limit.*** This mandatory field designates the timeout threshold, that is, the number of breaks in communications that the SPP will allow before disconnecting the line. A maximum of two digits of data may be entered. The field range is numbers 3 through 99. The default value is 10.

Note 1: After the timeout limit has been reached, the SPP hangs up the line. If a critical condition caused the timeouts, the condition will be flagged in the CC3 diagnostic record and recorded in the BNM log table, so that corrective action may be taken.

Note 2: Unless the customer conducts a POLLCDR job using the node name FAILPOLL (refer to the scheduling services information in 450-1021-311), another poll of the node will not take place until the next regular, scheduled poll.

(t) ***File Format.*** This one-character mandatory field defines the format in which files are stored.

Note: The optional entries are A (ASCII), B (binary), and C (a combination of binary and ASCII, stored in separate files). The SPP operator must select A.

(u) ***Switch Ext.*** This field is not relevant.

(v) ***Contact.*** This information field identifies the contact person at the customer site. A maximum of 20 characters of data may be entered.

(w) ***Phone.*** This information field contains the telephone number of the contact person at the customer site. A maximum of 20 characters of data may be entered.

Table 3-A
SITE-TYPE CODES

VENDOR	SITE TYPE	CODE
AT&T	Dimension FP-4	20
	Dimension FP-7	20
	Dimension FP-8	36
	Dimension FP-10	20
	Dimension FP-12	36
	Dimension FP-15	47
	ESS/1A	18
	ESS/5E	19
	LSU FP 4	20
	LSU FP 7	20
	LSU FP 8	36
	LSU FP 10	20
	LSU FP 12	36
	System 75	63
	System 85	51
NEC	Electra 16	62
	Electra 48	62
	NEAX 2400	40
Ericsson	MD110	67
	Prodigy	21
Focus	Focus 960	14
	Focus 9600	08
GTE	GTD 1000	26
	Omni	26
	SBCS	60
	GTD 4600	61
Harris	Harris DPX 1200	71
Intecom	Basic	05

Table Continued --------------------------------

Table 3-A Continued
SITE-TYPE CODES

VENDOR	SITE TYPE	CODE
ITT	3100	37
Micom	Micom	03
Mitel	SX100	35
	SX2000	35
	SX2000 SG	35
Northern Telecom	SL1 Gen. 04	55
	SL1 Gen. 05	55
	SL1 Gen. 11, Rel. 2	25
	SL1 Gen. 11, Rel. 3	25
	SL1 Gen. 11, Rel. 4	56
	SL1 Gen. 11, Rel. 5	56
	SL1 Gen. 11, Rel. 6	56
	SL1 Gen. 11, Rel. 7+	27
	SL1 Gen. 37, Rel. 6	57
	SL1 [Merge]	28
Rolm	CBX II 8000 Series	23
	CBX II 9000 Series	22
	Redwood V2	23
Siemens	Saturn II	06
	Saturn III	06
Siemens	SD-192-MX	44
Tadiran	Tadiran	04
Telex	DBX (UTX-1200D)	20
TIE	Delphi BK	07
	Ultracom	30
	CX	31

3.04 ***Site Information Screen Commands.*** Table 3-B lists the functions of the commands that are available at the bottom of the Site Information screen (see Fig. 3-2).

Table 3-B
COMMANDS ON THE SITE INFORMATION SCREEN

COMMAND	FUNCTION
Add	Used to initiate the creation of a new record.
Build	This command is not relevant.
Change	Allows the currently viewed screen information to be changed.
Delete	Deletes the currently viewed record from the database.
Exit	Exits the current screen and restores the file maintenance submenu.
First	Displays the first record in the database.
List	Displays the database records in alphabetical and numeric order.
Next	Displays the next record in the database.
Print	Prints the screen information.
Search	Locates a specified record in the database when the first unique character(s) of the site name are entered in the Site Name field.

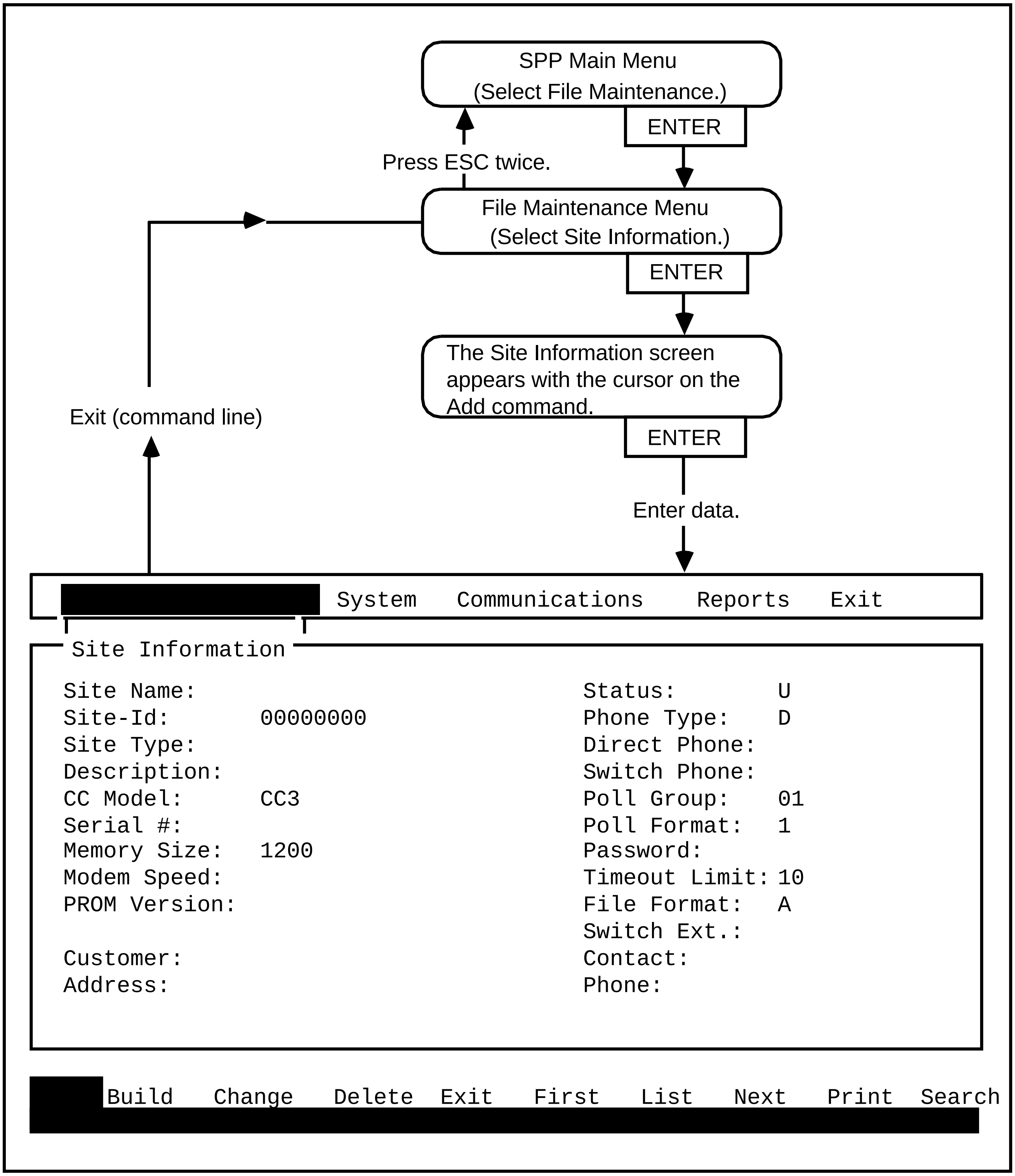


Fig. 3-2
Creating a Site Information Record

Creating a Site Information Record

3.05 To create a site information record (see Fig. 3-2), proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Site Information option. Press ***ENTER***.
==> The Site Information screen appears with the cursor on the Add command.

(3) Press ***ENTER***.
==> The Site Information screen reappears with some fields filled with default values by the SPP.

(4) Type in data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the Phone field, the SPP responds with RECORD ADDED SUCCESSFULLY.

Note 1: In some cases, after you have pressed ***ENTER*** for the Phone field, the SPP responds with DO YOU WANT TO RE-EDIT THIS RECORD (Y/N). This is because the SPP has detected a verification error in the data. Type Y and press ***ENTER.*** The SPP verifies the information that you have entered and responds with RECORD ADDED SUCCESSFULLY. (In some cases the SPP requires several passes to verify the information that you have entered. Continue to type Y and press ***ENTER*** until the SPP responds with RECORD ADDED SUCCESSFULLY.)

Note 2: To configure a CC3 device, refer to the procedure "Dialoging with a CC3 Device That Is Defined in the Switch/PBX Poller Database," in Chapter 5 of this publication.

3.06 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

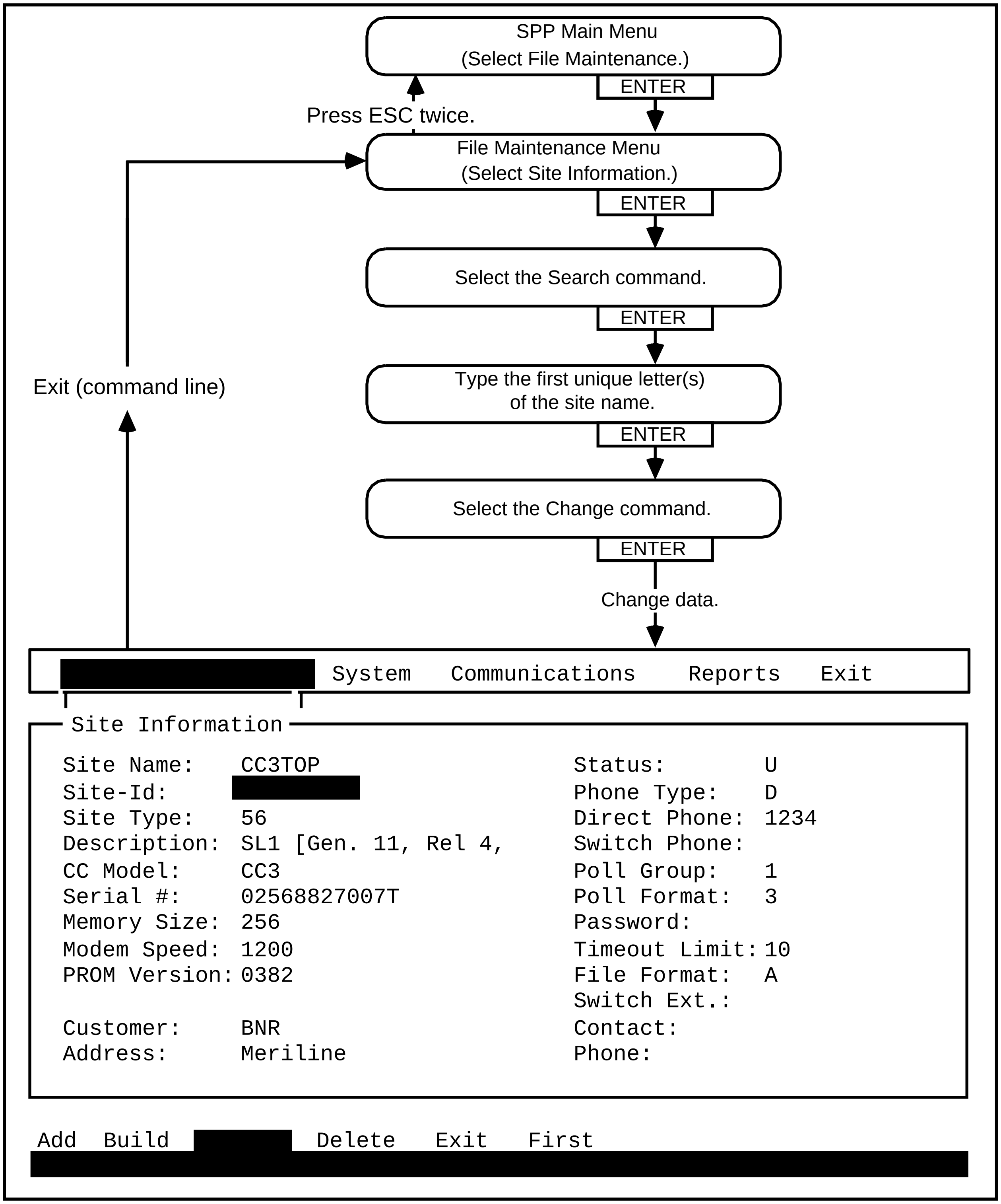


Fig. 3-3
Changing a Site Information Record

Changing a Single Site Information Record

3.07 To change a single site information record (see Fig. 3-3), proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Site Information option. Press ***ENTER***.
==> The Site Information screen appears with the cursor on the Add command.

(3) Select the Search command. Press ***ENTER***.
==> The cursor appears on the Site Name field.

(4) Type in the first unique letter(s) of the site name of the site information record that you wish to alter.
==> The site information record for the site that you have selected appears, with the cursor on the Search command.

(5) Select the Change command. Press ***ENTER***.
==> The cursor appears in the Site-Id field.

(6) Enter data for the fields that you wish to alter, pressing ***ENTER*** at each field to move from field to field.
After you have input data for the last field (that is, the field Phone), press F4 to enter the last field and to complete the update of the record.
==> The SPP responds with RECORD UPDATED SUCCESSFULLY.

3.08 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

Changing a Series of Site Information Records

3.09 To change a series of site information records, proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Site Information option. Press ***ENTER***.
==> The Site Information screen appears, with the cursor on the Add command.

(3) Select the First command. Press ***ENTER.***
==> The first site information record appears. (Records are listed according to the alphabetic and numeric order of the site names.)

(4) If the first record listed is the first record that you want to change, go to Step 6. If you want to change a different record, go to Step 5.

(5) Select the Next command and press ***ENTER*** . Perform this sequence as many times as required until the record that you want to change appears.
==> The SPP delivers the next record in the database.

(6) Select the Change command. Press ***ENTER***.
==> The cursor appears in the Site-Id field.

(7) Enter the data for the fields that you wish to alter, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the Phone field, the SPP responds with RECORD UPDATED SUCCESSFULLY.

(8) Return to Step 5 as many times as required until all of the records that you wish to change have been changed.

3.10 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

Deleting a Site Information Record

3.11 To delete a site information record, proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Site Information option. Press ***ENTER***.
==> The Site Information screen appears, with the cursor on the Add command.

(3) Select the Search command. Press ***ENTER.***
==> The cursor appears on the Site Name field.

(4) Type in the first unique letter(s) of the site name of the site information record that you wish to delete.
==> The site information record for the site that you have selected appears with the cursor on the Search command.

(5) Select the Delete command. Press ***ENTER***.
==> The record is deleted from the database, and the SPP responds with RECORD DELETED SUCCESSFULLY.

3.12 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

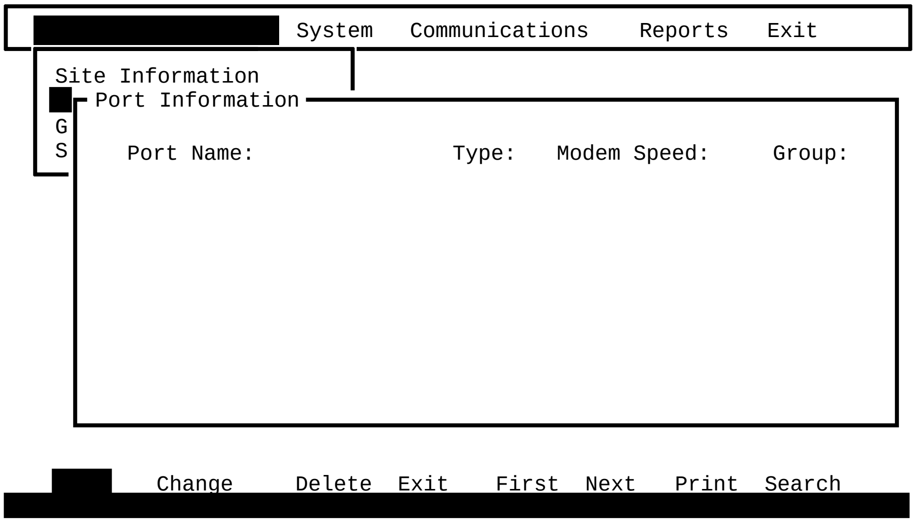


Fig. 3-4
The Port Information Screen

CREATING OR CHANGING A PORT INFORMATION RECORD

3.13 ***Field Information.*** The following list describes the data required for the fields of the Port Information screen (see Fig. 3-4).

(a) ***Port Name.*** This mandatory field is the name of the port that is used to communicate with the CC3. A maximum of ten characters of data may be entered.

Note: Press the ***F2*** key for a list of the choices for this field.

(b) ***Type.*** This mandatory 1-character field describes the function of the port. The four possible data entries are the following:

- P (poller); used to initiate outgoing calls, for example, polling and remote diagnostics
- L (listener); used to listen for alarms from all CC3s

Note: If the port is specified as a listener type and a critical alarm condition occurs, the CC3 dials out an alert to the SPP. (The dial up number for the port is located in the CC3 device. The dial up number for the CC3 device is located in the SPP Site Information screen.) The SPP then initiates a diagnostic record, and as soon as it recognizes that a critical condition exists, the SPP polls the CC3. The following conditions are critical: a user-defined record-storage threshold has been reached; the memory is full; a date was not set in the CC3 when it was configured; a hard disk failure occurred; a complimentary metal oxide semiconductor (CMOS) failure occurred; the node port is off line; a dynamic random-access memory (DRAM) failure occurred; a DRAM checksum failure occurred; direct current is low; there is no alternating current.

- B (both); used for both polling and listening functions
- H (hardwired); used when the port is directly connected to a CC3

Note: Press the ***F2*** key for a list of the choices for this field.

(c) ***Modem Speed.*** This mandatory field defines the speed of the modem that is connected to the port. A maximum of four digits of data may be entered.

Note: Press the ***F2*** key for a list of the choices for this field.

(d) ***Group.*** This field, mandatory for hardwired ports and functional for others, assigns polling groups to all but listener (L) type ports. If a group number is entered in this field, the SPP dedicates the port to that group. If no group number is entered in this field, the SPP considers the port to be a floating port. A maximum of three digits of data may be entered in this field.

3.14 ***Port Information Screen Commands.*** Table 3-C lists the functions of the commands on the Port Information screen.

Table 3-C
COMMANDS, PORT INFORMATION SCREEN

COMMAND	FUNCTION
Add	Used to initiate the creation of a new record. ***Note:*** After a port information record has been added, the SPP manager must be started or rebooted for the new record to be included in the SPP operations. Refer to Chapter 4 of this Practice.
Build	This command is not relevant.
Change	Allows the Type, Modem Speed, and Group fields to be changed. ***Note:*** After a port information record has been changed, the SPP manager must be started or rebooted for the changes to be included in the SPP operations. Refer to Chapter 4 of this Practice.
Delete	Deletes the currently viewed record from the database. ***Note:*** After deleting a port information record, start or reboot the SPP manager so that the update is included in the SPP operations. Refer to Chapter 4 of this publication for details.

Table Continued --------------------------------

Table 3-C Continued
COMMANDS, PORT INFORMATION SCREEN

COMMAND	FUNCTION
Exit	Exits the current screen and restores the File Maintenance submenu.
First	Displays the first record in the database.
Next	Displays the next record in the database (records are in numeric order).
Print	Prints the port records.
Search	Locates a specified record in the database when the first unique character(s) of the port name are entered in the Port Name field.

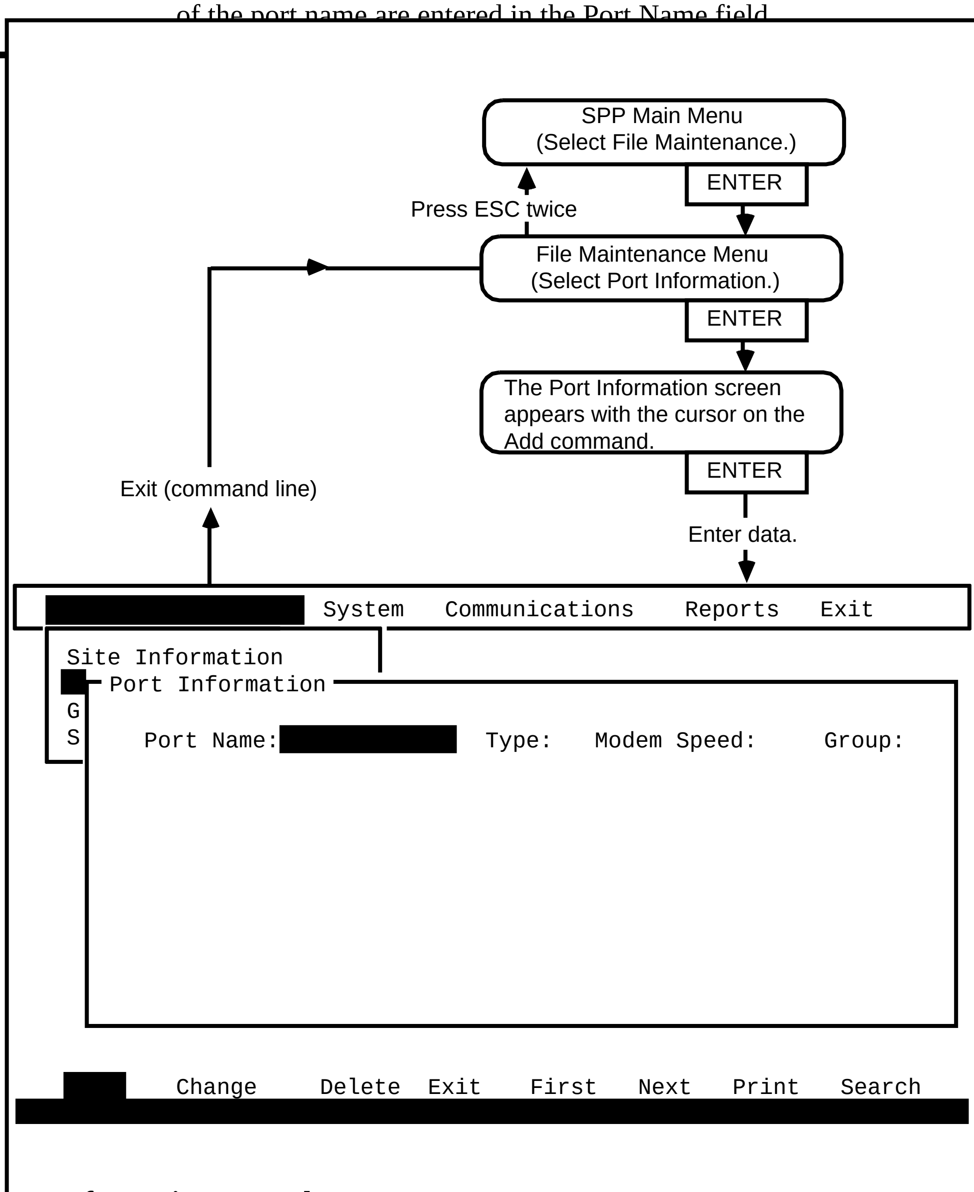


Fig. 3-5
Creating a Port Information Record

Creating a Port Information Record

3.15 To create a port information record (see Fig. 3-5), proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance option appears.

(2) Select the Port Information option. Press ***ENTER***.
==> The port information screen appears, with the cursor on the Add command.

(3) Press ***ENTER.***
==> The Port Information screen reappears, with the cursor on the Port Name field.

(4) Type in data for the fields, pressing ***ENTER*** at each field to move to the next field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Group, the SPP verifies the information that you have entered, and responds with RECORD ADDED SUCCESSFULLY.

Note: If the SPP encounters a verification error for the data, it responds with DO YOU WANT TO RE-EDIT THIS RECORD (Y/N). Type Y and press ***ENTER***. The SPP verifies the information and responds with RECORD ADDED SUCCESSFULLY.

3.16 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER.***
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

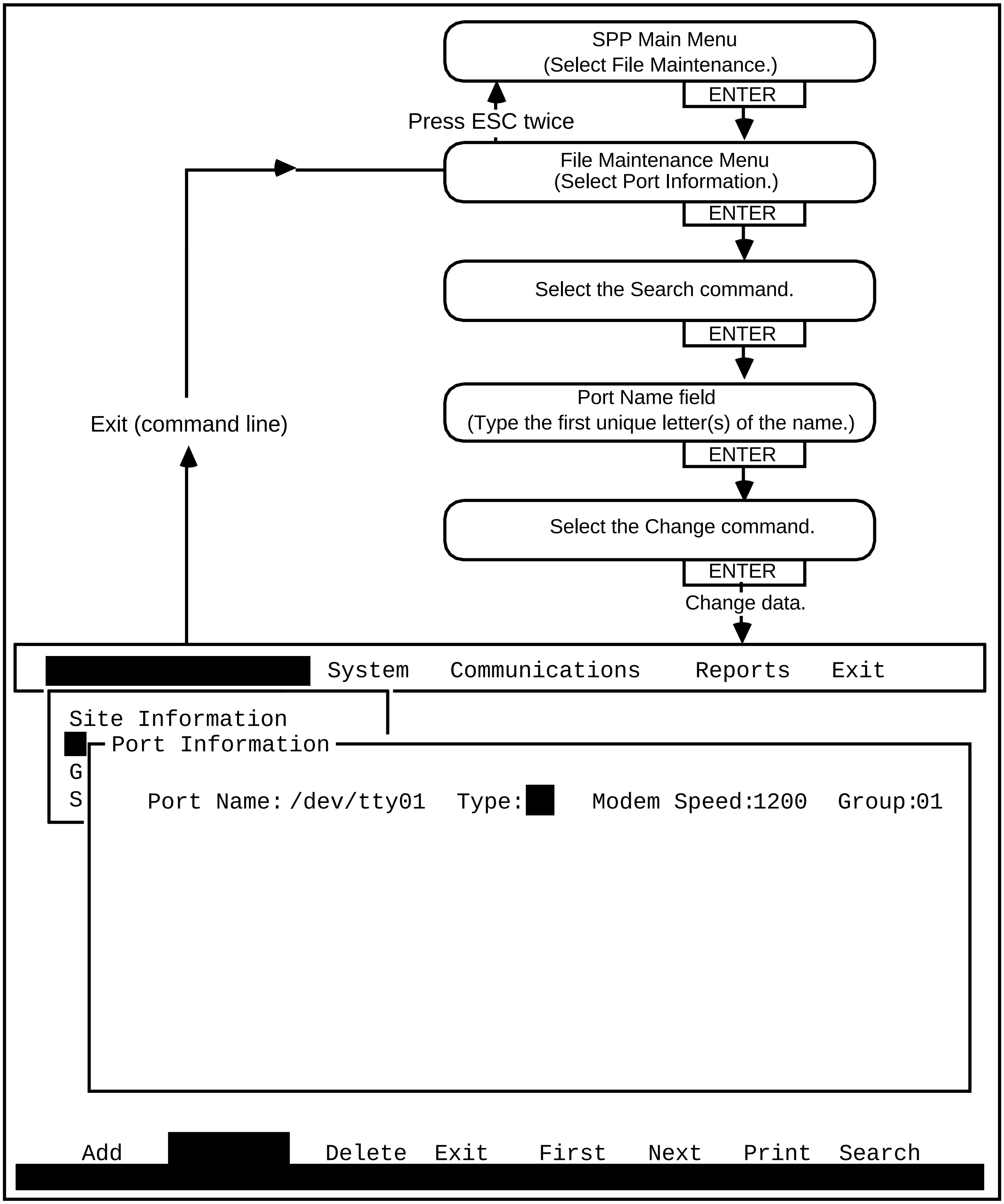


Fig. 3-6
Changing a Single Port Information Screen

Changing a Single Port Information Record

3.17 To change a single port information record (see Fig 3-6), proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Port Information option. Press ***ENTER***.
==> The Port Information screen appears with the cursor on the Add command.

(3) Select the Search command. Press ***ENTER***.
==> The cursor appears on the Port Name field.

(4) Type in the first unique letter(s) of the port name of the port information record that you wish to alter.
==> The port information record for the port that you have selected appears with the cursor on the Search command.

(5) Select the Change command. Press ***ENTER.***
==> The cursor appears on the Type field.

(6) Enter data for the fields that you wish to alter, pressing ***ENTER*** at each field to move to the next field.
==> After you have pressed ***ENTER*** for the last field, that is, the Group field, the SPP responds with RECORD UPDATED SUCCESSFULLY.

3.18 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

Changing a Series of Port Information Records

3.19 To change a series of port information records, proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Port Information option. Press ***ENTER***.
==> The Port Information screen appears, with the cursor on the Add command.

(3) Select the First command. Press ***ENTER.***
==> The first port information record appears.

(4) If the first record listed is the first record that you want to change, go to Step 6. If you want to change a different record, go to Step 5.

(5) Select the Next command and press ***ENTER***. Perform this sequence as many times as required until the record that you want to change appears.
==> The SPP delivers the next record in the database.

(6) Select the Change command. Press ***ENTER***.
==> The cursor appears on the Type field.

(7) Enter data for the fields that you wish to alter, pressing ***ENTER*** at each field to move to the next field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Group, the SPP responds with RECORD UPDATED SUCCESSFULLY.

(8) Return to Step 5 as many times as required until all of the records that you wish to change have been changed.

3.20 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

Deleting a Port Information Record

3.21 To delete a port information record, proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Port Information option. Press ***ENTER***.
==> The Port Information screen appears with the cursor on the Add command.

(3) Select the Search command.
==> The cursor appears on the Port Name field.

(4) Type in the first unique letter(s) of the port name of the port information record that you wish to alter.
==> The port information record for the port that you have selected appears with the cursor on the Search command.

(5) Select the Delete command. Press ***ENTER***.
==> The record is deleted from the database and the SPP responds with RECORD DELETED SUCCESSFULLY.

3.22 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

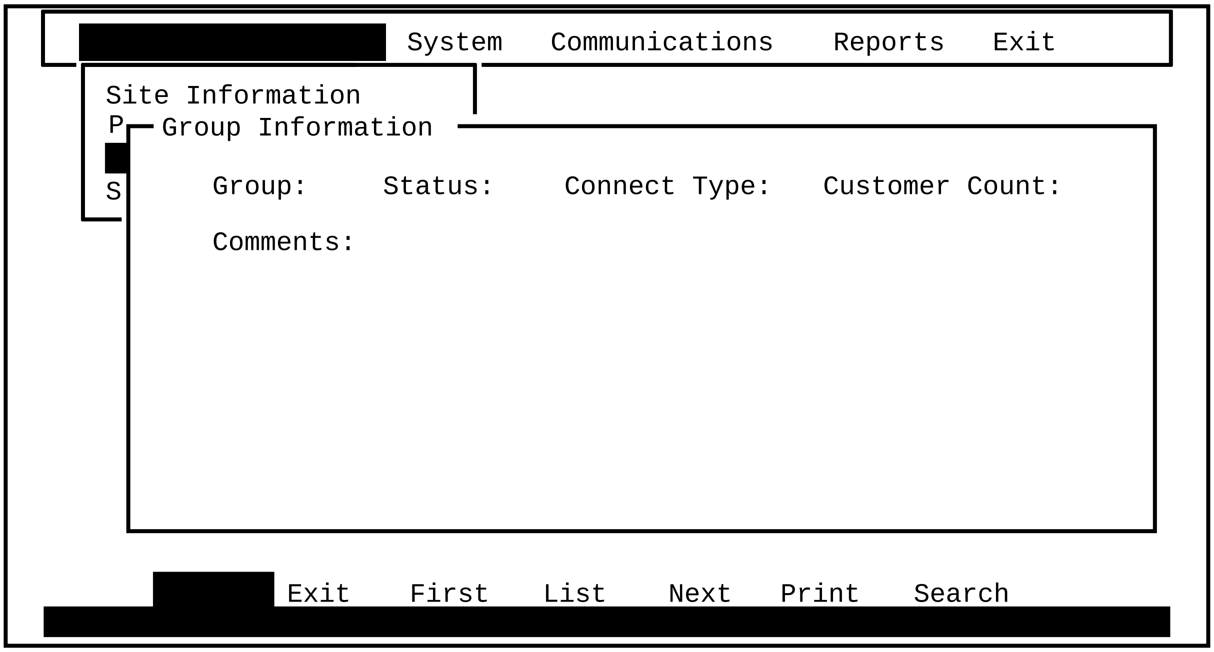


Fig. 3-7
Fields of the Group Information Screen

3.23 ***Group Information Screen Commands.*** Table 3-D lists the functions of the commands available at the bottom of the Group Information screen.

Table 3-D
COMMANDS, GROUP INFORMATION SCREEN

COMMAND	FUNCTION
Change	Used to initiate changes to the Status and Comments fields.
Exit	Exits the current screen and restores the File Maintenance menu.
First	Displays the first record in the database.
List	Lists all polling groups and nodes located within each group in numeric order.
Next	Displays the next record in the database.
Print	Prints a user-defined selection of polling group records.
Search	Locates a specified polling group record in the database when the first unique characters of the group name are entered in the Group Name field.

CHANGING GROUP INFORMATION RECORDS

3.24 ***Field Information.*** The following list describes the information required as data for the fields of the group information screen (see Fig. 3-7).

(a) ***Group.*** This two-digit display field identifies a group of nodes. Sites are assigned a group number on the Site Information screen.

Note 1: When a CC3 is hard wired to the SPP, the CC3's associated node must be the only node identified in its group.

Note 2: Press the ***F2*** key for a list of the choices for this field.

(b) ***Status.*** This functional one-character field designates the polling status of a group. When polling is enabled, the status is U (up); when polling is disabled, the status is D (down).

Note: Press the ***F2*** key for a list of the choices for this field.

(c) ***Connect Type.*** This one-character display field describes the type of communication port that a polling group uses. (The connection type is defined in the port information screen.)

(d) ***Customer Count.*** This two-digit display field identifies the number of nodes in a polling group.

(e) ***Comments.*** This information field allows you to enter a maximum of three 50-character lines of comments, for reference purposes.

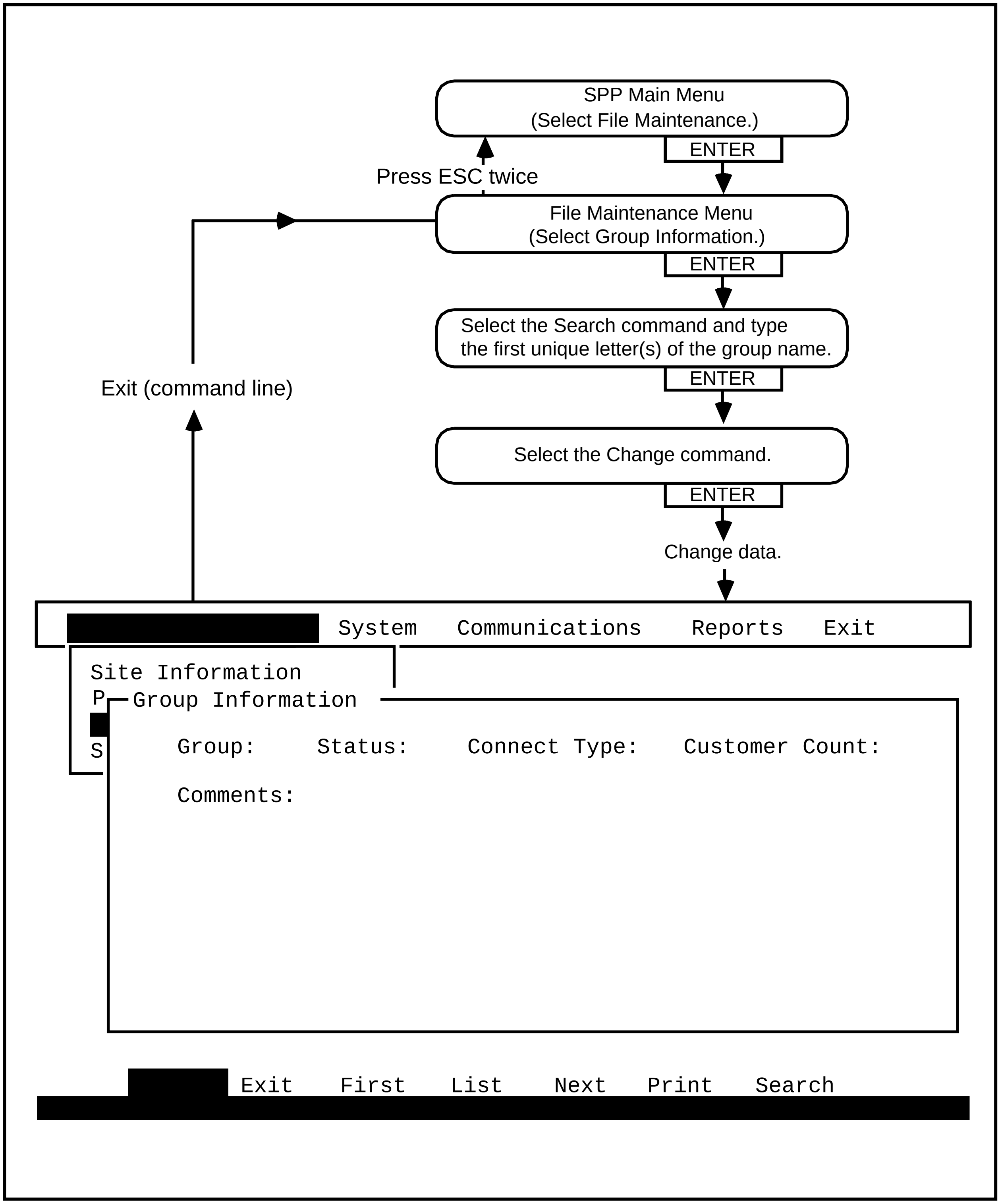


Fig. 3-8
Changing a Group Information Record

Changing a Single Group Information Record

3.25 To change a group information record (see also Fig. 3-8), proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Group Information option. Press ***ENTER***.
==> The Group Information screen appears with the cursor on the Change command.

(3) Select the Search command. Press ***ENTER***.
==> The cursor appears in the Group field.

(4) Type in the first unique number(s) of the group for the group information record that you wish to alter.
==> The group information record for the group that you have selected appears with the cursor on the Search command.

(5) Select the Change command. Press ***ENTER***.
==> The cursor appears in the Status field.

Note: Only the Status and Comments fields can be changed from the Group Information screen.

(6) Enter data for the fields. Press ***ENTER*** when you have finished typing data for the Comments field.
==> The SPP responds with RECORD UPDATED SUCCESSFULLY.

3.26 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

Changing a Series of Group Information Records

3.27 To change a series of group information records, proceed as follows:

(1) Select the File Maintenance option on the SPP main menu. Press ***ENTER***.
==> The File Maintenance menu appears.

(2) Select the Group Information option. Press ***ENTER***.
==> The Group Information screen appears, with the cursor on the Add command.

(3) Select the First command. Press ***ENTER.***
==> The first group information record appears.

(4) If the first record listed is the first record that you want to change, go to Step 6. If you want to change a different record, go to Step 5.

(5) Select the Next command and press ***ENTER***. Perform this sequence as many times as required until the record that you want to change appears. (Records are in numeric order.)
==> The SPP delivers the next record in the database.

(6) Select the Change command. Press ***ENTER***.
==> The cursor appears in the Status field.

Note: Only the Status and Comments fields can be changed from the Group Information screen.

(7) Enter data for the fields. Press ***ENTER*** when you have finished typing data for the Comments field.
==> The SPP responds with RECORD ADDED SUCCESSFULLY.

(8) Return to Step 5 as many times as required until all of the records that you wish to change have been changed.

3.28 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command and press ***ENTER***.
==> The SPP returns you to the File Maintenance menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

4. SYSTEM MENU

4.01 The System menu is the starting point for all work with the Switch/PBX Poller (SPP) polling manager. The SPP manager works with the information that is defined in the File Maintenance screens to control all communications between the SPP and the call collector 3 (CC3) devices. The System menu contains the following three options:

(a) ***SPP Manager.*** The SPP Manager menu is used to start and shut down the SPP manager.

Note: To enable the ports that you configured using the Site Information screen of the File Maintenance menu, you must activate the SPP manager by either starting or rebooting the manager.

(b) ***Monitor.*** The Monitor menu is used to display real-time information about port activities.

(c) ***Ports.*** The Ports menu is used to abort the current operations of a port, to disable a port temporarily without being required to shut down the SPP manager, and to restore a temporarily disabled port to active status without being required to start the SPP manger.

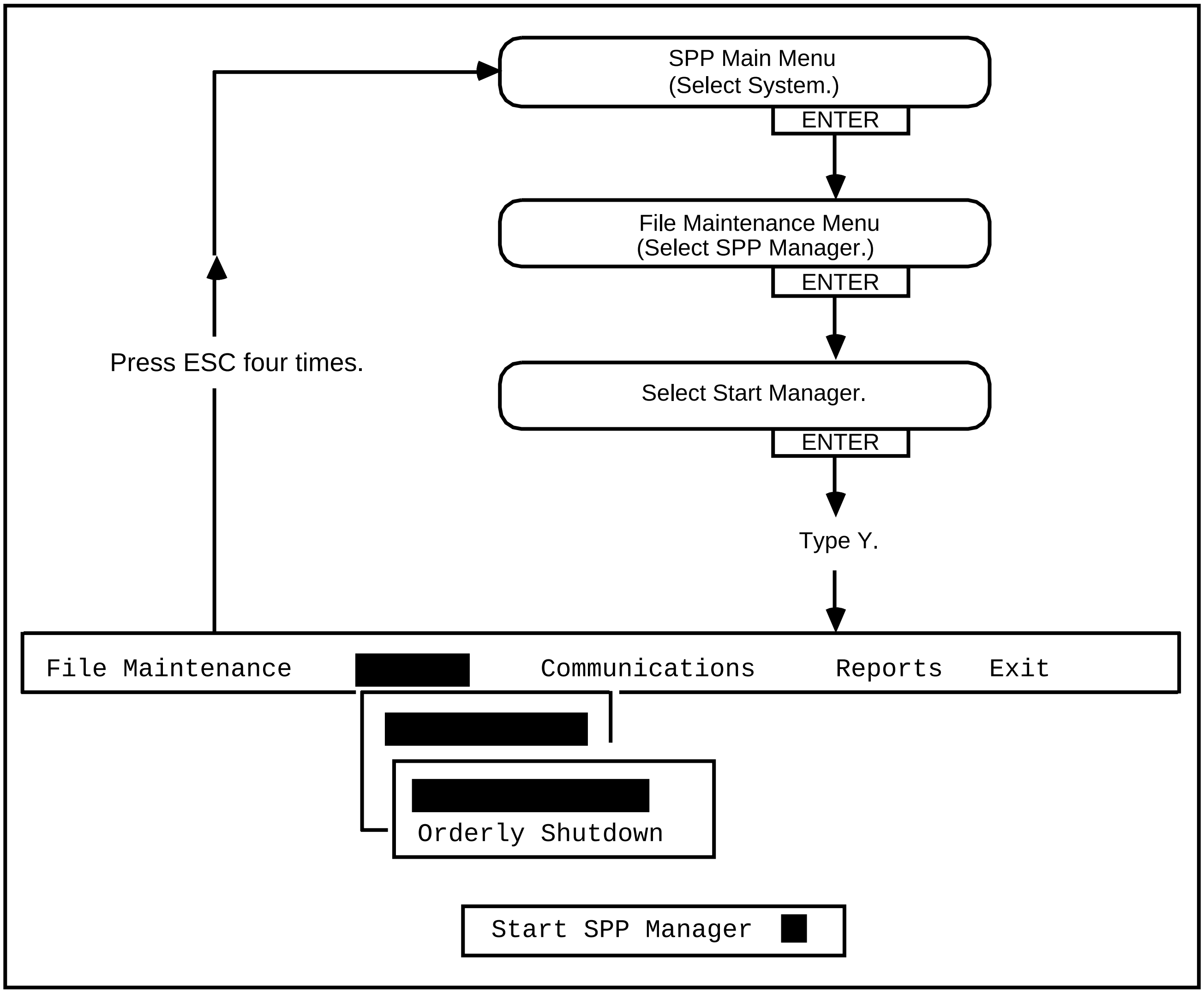


Fig. 4-1
Starting the SPP Manager

STARTING AND SHUTTING DOWN THE SWITCH/PBX POLLER MANAGER

Starting the Switch/PBX Poller Manager

4.02 The Start Manager menu (see Fig. 4-1) activates the SPP manager. This enables all of the ports that are configured by means of the Port Information screen of the File Maintenance menu. To activate the SPP manager, proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER***.
==> The System menu appears.

(2) Select the SPP Manager option. Press ***ENTER***.
==> The SPP Manager menu appears.

(3) Select the Start Manager option. Press ***ENTER***.
==> The Start SPP Manager prompt box appears with the cursor on the default value N.

(4) Type Y.
==> The prompt box disappears and the SPP responds with CREATED MANAGER / START SPP/UNIX MANAGER.

4.03 ***Exiting.*** To return to the SPP main menu, press the ***ESC*** key four times.

Rebooting Routine

4.04 To reboot the SPP, complete the following two steps:

(1) Perform the procedure "Shutting Down the Switch/PBX Poller Manager," located in this Chapter.

(2) Perform the procedure "Starting the Switch/PBX Poller Manager," located in this Chapter.

WARNING: All poll jobs must be completed before the reboot procedure is invoked.

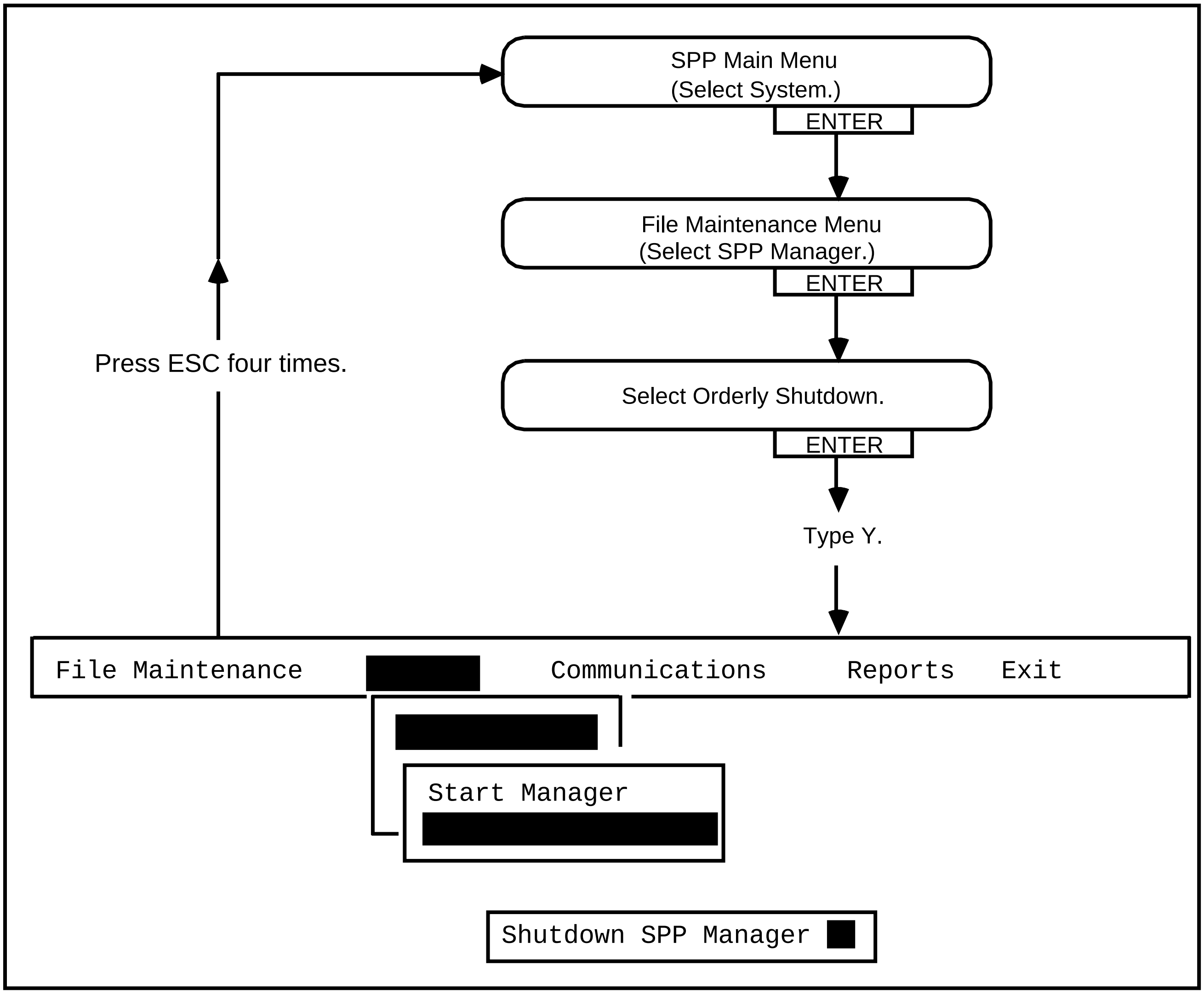


Fig. 4-2
Shutting Down the SPP Manager

Shutting Down the Switch/PBX Poller Manager

4.05 The Orderly Shutdown menu (see Fig. 4-2), disables all SPP communications. When orderly shutdown is activated, the SPP puts the message SYSTEM SHUTTING DOWN on the terminals of all users. No new communications can be initiated; listening is suspended immediately on all ports that are not currently engaged with a poll; and as active polling is completed on other ports, those ports are also suspended. To shut down the SPP manager, proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER***.
==> The System menu appears.

(2) Select the SPP Manager option. Press ***ENTER***.
==> The SPP Manager menu appears.

(3) Select the Orderly Shutdown option. Press ***ENTER***.
==> The Shutdown SPP Manager prompt box appears with the cursor on the default value N.

(4) Type Y.
==> The prompt box disappears, and the SPP responds with SPP MANAGER IS SHUTTING DOWN / STOP SPP/UNIX MANAGER.

WARNING: After the SPP manager is shut down, scheduled poll jobs fail until the procedure "Starting the Switch/PBX Poller Manager " is invoked.

4.06 ***Exiting.*** To return to the SPP main menu, press the ***ESC*** key four times.

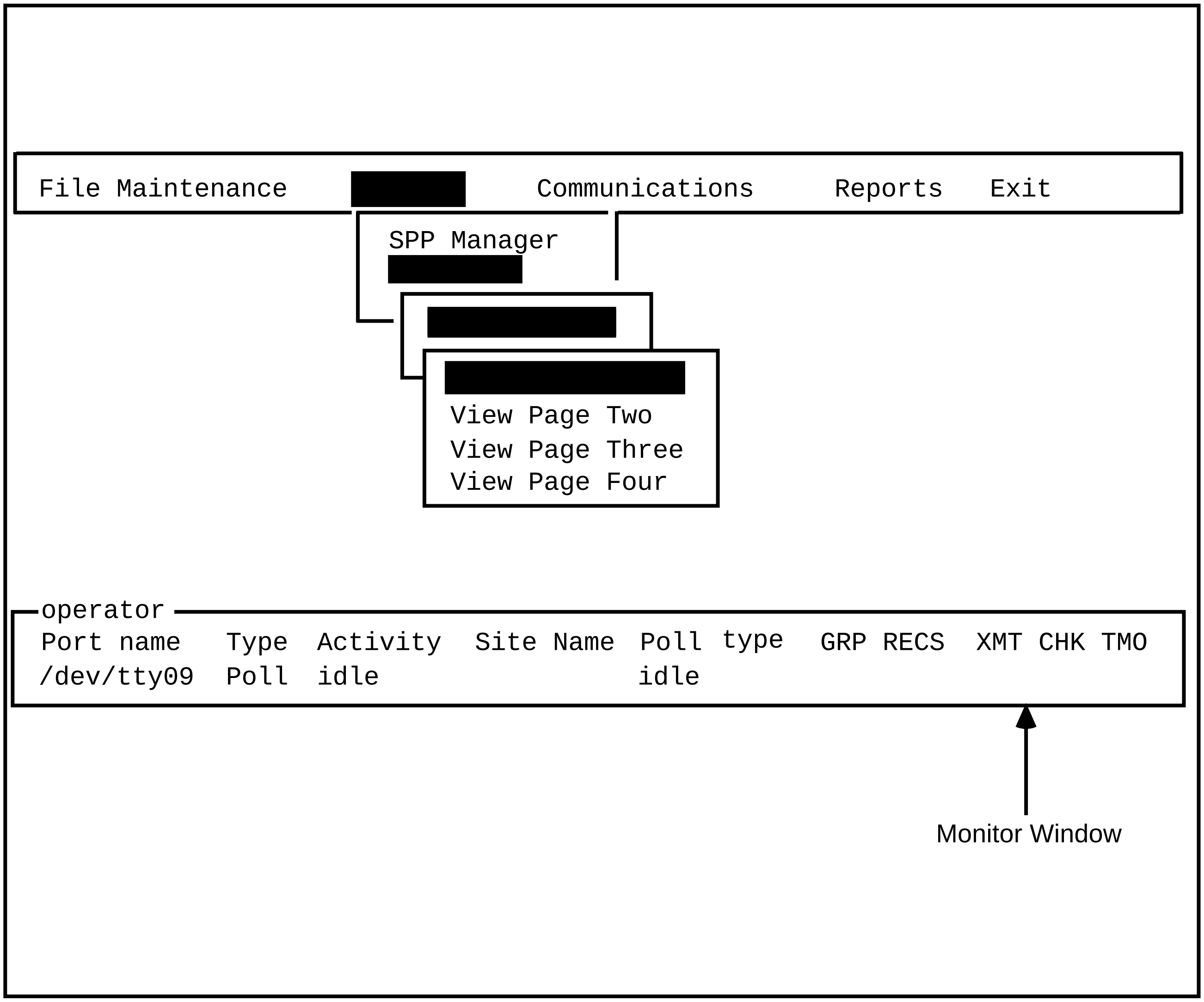


Fig. 4-3
The View Ports Screen and the Monitor Window

MONITORING PORT ACTIVITIES

4.07 ***Field Information.*** The following list describes the information in the display fields of the Monitor window (see Fig. 4-3).

(a) ***Port Name.*** This field displays the name assigned to the port.

(b) ***Type.*** This field displays the port type.

(c) ***Activity.*** This field displays the current activity of the port.

(d) ***Site Name.*** This field displays the name of the node that is connected to the port.

(e) ***Poll Type.*** When polling is active, this field displays whether the poll is a scheduled, manual, or diagnostic-record poll.

(f) ***GRP.*** When scheduled polling is active, this field displays the polling group currently being polled.

(g) ***RECS.*** When polling is active, this field displays the number of records that have been received.

(h) ***XMT.*** When polling is active, this field displays the number of records that have been transmitted.

(i) ***CHK.*** When polling is active, this field displays the number of checksum exchanges between the CC3 and the poll manager. (One cyclical redundancy check is exchanged after each block of records has been transmitted to the SPP.)

(j) ***TMO.*** When polling is active, this field displays the number of timeouts that occurred.

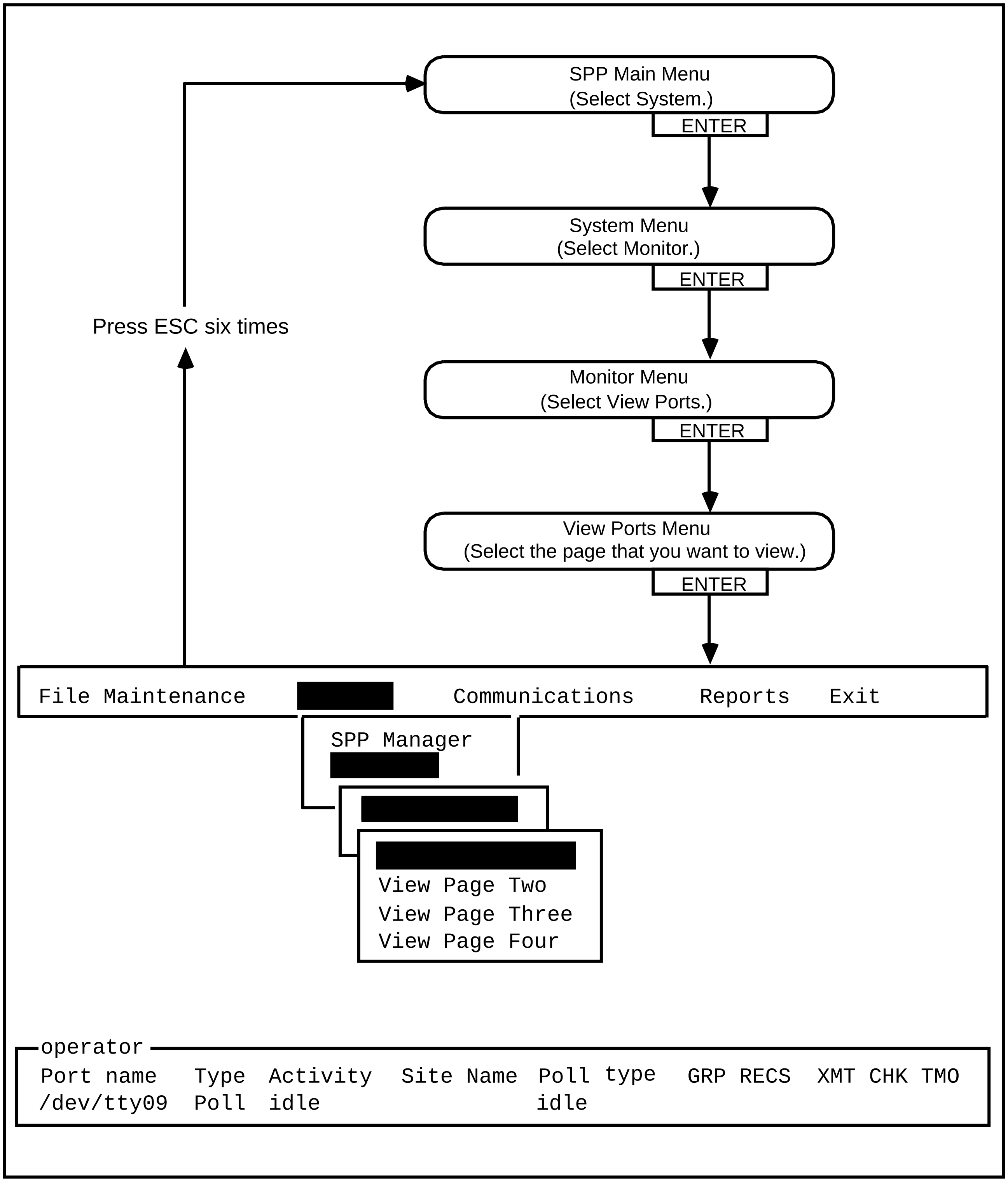


Fig. 4-4
Activating the Port Monitor Window

Activating the Port Monitor Window to View Port Activities

4.08 To view the status and real-time activities of the SPP ports (see Fig. 4-4), proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER***.
==> The System menu appears.

(2) Select the Monitor option. Press ***ENTER***.
==> The Monitor menu appears.

(3) Select the View Ports option. Press ***ENTER***.
==> The View Ports menu appears.

(4) Select the page that you want to view. Press ***ENTER***.
==> The Monitor window appears at the bottom of the screen, showing the page that you have selected.

Note: Each page contains up to four ports. Ports are listed in numeric order.

4.09 ***Exiting.*** To return to the SPP main menu while leaving the Port Monitor window active, press the ***ESC*** key four times.

Deactivating the Port Monitor Window

4.10 To deactivate the Port Monitor window, proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER***.
==> The System menu appears.

(2) Select the Monitor option. Press ***ENTER***.
==> The Monitor menu appears.

(3) Select the Unview Ports option. Press ***ENTER***.
==> The Port Monitor window disappears.

4.11 ***Exiting.*** To return to the SPP main menu, press the ***ESC*** key four times.

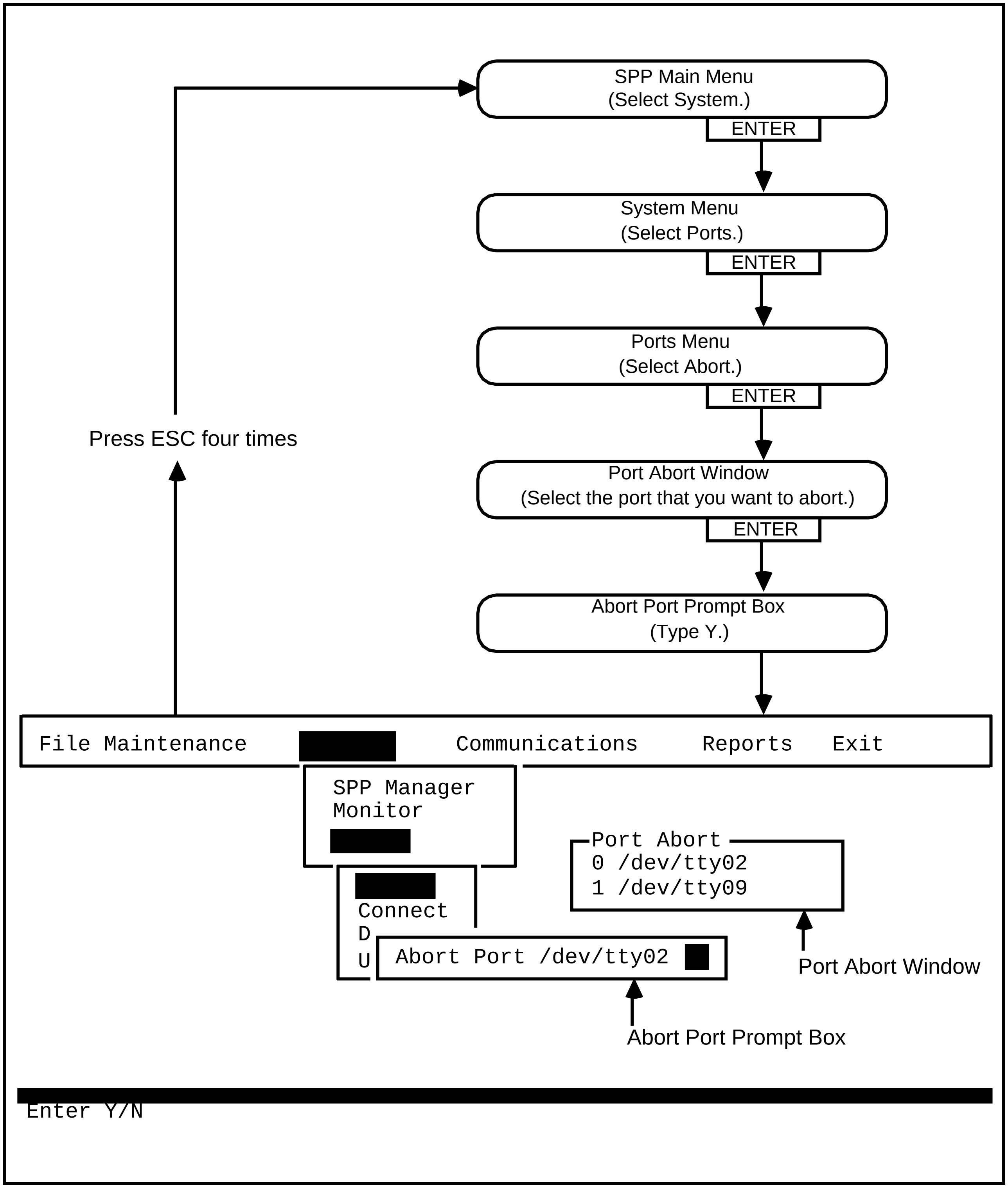


Fig. 4-5
Aborting a Port

ABORTING, ENABLING, AND DISABLING PORTS

Aborting the Operations of a Port

4.12 The Abort Port prompt box (see Fig. 4-5) is used to cancel the operations in process at a specified port. To cancel the operations of a port, proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER***.
==> The System menu appears.

(2) Select the Ports option. Press ***ENTER***.
==> The Ports menu appears.

(3) Select the Abort option. Press ***ENTER***.
==> The Port Abort window appears, listing all of the ports.

(4) Select the port whose operations you wish to cancel.
Press ***ENTER***.
==> The Abort Port prompt box appears with the cursor on the default value N.

(5) Type Y.
==> The operations of the port are cancelled, and the SPP responds with MGR GRANTS REQUEST / ABORT PORT ACTIVITY.

4.13 ***Exiting.*** To return to the SPP main menu, press the ***ESC*** key four times.

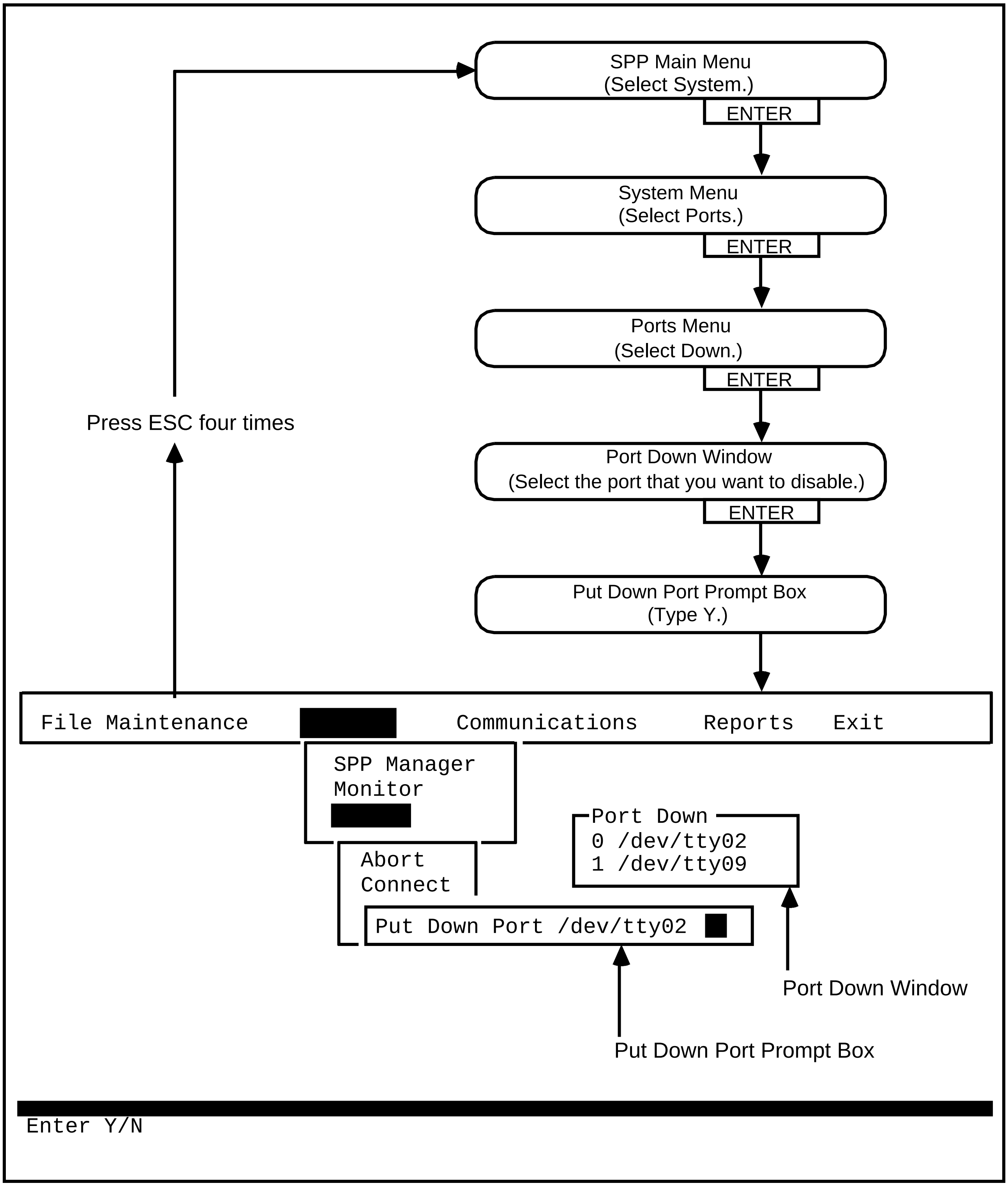


Fig. 4-6
Temporarily Disabling a Port

Temporarily Disabling a Port

4.14 The Put Down Port prompt box (see Fig. 4-6) is used to disable a port tempoarily without shutting down the SPP manager. To disable a port temporarily, proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER***.
==> The System menu appears.

(2) Select the Ports option. Press ***ENTER***.
==> The Ports menu appears.

(3) Select the Down option. Press ***ENTER***.
==> The Port Down window appears listing all of the ports.

(4) Select the port that you want to temporarily disable.
Press ***ENTER***.
==> The Put Down Port prompt box appears with the cursor on the default value N.

(5) Type Y.
==> The port is temporarily disabled and the SPP responds with MGR GRANTS REQUEST / PUT A PORT DOWN.

4.15 ***Exiting.*** To return to the SPP main menu, press the ***ESC*** key four times.

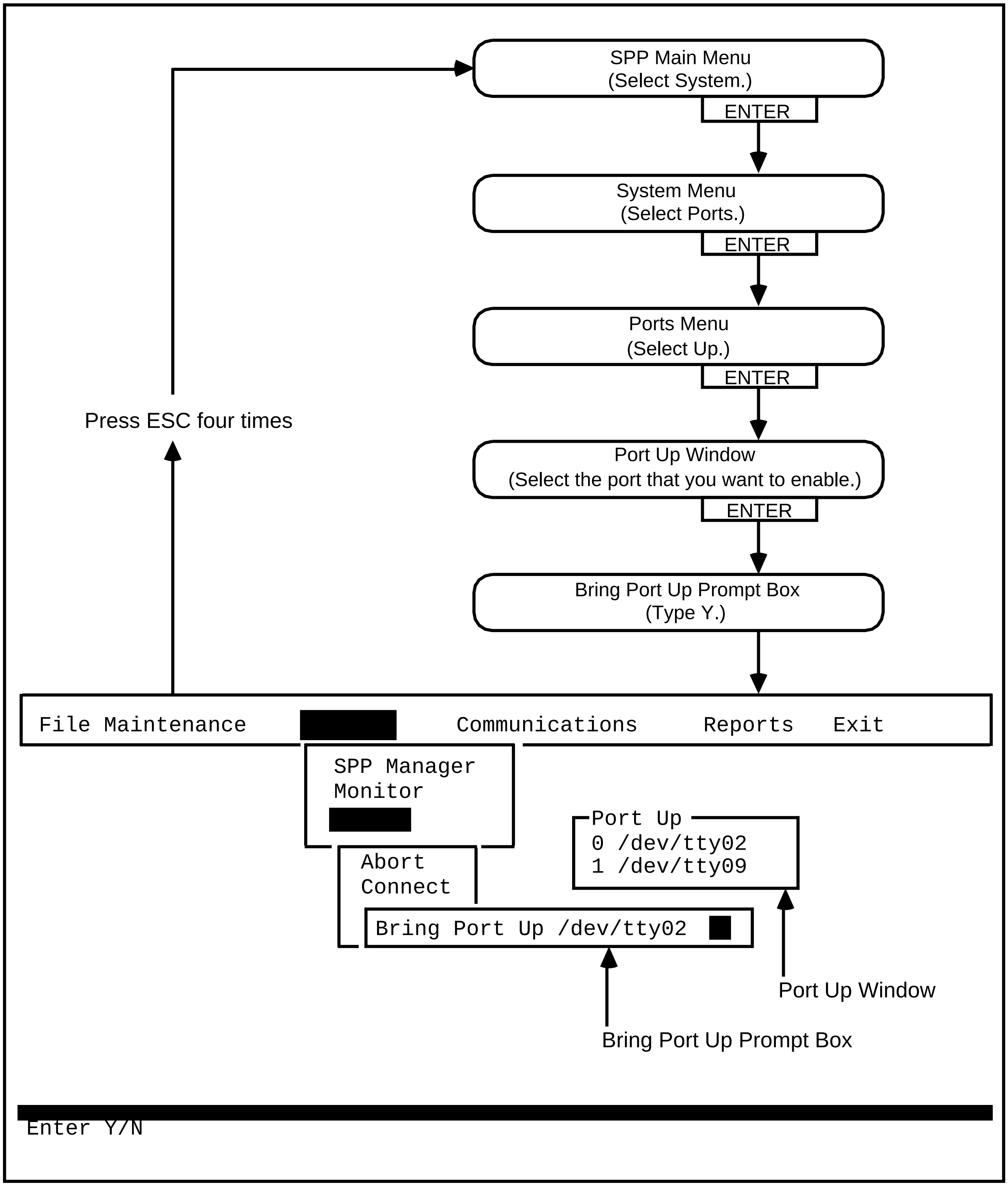


Fig. 4-7
Enabling a Temporarily Disabled Port

Enabling a Temporarily Disabled Port

4.16 The Bring Port Up prompt box (see Fig. 4-7) is used to restore a port which has been put down temporarily by way of the procedure "Temporarily Disabling a Port". To enable a temporarily disabled port, proceed as follows:

(1) Select the System option on the SPP main menu. Press ***ENTER.***
==> The System menu appears.

(2) Select the Ports option. Press ***ENTER***.
==> The Ports menu appears.

(3) Select the Up option. Press ***ENTER***.
==> The Port Up window appears listing all of the ports.

(4) Select the disabled port that you want to enable. Press ***ENTER***.
==> The Bring Port Up prompt box appears with the cursor on the default value N.

(5) Type Y.
==> The port is enabled and the SPP responds with MGR GRANTS REQUEST / PUT A PORT UP.

4.17 ***Exiting.*** To return to the SPP main menu, press the ***ESC*** key four times.

5. COMMUNICATIONS MENU

5.01 The communications menu contains the following two submenus:

(a) ***Groups.*** This menu is not relevant.

(b) ***Sites.*** The sites menu is used to dialog with a call collector 3 (CC3) device for the purpose of configuring the CC3's operating parameters, and for performing a diagnostic check by querying the CC3 on its internal operations.

Note 1: To schedule an automatic poll of all sites that did not successfully poll during a regularly scheduled poll, refer to the BNM scheduling services information in 450-1021-311.

Note 2: To abort a poll job, disable the operations of the port by using the procedure "Aborting the Operations of a Port," located in Chapter 4 of this publication.

5.02 For some fields of the Sites menu screens, when you press the ***F2*** key a list of choices for the field appears. Use the directional arrow keys to position the cursor on the desired item in the choice window and press ***ENTER*** twice to populate the field with the selected item.

```
Site Operations
  Site Name   CC3MIDDLE        Customer
  Site ID     00000002         Direct Phone  1234
  Poll Group                   Switch Phone
  HW Model    CC3              Switch Ext.


  Port Name  [redacted]
  Dial Type  Direct


Select a Port
```

Fig. 5-1
Fields of the Site Operations Screen

```
Site Operations
 Site Name                     Customer
 Site ID                       Direct Phone
 Poll Group                    Switch Phone
 AT/CC Model                   Switch Ext.


[redacted]  Configure Poll          Revert   Exit
```

Fig. 5-2
Commands Of The Site Operations Screen

SITES

5.03 ***Field Information.*** The following list describes the information required as data for the fields of the site operations screen (see Fig. 5-1).

(a) ***Site Name.*** This mandatory field is the name of the CC3 with which you want to communicate.

Note: Press the ***F2*** key for a list of the choices for this field.

(b) ***Port Name.*** This mandatory field is used to identify a port. A maximum of ten characters of data may be entered in this field. The default value is: default.

Note: Press the ***F2*** key for a list of the choices for this field.

(c) ***Dial Type.*** This mandatory field specifies whether the dial up connection to the CC3 is direct or controlled by a switchboard. A maximum of 12 characters of data may be entered in this field. The default value is: direct.

Note: Press the ***F2*** key for a list of the choices for this field.

5.04 ***Site Operations Screen Commands.*** Table 5-A lists the functions of the site operations screen commands (see Fig. 5-2).

Table 5-A
COMMANDS, DIALOG SCREEN

COMMAND	FUNCTION
Dialog	Used to initiate an interactive connection with a specified CC3 device, for the purpose of performing a remote configuration of the CC3, performing remote diagnostics of the CC3, or for viewing the records that are stored in the data collector.
Configure	Used to initiate the downloading of switch support software to a CC3 device. This command is invoked as part of the procedure "Dialoguing with a CC3 Device that Is Set Up," located in this chapter.
Poll	This command is not relevant.
Revert	This command is not relevant.
Exit	Returns the user to the sites submenu.

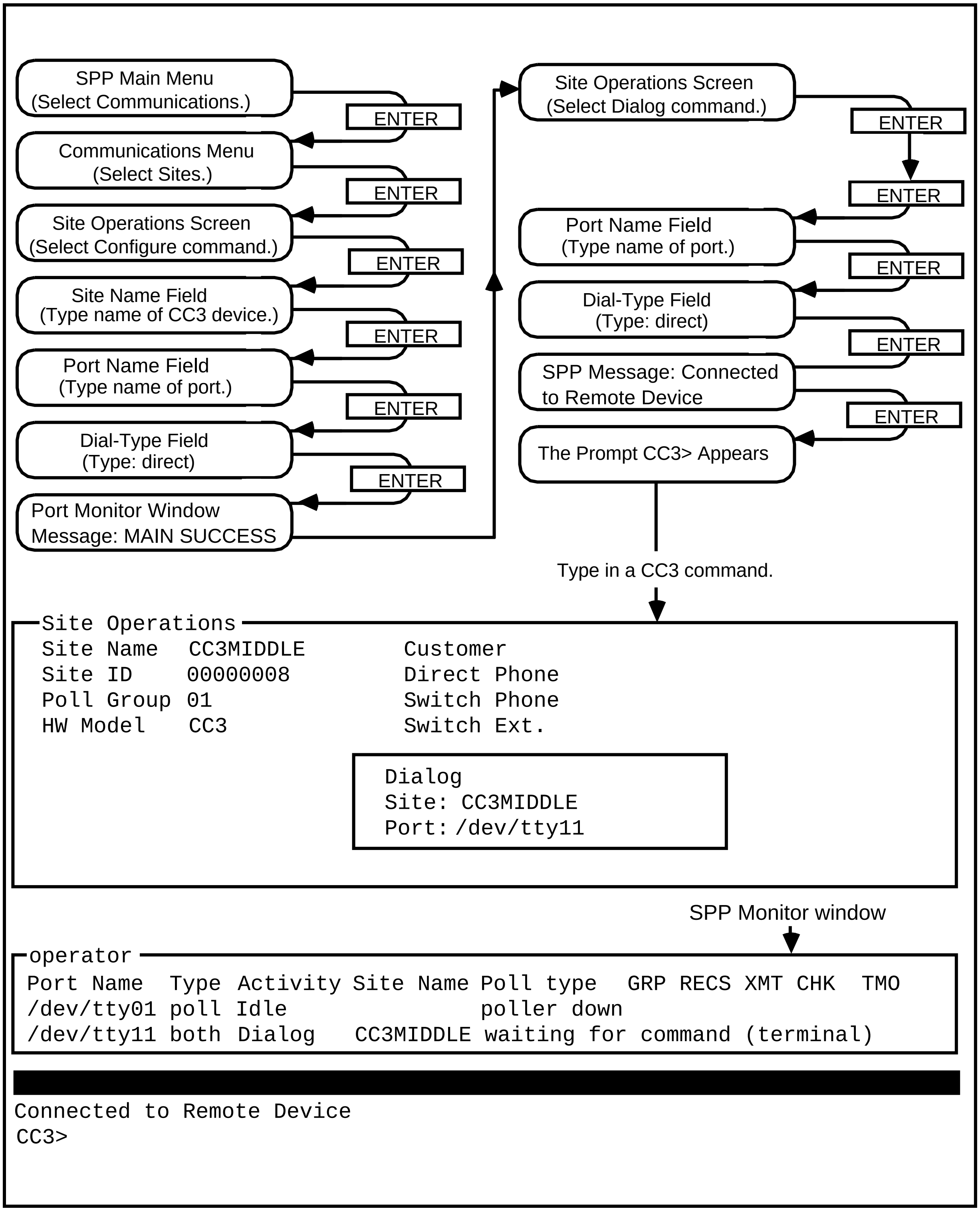


Fig. 5-3
Dialoguing with a CC3 Device that Is Set Up

Dialoguing with a CC3 Device That Is Set Up

Note: To view the SPP activities during the CC3 dialog process, use the procedure "Activating the Monitor Window to View Port Activities," located in Chapter 4 of this publication.

5.05 To dialog with a CC3 device (see Fig. 5-3) proceed as follows:

(1) Select the Communications option on the SPP main menu. Press ***ENTER***.
==> The Communications menu appears.

(2) Select the Sites option. Press ***ENTER***.
==> The Site Operations screen appears, with the cursor on the Dialog command.

(3) Select the Configure command to activate downloading of switch support software, to support the type of node connected to the CC3 device. Press ***ENTER***.
==> The Site Operations screen reappears, with the cursor in the Site Name field.

(4) Type the name of the CC3 device that you wish to configure. Press ***ENTER***.
==> The Site Operations screen reappears, with some fields filled by the SPP. Two new fields, Port Name and Dial Type, also appear. The cursor is on the Port Name field.

(5) Type in the name of the port that you wish to select.
Press ***ENTER***.
==> The cursor appears on the Dial Type field.

(6) Type: direct. Press ***ENTER***.
==> The SPP responds with MANAGER GRANTED REQUEST. Then, while the SPP is downloading the switch support software, the message DOWNLOAD appears under the activity heading in the port monitor window. When the switch support software has been successfully downloaded, the message MAIN SUCCESS appears in the port monitor window.

Note: If the SPP is unsuccessful in downloading switch support software, the message MAIN FAILED appears in the port monitor window. Contact technical support.

(7) Select the Dialog command. Press ***ENTER.***
The Site Operations screen reappears, with the cursor on the Site Name field.

(8) Press ***ENTER***.
==> The Site Operations screen reappears. Two new fields, Port Name and Dial Type, also appear. The cursor is on the Port Name field.

(9) Type in the name of the port that you wish to select.
Press ***ENTER***.
==> The cursor appears on the Dial Type field.

(10) Type: direct. Press ***ENTER.***
==> The dialog prompt box appears, showing the names of the CC3 device and port that you selected, and the SPP displays DIALOG IN PROGRESS / PRESS ESC ESC TO ABORT. Then, after the SPP manager has logged onto the CC3 device, the SPP displays CONNECTED / CONNECTED TO REMOTE DEVICE.

Note 1: If after pressing ***ENTER*** you decide to cancel your connection to the CC3 device, press the ***ESC*** key twice. A command line containing the commands Abort and Continue appears below the dialog prompt box. Select Abort and press ***ENTER***. The SPP stops the connection process and returns you to the site operations screen of Step 3. If you did not press the ***ESC*** key in time and the connection was completed, press the control character ^ to drop the connection to the CC3.

Note 2: If you change your mind and decide not to abort the connection, select Continue and press ***ENTER.***

(11) Press ***ENTER***.
==> The CC3> prompt appears at the bottom of the screen.

(12) Type the CC3 command symbol for the CC3 command that you want to activate. Press ***ENTER***.
==> The CC3 command is activated.

Note 1: For a help screen that lists the CC3 command symbols and their functions, type H and press ***ENTER*** (see Fig. 5-4). Refer to the CC3 manual for a full description of the CC3 commands and instructions on their use.

Note 2: To drop the connection to the CC3, press the control character ^.

```
CC3>H
CC3 Status Commands
C-Monitor Incoming Call Records
L-List Call Record Options
M-Memory Usage Display
P-Display Rejected Call Records
R-Read Stored Call Records
S-System Port Status

CC3 Configuration Commands
A-Authorize Password
D-Set Date
I-Initialize CC3 (Reset)
O-Set All Record Options
W-Set Warning Dial-Out Number
X-Set PBX (CC3 Options)
Z-Hardwire Modem Port

CC3>
```

Fig. 5-4
The CC3 Help Screen

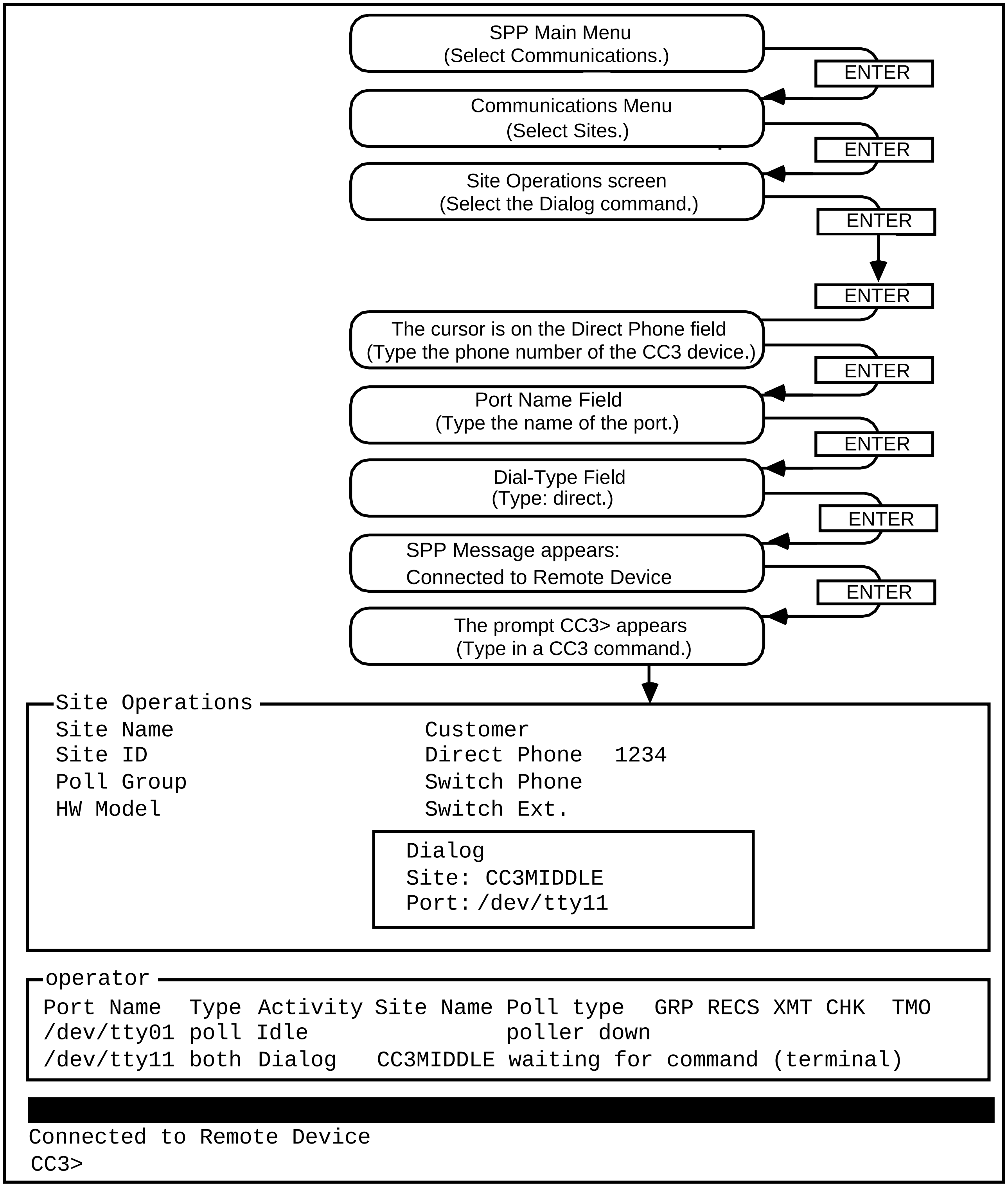


Fig. 5-5
Dialoguing with a CC3 Device that Is Not Set Up

Dialoguing with a CC3 Device That Is Not Set Up

5.06 In cases where the port type is defined as either poller (P) or both (B), it is possible to dialog with a CC3 device that has been been installed in the field, but which has not been configured. To dialog with a CC3 device that has not been configured (see Fig. 5-5), proceed as follows:

(1) Select the Communications option on the SPP main menu. Press ***ENTER***.
==> The Communications menu appears.

(2) Select the Sites options. Press ***ENTER.***
==> The Site Operations screen appears, with the cursor on the Dialog command.

(3) Press ***ENTER***.
==> The site operations screen reappears, with the cursor in the Site Name field.

(4) Press ***ENTER***.
==> The cursor advances to the Direct Phone field.

(5) Type the dial up number of the CC3 device with which you wish to dialog. Press ***ENTER***.
==> The Site Operations screen reappears, with two new fields, Port Name and Dial Type. The cursor is on the Port Name field.

(6) Type in the name of the port that you wish to select. Press ***ENTER***.
==> The cursor appears on the Dial Type field.

(7) Type in: Direct. Press ***ENTER.***
==> The dialog prompt box appears, showing the names of the CC3 device and port that you selected, and the SPP displays DIALOG IN PROGRESS / PRESS ESC ESC TO ABORT. Then, after the SPP manager has logged onto the CC3 device, the SPP displays CONNECTED / CONNECTED TO REMOTE DEVICE.

Note 1: If after pressing ***ENTER*** you decide to cancel your connection to the CC3 device, press the ***ESC*** key twice. A command line containing the commands Abort and Continue appears below the dialog prompt box. Select Abort and press ***ENTER***. The SPP stops the connection process and returns you to the Site Operations screen of Step 3. If you did not press the ***ESC*** key in time and the connection was completed, press the control character ^ to drop the connection to the CC3.

Note 2: If you change your mind and decide not to abort the connection, select Continue and press ENTER.

(8) Press ***ENTER***.
==> The CC3> prompt appears at the bottom of the screen.

(9) Type the CC3 command-symbol for the CC3 command that you want to activate. Press ***ENTER***.
==> The CC3 command is activated.

Note 1: For a help screen that lists the CC3 command symbols and their functions, type H and press ***ENTER*** (see Fig. 5-4). Refer to the CC3 manual for a full description of the CC3 commands and instructions on their use.

Note 2: To drop the connection to the CC3, press the control character ^.

6. REPORTS MENU

6.01 The reports menu is used to generate reports for poll sites. The reports menu contains the following three options:

(a) ***Poll Status.*** The Poll Status menu is disabled. Log and alarm records are accessed through log and alarm man machine interface (MMI) screens on the Dynamic Network Controller (DNC) logger. Refer to 450-1021-551 for information on accessing the log and alarm records.

(b) ***Variance Report.*** Variance reports are useful for monitoring the automatic polling process that is controlled by the Switch/PBX Poller (SPP) manager. These reports can be used to identify the best hourly use of ports. Variance reports break down into the following two main types:

- ***Variance by Number.*** A variance by number report is a list of all CC3 devices that polled less than or more than a user-specified number of records during a specified time period.
- ***Variance by Percent.*** A variance by percent report is a list of all CC3 devices that polled a user-specified percentage less than or more than the average number of records collected during a specified day of the week for a certain time period. For example, a variance by percent report might identify the CC3s that collected 15% more records than the total average number of records that where collected by all CC3 devices during the past four Mondays.

(c) ***History Report.*** The History Report menu is used to collect reports which detail site polling histories.

6.02 For some fields of the Reports menu screens, when you press the ***F2*** key a list of choices for the field appears. Use the directional arrow keys to position the cursor on the desired item in the choice window and press ENTER twice to populate the field with the selected item.

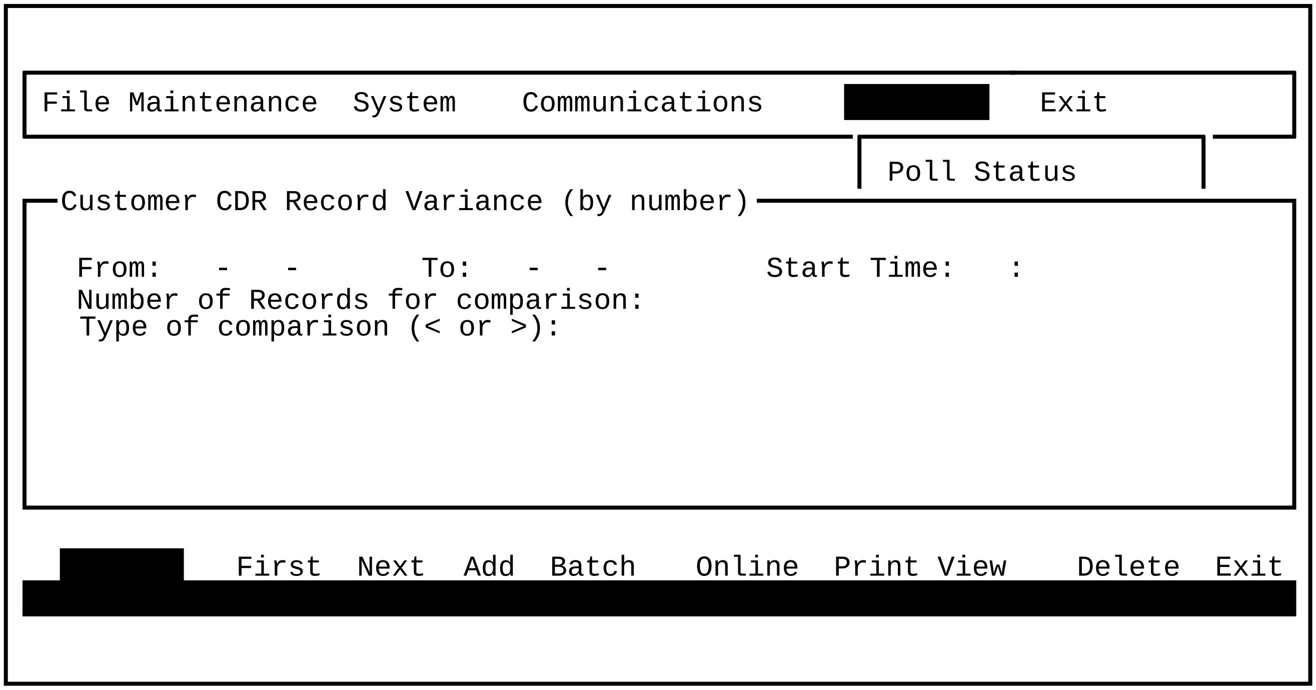


Fig. 6-1
Fields of the Customer CDR Record Variance (By Number) Screen

VARIANCE REPORT

Variance by Number

6.03 ***Field Information.*** The following list describes the information required as data for the fields of the customer call detail record (CDR) record variance by number screen, Fig. 6-1.

(a) ***From.*** This mandatory nine-character field is used to specify the first date of a date range for polling logs. The format is dd-mmm-yyyy, where dd is the day, mmm is the first three letters of the month, and yyyy is the year.

(b) ***To.*** This mandatory nine-character field is used to specify the last date of a date range for polling logs. The format is dd-mmm-yyyy, where dd is the day, mmm is the first three letters of the month, and yyyy is the year.

Note: The total time range must not exceed 35 days.

(c) ***Start Time.*** This mandatory four-digit field is used to specify the start time of the From date. The format is hh-mm, where hh is the hour, and mm is the minute.

(d) ***Number of Records for Comparison.*** This field is used to specify the threshold number of records against which the SPP will compare the polling performance. This field contains a maximum of four digits.

(e) ***Type of Comparison.*** This mandatory one-character field is used to specify whether the report should be for a quantity of records that is either greater than (>) or less than (<) the specified threshold number.

6.04 ***Customer CDR Record Variance by Number Screen Commands.*** Table 6-A lists the functions of the commands that are available at the bottom of the customer CDR record variance by number screen (see Fig. 6-1).

Table 6-A
COMMANDS, CUSTOMER CDR RECORD VARIANCE (BY NUMBER) SCREEN

COMMAND	FUNCTION
Search	Used to select a report from the SPP database for display ***Note:*** After activating the Search command the cursor appears in the From field. Press the ***F2*** key for a list of the reports from which you may make a selection.
First	Displays the first report in the database
Next	Displays the next report in the database
Add	Used to create a new variance report
Batch	Used to submit a currently selected report for batch processing
Online	Used to process a report online
Print	Transfers the currently selected report files to the printer spool ***Note:*** The print command cannot be executed until the desired report has been processed by batch or online processing.
View	Displays a selected report file on the terminal
Delete	Deletes a specified range of report records from the SPP reports database
Exit	Exits the current screen and returns to the Variance Report submenu

Creating a Variance by Number Report

6.05 To generate reports for a specified date range, showing sites for which the volume of records polled is greater or lesser than a specified number (see Fig. 6-2) proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the Variance Report option. Press ***ENTER***.
==> The Variance Report menu appears.

(3) Select the Variance by Number option. Press ***ENTER***.
==> The Customer CDR Record Variance By Number screen reappears, with the cursor on the Search command.

(4) Select the Add command. Press ***ENTER***.
==> The customer CDR record variance by number screen reappears, with the cursor on the From field.

(5) Type in data for the fields.
==> After you have typed in data for the last field, that is, the field Type of Comparison, the cursor advances to the Add command, and the SPP responds with RECORD ADDED SUCCESSFULLY.

(6) Select either the Batch command or the Online command to generate the report. Press ***ENTER***.
==> The SPP responds with ONLINE JOB IS RUNNING / *n* RECORDS WRITTEN TO FILE.

6.06 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the Variance Report menu.

(2) Press the ***ESC*** key four times.
==> The SPP returns you to the SPP main menu.

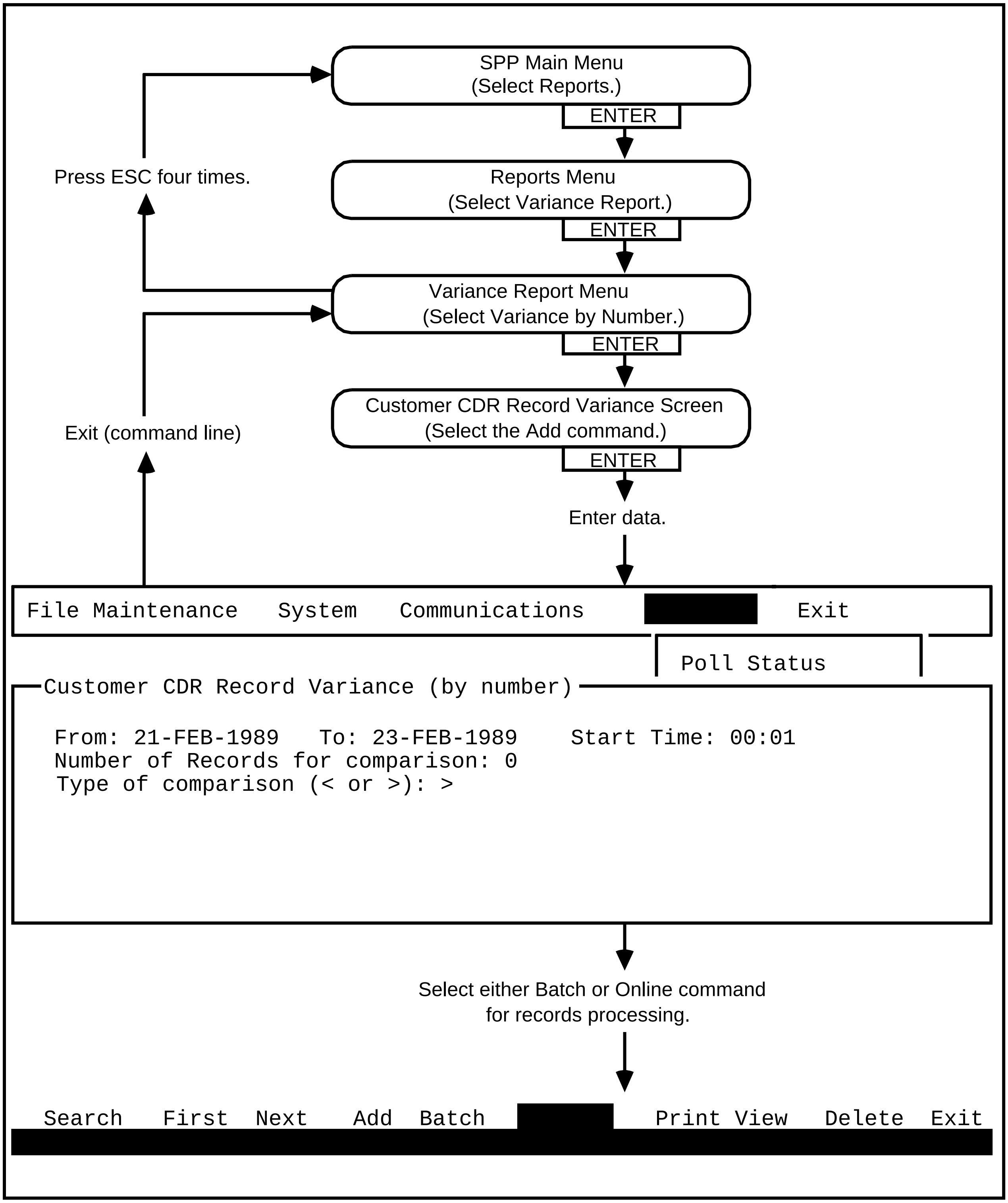


Fig. 6-2
Creating a Variance by Number Report

Viewing Processed Variance by Number Reports

6.07 To select and view processed variance by number reports (see Fig. 6-3) proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the Variance Report option. Press ***ENTER***.
==> The Variance Report menu appears.

(3) Select the Variance by Number option. Press ***ENTER***.
==> The Customer CDR Record Variance By Number screen appears, with the cursor on the Search command.

(4) Press ***ENTER***.
==> The Customer CDR Record Variance By Number screen reappears, with the cursor on the From field.

(5) Press the ***F2*** key.
==> A list of the processed variance reports appears. The list items show the from date, the to date, and the start time.

(6) Select one of the records with the cursor. Press ***ENTER***.
==> The SPP fills the From field with data from the chosen record.

(7) Press ***ENTER***.
==> The SPP fills the remainding fields with data.

(8) Select the View command. Press ***ENTER***.
==> The selected variance report appears on the screen. Use the directional arrow keys to scroll through the report.

6.08 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the Variance Report submenu.

(2) Press the ***ESC*** key four times.
==> The SPP returns you to the SPP main menu.

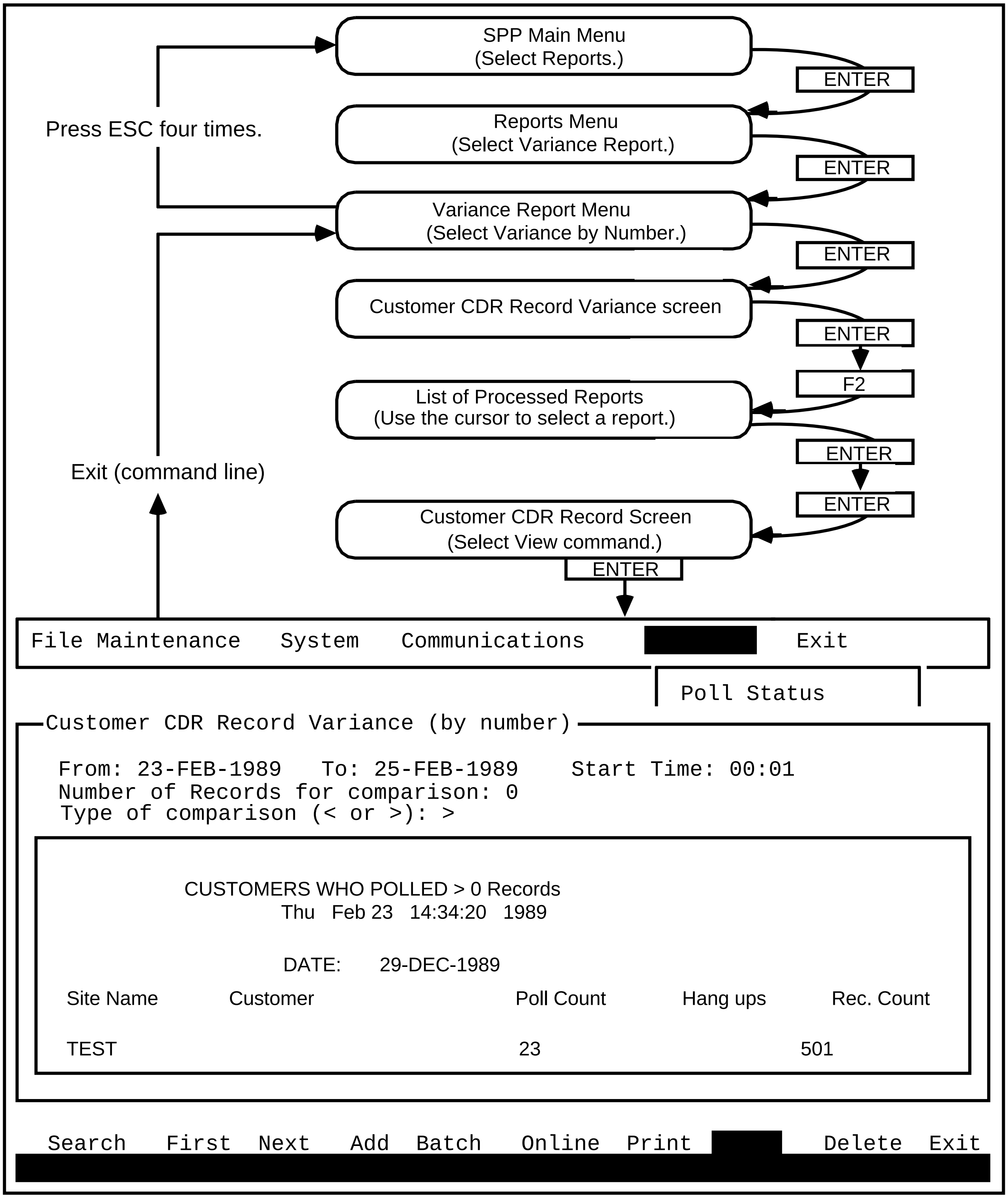


Fig. 6-3
Viewing a Processed Variance by Number Report

Deleting a Variance by Number Report

6.09 To delete a variance by number report proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the Variance Report option. Press ***ENTER***.
==> The Variance Report menu appears.

(3) Select the Variance by Number option. Press ***ENTER***.
==> The Customer CDR Record Variance By Number screen appears, with the cursor on the Search command.

(4) Press ***ENTER***.
==> The Customer CDR Record Variance By Number screen reappears, with the cursor on the From field.

(5) Press the ***F2*** key.
==> A list of the processed variance reports appears. The list items show the from date, the to date, and the start time.

(6) Select one of the records with the cursor. Press ***ENTER***.
==> The SPP fills the From field with data from the chosen record.

(7) Press ***ENTER***.
==> The SPP fills the remainding fields with data.

(8) Select the Delete command. Press ***ENTER***.
==> The selected variance report is deleted from the database

6.10 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the Variance Report menu.

(2) Press the ***ESC*** key four times.
==> The SPP returns you to the SPP main menu.

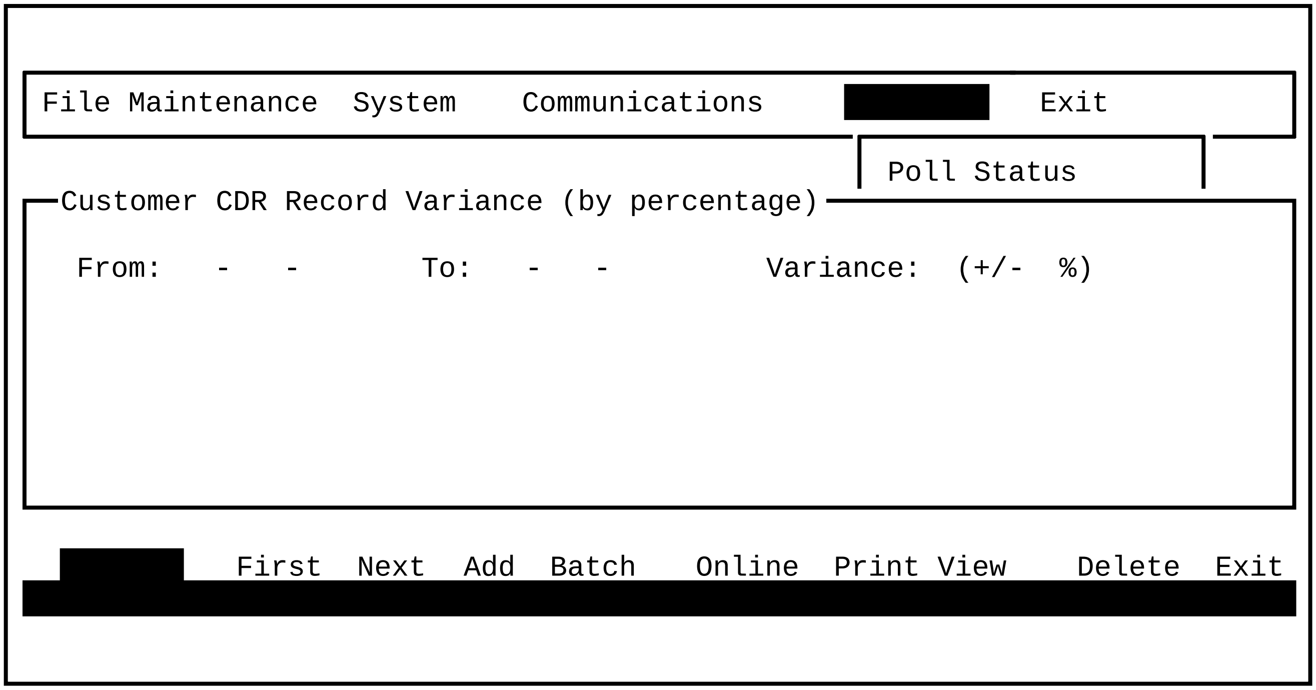


Fig. 6-4
Fields of the Customer CDR Record Variance (By Percent) Screen

Variance by Percent

6.11 ***Field Information.*** The following list describes the information required as data for the fields of the Customer Call Detail Record (CDR) Variance By Percent screen (see Fig. 6-4).

(a) ***From.*** This mandatory nine-character field is used to specify the first date of a date range for polling logs. The format is dd-mmm-yyyy, where dd is the day, mmm is the first three letters of the month, and yyyy is the year.

Note: Press the ***F2*** key for a list of the choices for this field.

(b) ***To.*** This mandatory nine-character field is used to specify the last date of a date range for polling logs. The format is dd-mmm-yyyy, where dd is the day, mmm is the first three letters of the month, and yyyy is the year.

Note: The total time range must not exceed 35 days.

(c) ***Variance.*** This mandatory three-character field is used to specify the percentage of variation from the average number of records polled during the specified time period. This threshold identifies the CC3s that will be reported. The entry format is either +nn or -nn.

6.12 *Customer CDR Record Variance by Percent Screen Commands.* Table 6-B lists the functions of the commands that are available at the bottom of the Customer CDR Record Variance By Percent screen (see Fig. 6-4).

Table 6-B
COMMANDS, CUSTOMER CDR RECORD VARIANCE (BY PERCENTAGE) SCREEN

COMMAND	FUNCTION
Search	Selects a report record from the SPP database ***Note:*** Press the F2 key for a list of the reports from which you may make a selection.
First	Displays the first report in the database
Next	Displays the next report in the database
Add	Used to create a new variance report
Batch	Used to submit a currently selected report for batch processing
Online	Used to process a report online
Print	Transfers the currently selected report files to the printer spool ***Note:*** The print command cannot be executed until the desired report has been processed by batch or online processing.
View	Displays a selected report file on the terminal
Delete	Deletes a specified range of report records from the SPP reports database
Exit	Exits the current screen and returns to the Variance Report menu

Creating a Variance by Percent Report

6.13 To generate reports for a specified date range, showing sites for which the volume of records polled is greater or lesser than a specified percentage (see Fig. 6-5) proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the Variance Report option. Press ***ENTER***.
==> The Variance Report menu appears.

(3) Select the Variance by Percentage option. Press ***ENTER***.
==> The Customer CDR Record Variance By Percent screen appears, with the cursor on the Search command.

(4) Select the Add command. Press ***ENTER***.
==> The Customer CDR Record Variance By Percent screen reappears, with the cursor on the From field.

(5) Type in data for the fields.
==> After you have typed in data for the last field, that is, the field Variance, the cursor advances to the Add command, and the SPP responds with RECORD ADDED SUCCESSFULLY.

(6) Select either the Batch command or the Online command to generate the report. Press ***ENTER***.
==> The SPP responds with ONLINE JOB IS RUNNING / *n* RECORDS WRITTEN TO FILE.

6.14 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the Variance Report menu.

(2) Press the ***ESC*** key four times.
==> The SPP returns you to the SPP main menu.

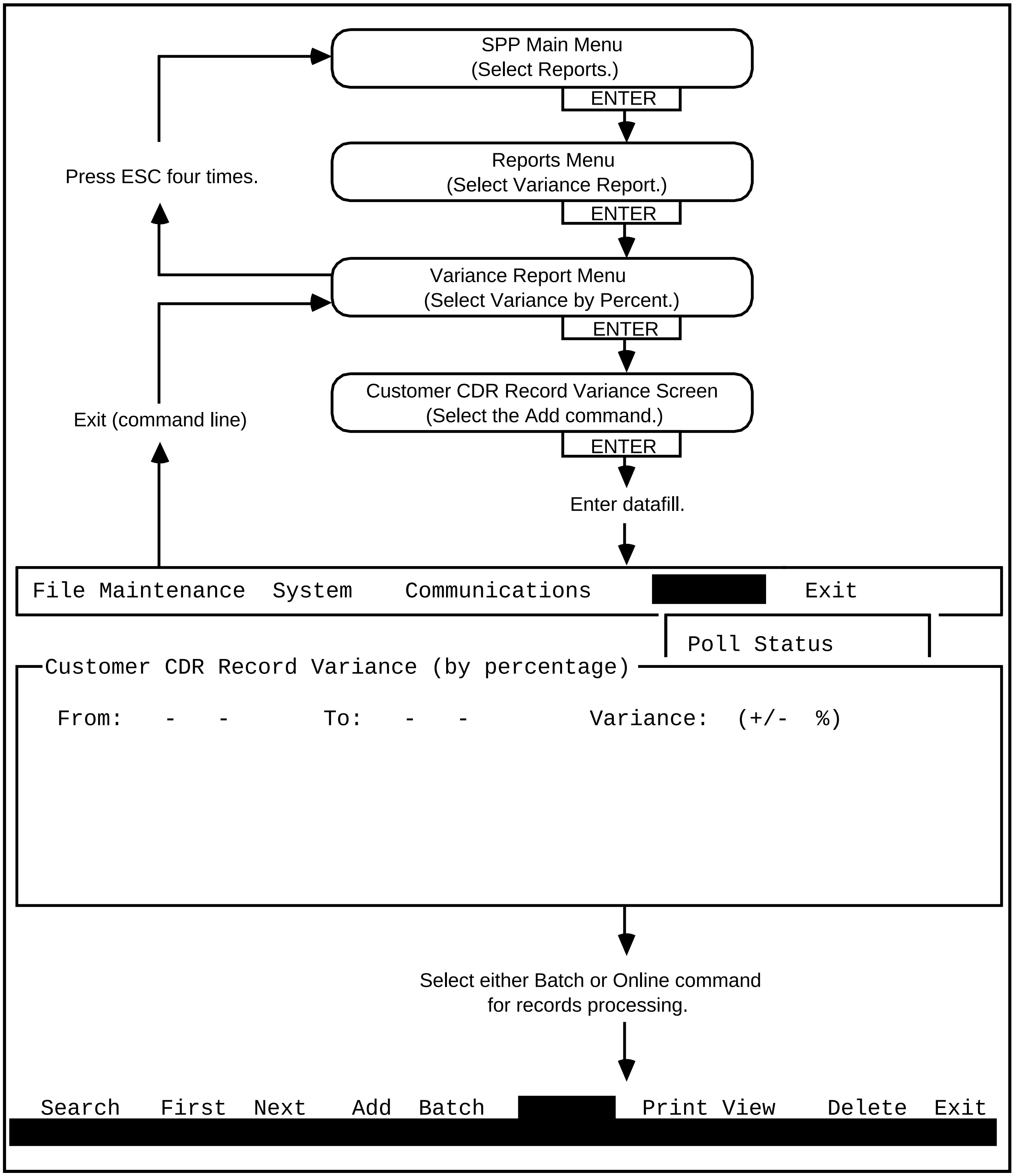


Fig. 6-5
Creating a Variance by Percent Report

Viewing Processed Variance by Percent Reports

6.15 To select and view processed variance by percent reports (see Fig. 6-6) proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the Variance Report option. Press ***ENTER***.
==> The Variance Report menu appears.

(3) Select the Variance by Percentage option. Press ***ENTER***.
==> The Customer CDR Record Variance By Percent screen appears, with the cursor on the Search command.

(4) Press ***ENTER***.
==> The Customer CDR Record Variance By Percent screen reappears, with the cursor on the From field.

(5) Press the ***F2*** key.
==> A list of the processed variance reports appears. The list items show the from date, the to date, and variance percent.

(6) Select one of the records. Press ***ENTER***.
==> The SPP fills the From field with data from the chosen record.

(7) Press ***ENTER***.
==> The SPP fills the remaining fields with data.

(8) Select the View command. Press ***ENTER***.
==> The selected variance report appears on the screen. Use the directional arrow keys to scroll through the report.

6.16 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the Variance Report menu.

(2) Press the ***ESC*** key four times.
==> The SPP returns you to the SPP main menu.

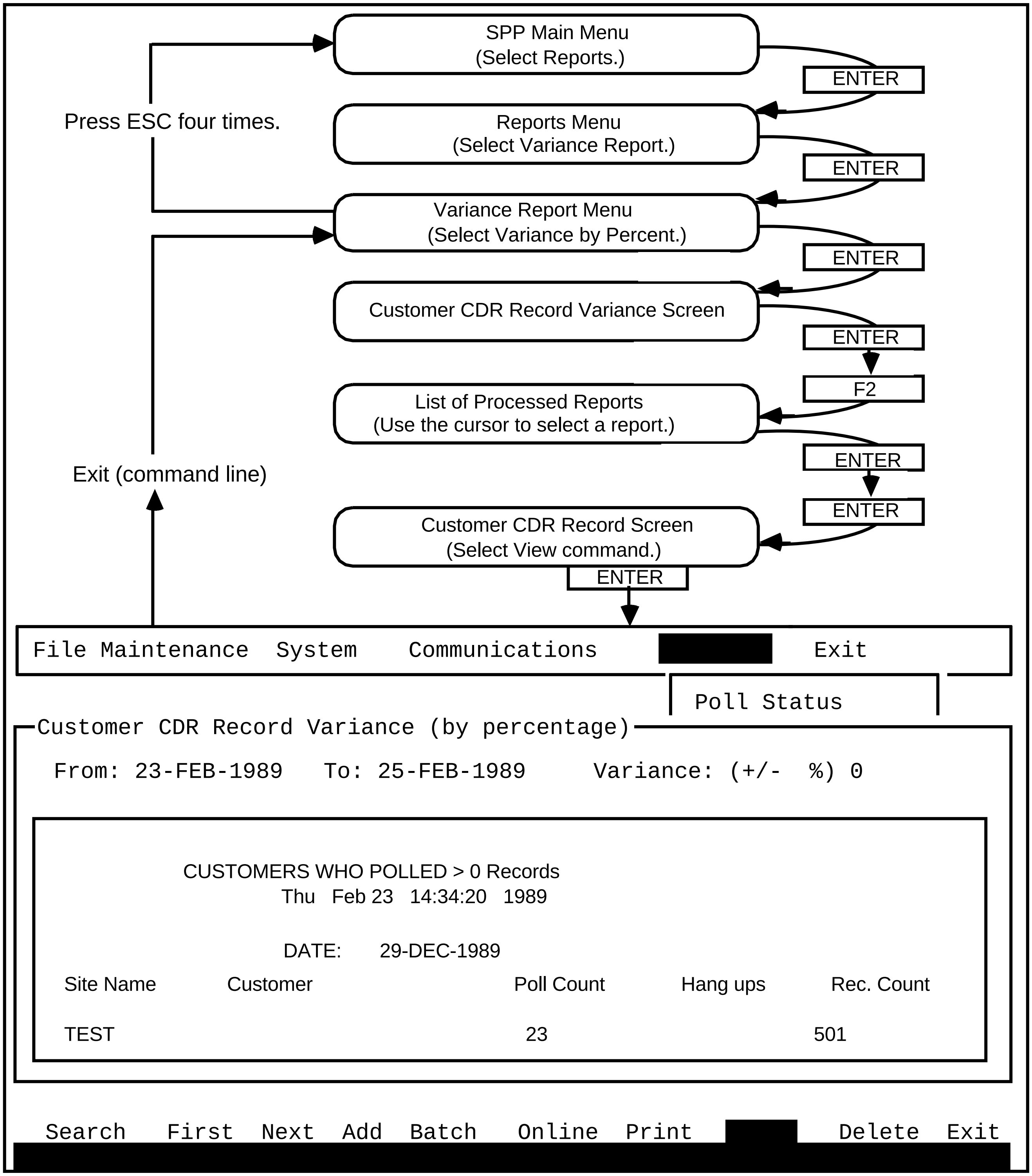


Fig. 6-6
Viewing Processed Variance (by percentage) Reports

Deleting a Variance by Percent Report

6.17 To delete a variance by percent report proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the Variance Report option. Press ***ENTER***.
==> The Variance Report menu appears.

(3) Select the Variance by Percentage option. Press ***ENTER***.
==> The Customer CDR Record Variance By Percent screen appears, with the cursor on the Search command.

(4) Press ***ENTER***.
==> The Customer CDR Record Variance By Percent screen reappears, with the cursor on the From field.

(5) Press the ***F2*** key.
==> A list of the processed variance reports appears. The list items show the from date, the to date, and variance percent.

(6) Select one of the records. Press ***ENTER***.
==> The SPP fills the From field with data from the chosen record.

(7) Press ***ENTER***.
==> The SPP fills the remaining fields with data.

(8) Select the Delete command. Press ***ENTER***.
==> The selected report is deleted from the database.

6.18 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the Variance Report menu.

(2) Press the ***ESC*** key four times.
==> The SPP returns you to the SPP main menu.

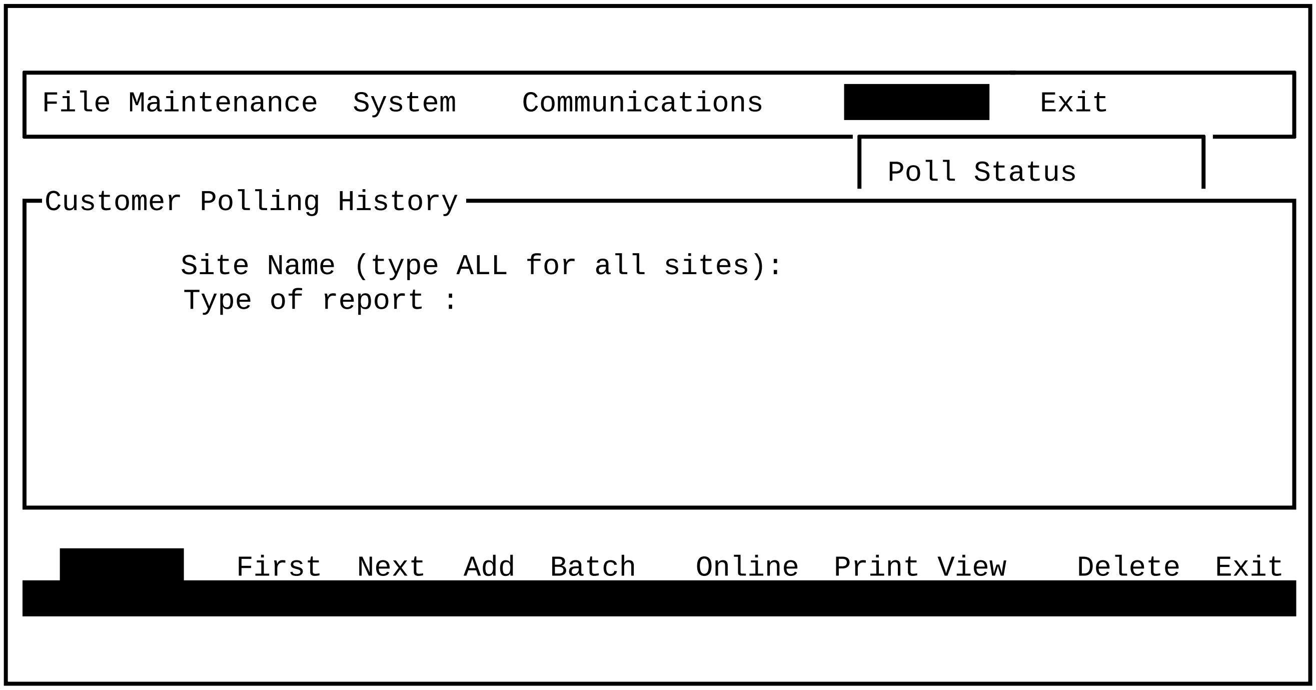


Fig. 6-7
Fields of the Customer Polling History Screen

HISTORY REPORT

6.19 Customer polling history reports are generated from the raw polling data contained in the SPP polling logs. History reports allow the user to generate reports that show the polling history for a site. These reports are useful for determining the optimal port configurations for different times.

6.20 ***Field Information.*** The history report menu provides reports which detail the polling histories of the CC3s. The following list describes the information required as data for the fields of the customer polling history screen (see Fig. 6-7).

(a) ***Site Name.*** This mandatory field is the name of the site that is to be reported. Type ALL if all sites are to be included in the report. A maximum of ten characters of data may be entered.

Note: Press the ***F2*** key for a list of the choices for this field.

(b) ***Type of Report.*** This mandatory one-character field is used to specify the type of history report that is required. The optional choices are detail (D), summary (S), and volume (V). The information that is generated in relation to these options is the following:

- ***Detail.*** The report contains detailed information on each polling transaction, including date, time of poll, device name, and the number of records polled.
- ***Summary.*** The report identifies the number of records that where polled from each CC3 on each day.
- ***Volume.*** The report identifies the total average number of reports collected by each CC3 device for all days of each day of the week during the specified reporting period. For example, a volume report might identify the total average number of records that where collected by a CC3 device during the past four Mondays.

Note: Press the ***F2*** key for a list of the choices for this field.

6.21 *Customer Polling History Screen Commands.* Table 6-C lists the functions of the commands that are available at the bottom of the customer polling history screen, Fig. 6-7.

Table 6-C
COMMANDS, CUSTOMER POLLING HISTORY SCREEN

COMMAND	FUNCTION
Search	Used to select a report from the SPP database for display ***Note:*** Press the ***F2*** key for a list of the reports from which you may make a selection.
First	Displays the first record in the database
Next	Displays the next record in the database
Add	Used to create a new history report record
Batch	Used to submit a currently selected report for batch processing
Online	Used to process a report online
Print	Transfers the currently selected report files to the printer spool ***Note:*** The print command cannot be executed until the desired report has been processed by batch or online processing.
View	Displays a selected report file on the terminal
Delete	Deletes a specified range of report records from the SPP reports database
Exit	Exits the current screen and returns to the History Report menu

Creating a Customer Polling History Report

6.22 To generate customer polling history reports (see Fig. 6-8) proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the History Report option. Press ***ENTER***.
==> The Customer Polling History screen appears. The cursor is on the Search command.

(3) Select the Add command. Press ***ENTER***.
==> The Customer Polling History screen reappears, with the cursor on the Site Name field.

(4) Type either the site name, to create a history report for a specific site, or ALL, to create a history report for all sites. Press ***ENTER***.
==> The Customer Polling History screen reappears, with the cursor on the Type of Report field.

(5) Type the kind of history report that you wish to generate. Press ***ENTER***.
==> The customer polling history screen reappears, with the cursor on the Add command.

(6) Select either the Batch command or the Online command to generate the report. Press ***ENTER***.
==> The SPP responds with ONLINE JOB IS RUNNING / *n* RECORDS WRITTEN TO FILE.

6.23 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the History Report menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

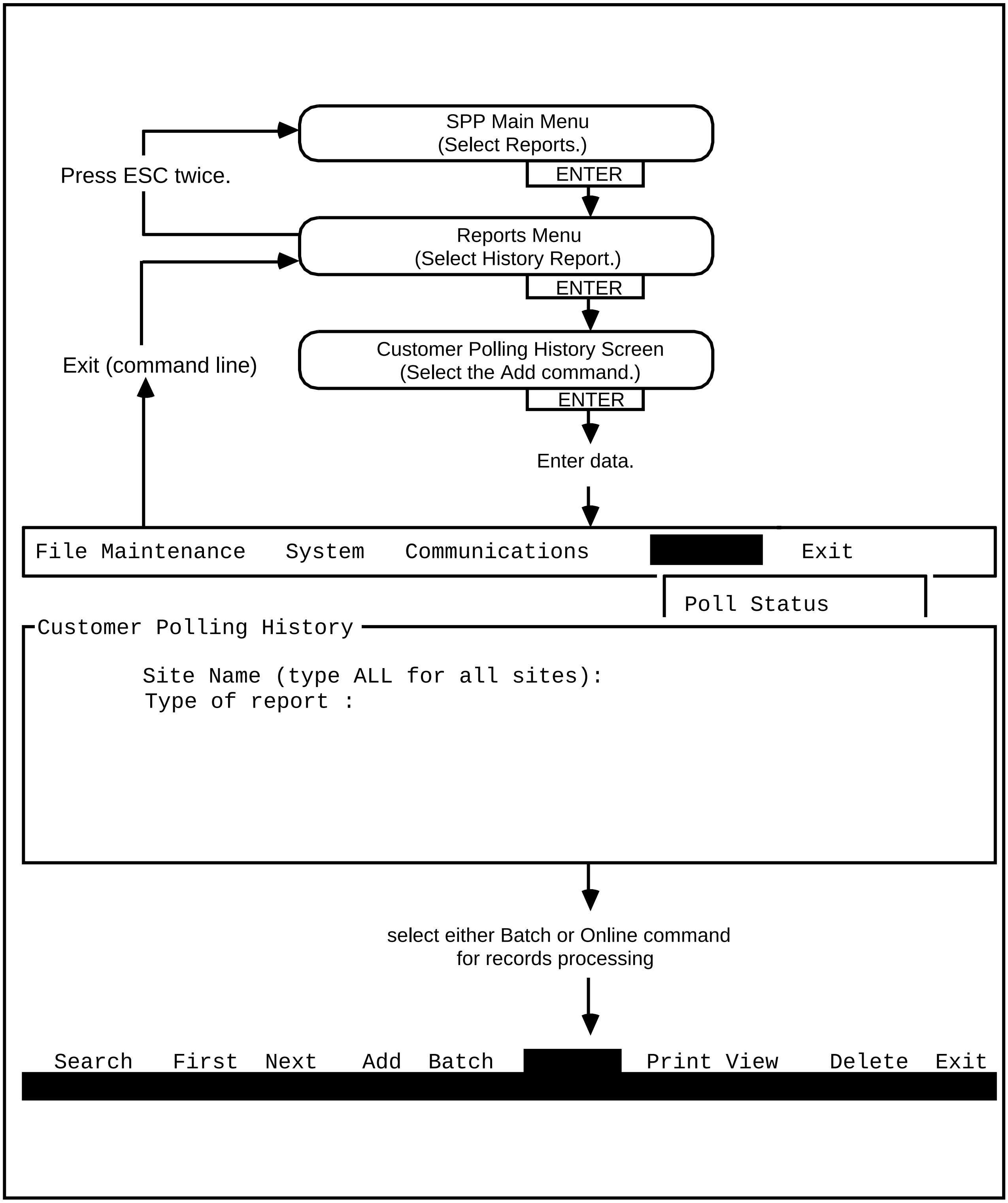


Fig. 6-8
Creating a Customer Polling History Report

Viewing Processed Customer Polling History Reports

6.24 To select and view processed customer polling history reports (see Fig.6-9), proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the History Report option. Press ***ENTER***.
==> The Customer Polling History screen appears. The cursor is on the Search command.

(3) Press ***ENTER***.
==> The Customer Polling History screen reappears, with the cursor on the Site Name field.

(4) Press the ***F2*** key.
==> A list of the processed customer polling history reports appears, giving the site names and the types of report.

(5) Select one of the records with the cursor. Press ***ENTER***.
==> The SPP fills the Site Name field.

(6) Press ***ENTER***.
==> The cursor appears on the Type of Report Field, and a list of report types appears.

(7) Select a report type. Press ***ENTER***.
==> The SPP fills the Type of Report Field.

(8) Press ***ENTER***.
==> The Customer Polling History screen reappears, with the cursor on the Search command.

(9) Select the View command. Press ***ENTER***.
==> The selected customer polling history report appears on the screen. Use the directional arrow keys to scroll through the report.

6.25 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Press the ***ESC*** key twice.

(2) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the History Report menu.

(3) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

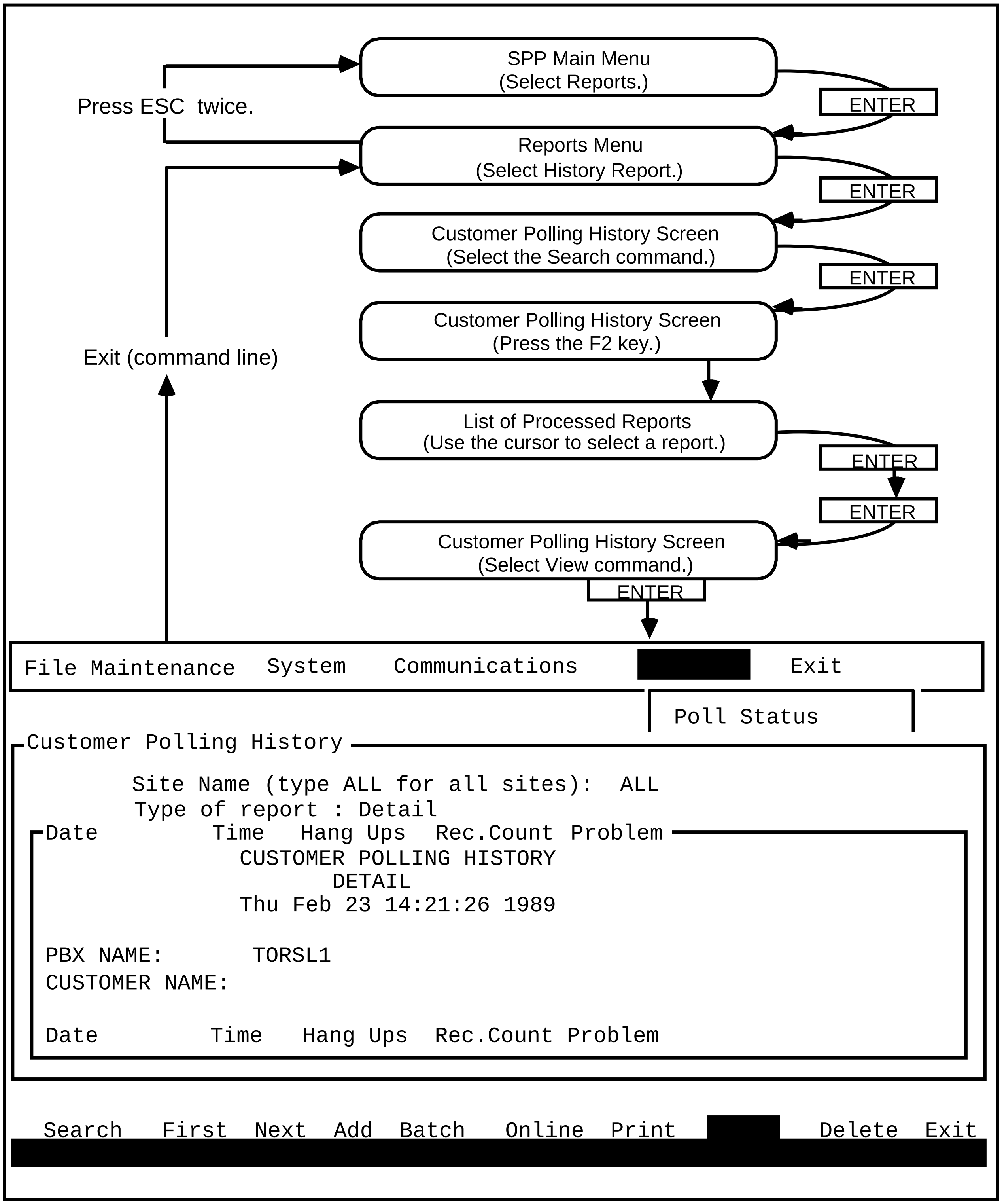


Fig. 6-9
Viewing Processed Customer Polling History Reports

Deleting a Customer Polling History Report

6.26 To delete a customer polling history report proceed as follows:

(1) Select the Reports option on the SPP main menu. Press ***ENTER***.
==> The Reports menu appears.

(2) Select the History Report option. Press ***ENTER***.
==> The Customer Polling History screen appears. The cursor is on the Search command.

(3) Press ***ENTER***.
==> The Customer Polling History screen reappears, with the cursor on the Site Name field.

(4) Press the ***F2*** key.
==> A list of the processed customer polling history reports appears. The list items show the site name and the type of report.

(5) Select one of the records with the cursor. Press ***ENTER***.
==> The SPP fills the Site Name field for the chosen record.

(6) Press ***ENTER***.
==> The SPP fills the Type of Report field with data.

(7) Select the Delete command. Press ***ENTER***.
==> The selected customer polling history report is deleted from the database.

6.27 ***Exiting.*** To return to the SPP main menu, proceed as follows:

(1) Select the Exit command. Press ***ENTER***.
==> The SPP returns you to the History Report menu.

(2) Press the ***ESC*** key twice.
==> The SPP returns you to the SPP main menu.

7. FACILITY MAPPING

7.01 The Facility Mapping man machine interface (MMI) screens are used to establish a mapping between the names of facilities and their numeric identifiers as used in the call detail records, and to schedule the new mappings.

> ***Note:*** Before Facility Mapping screens are utilized, the user must update the Business Network Management (BNM) Node table, the BNM Customer table (DNC customers only), and the BNM Facility Ownership tables. Refer to Chapter 2 of this practice for further information.

7.02 The facility mapping MMI are used for the following procedures:

(a) view the table of existing mappings

(b) add a new mapping to the database

(c) change an existing mapping

(d) delete a mapping from the database

(e) query the mapping schedule

(f) add a new mapping schedule

(g) change an existing mapping schedule

(h) delete a mapping schedule

(i) dump mappings to a file

(j) edit a mapping file

(k) validate a mapping file

ACCESSING THE FACILITY MAPPING SCREENS

7.03 To gain access to the facility mapping screens, the user must first access the Facility Mapping main menu (see Fig. 7-1). There are two procedures for accessing the main menu. The procedures differ in terms of whether a password is required or not.

7.04 ***No Password Required.*** To access the Facility Mapping main menu when no password is required, proceed as follows:

(1) Sign on at the terminal.
==> The BNM main menu appears.

(2) Select the item "Facility Mapping MMI". Press ***ENTER***.
==> The facility mapping main menu appears.

7.05 ***Password Required.*** To access the Facility Mapping main menu when a password is required, proceed as follows:

(1) Sign on at the terminal.
==> The BNM main menu appears.

(2) Select the item "Facility Mapping MMI". Press ***ENTER***.
==> You are prompted for a password.

(3) Type the DVIX root password. Press ***ENTER.***
==> The Facility Mapping main menu appears.

```
Main:  Exit Current-Mapping Future-Mapping
Manipulate current facilities mapping


                     Facility Mappings For SPP Nodes
                     -------------------------------




          Please use cursor keys or space bar to position cursor,
          then hit Enter/Return to select menu item
```

Fig. 7-1
Facility Mapping Main Menu

SELECTING MENU ITEMS

7.06 The following two methods can be used to select menu items:

(a) Use the directional arrow keys to move the cursor to the desired menu item, which will then appear in reverse video. Press ***ENTER*** to activate the menu.

(b) Enter the first unique letter of the menu that you wish to select. For example, press the letter C to activate the current-mapping menu.

SPECIAL-FUNCTION KEYS

7.07 Special-function keys perform specific functions. In the Facility Mapping MMI, the function keys are explained at the bottom of the tables to which they apply. Table 7-A summarizes the functions of the function keys for the facility mapping tables.

Table 7-A
FUNCTION KEYS

SCREEN	KEY	FUNCTION
Facility Mapping Database Query Result (see Fig. 7-4)	***F1***	Exit from the table and return to the Current-Mapping Query Criteria screen
	F3	Display the next page of the table
	F4	Display the previous page of the table
	F6	Add the new mapping to the current-mapping table
	F7	Delete the selected mapping from the Current-Mapping table
	F8	Permit changes to be made to the selected mapping
Schedule Database Query Result (see Fig. 7-9)	***F1***	Exit from the table and return to the Future-Mapping Query Criteria screen
	F3	Display the next page of the schedule table
	F4	Display the previous page of the schedule table
	F6	Add the new mapping to the schedule table
	F7	Delete the selected mapping from the schedule table
	F8	Permit changes to be made to the selected schedule

Table Continued --------------------------------

Table 7-A Continued
FUNCTION KEYS

SCREEN	KEY	FUNCTION
Mapping-File List (see Fig. 7-13)	***F1***	Exit from the list and return to the Future-Mapping submenu
	F3	Display the next page of the list
	F4	Display the previous page of the list
	F6	Create a new mapping file using the "vi" editor
	F7	Edit the selected mapping file
	F8	Browse through the selectd mapping file
	F9	Validate the data of the selected mapping file

7.08 If it is the case that the user has a terminal that is not equipped with a full set of function keys, the function key operations can be activated by pressing the ***Control*** key and specific character keys. The following table lists function keys and their substitutions.

FUNCTION KEY	ALTERNATIVE ENTRY
F1	Press ***BREAK***
F3	Press Control and ***O***
F4	Press Control and ***P***
F6	Press Control and ***T***
F7	Press Control and ***U***
F8	Press Control and ***V***
F9	Press Control and ***W***

LOGICAL AND RELATIONAL OPERATORS

7.09 In some of the fields of the Facility Mapping MMI, the user can use logical and relational operators to serve as values. Table 7-B lists these operators.

Note 1: For example, to specify all nodes that have node names that are prefixed with the letters CC3 (for example, CC3TOP, CC3MIDDLE, CC3BOTTOM) use CC3*.

Note 2: For more information on these operators and their use, refer to Chapter 12 of the Northern Telecom manual titled: Meridian / Data Voice System / Informix* 4GL User Guide. This manual is published by Relational Database Systems, Inc., part no. 200-501-0001-0.

* Informix is a registered trademark of Relational Database Systems, Inc.

Table 7-B
LOGICAL AND RELATIONAL OPERATORS

SYMBOL	NAME	APPLICABLE DATA TYPES	MODELS
=	equal to	numeric and alphabetic	=x
>	greater than	numeric and alphabetic	>x
<	less than	numeric and alphabetic	<x
>=	greater than or equal to	numeric and alphabetic	>=x
<=	less than or equal to	numeric and alphabetic	<=x
<>	not equal to	numeric and alphabetic	<>x
:	range	numeric and alphabetic	x:y
*	wildcard	alphabetic	*x, x*, *x*
?	single character wildcard	alphabetic	?x, x?, ?x?, x??
|	or	numeric and alphabetic	x|y

VIEWING, CREATING, AND CHANGING FACILITY MAPPINGS

The Current-Mapping Query Criteria Screen

7.10 ***Field Information.*** The Current-Mapping Query Criteria screen (see Fig. 7-2) is used to access the Facility Mapping table for the purpose of viewing the facility mappings, changing a facility mapping, and deleting a facility mapping (see Fig. 7-3). The following list describes the information required as data for the fields of the Query Criteria screen.

> ***Note:*** The fields of the Query Criteria screen overflow into an input window that appears at the bottom of the screen. If you type data to the limit of the field as it first appears on the screen , the input window appears. This window accomodates up to 80 characters of data. Figure 7-2 illustrates the input window as it appears when the value T (for trunk) is typed into the Facility Type field.

(a) ***Facility Type.*** This field identifies the types of facilities that you are querying. The data entry is either T (trunk), C (customer group), A (attendant console), or a blank space to represent all of the types of facilities.

(b) ***Facility Name.*** This field is the name of the facility.

(c) ***Facility Id.*** This field is the numeric identificafion that is used to identify the facility in call detail records.

(d) ***Node Name.*** This field is the name of the node.

```
Please enter query criteria
ESC to query.  BREAK to quit.

           Facility Type  :  <T>

           Facility Name  :  <         >

           Facility Id    :  <      >

           Node Name      :  <         >


[T                                                                     ]
                          Input Window
```

Fig. 7-2
Fields of the Query Criteria Screen, with the Input Window Activated

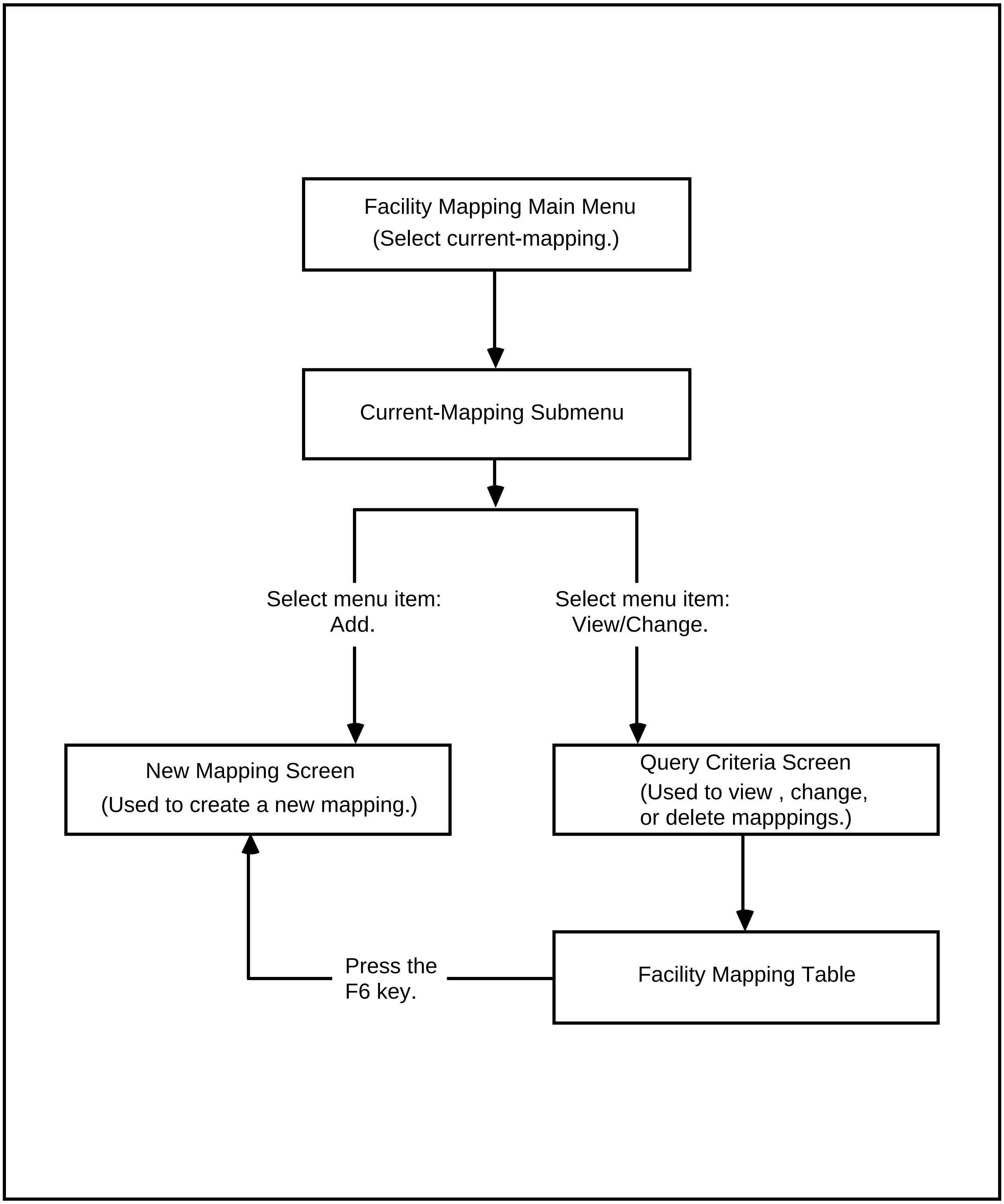
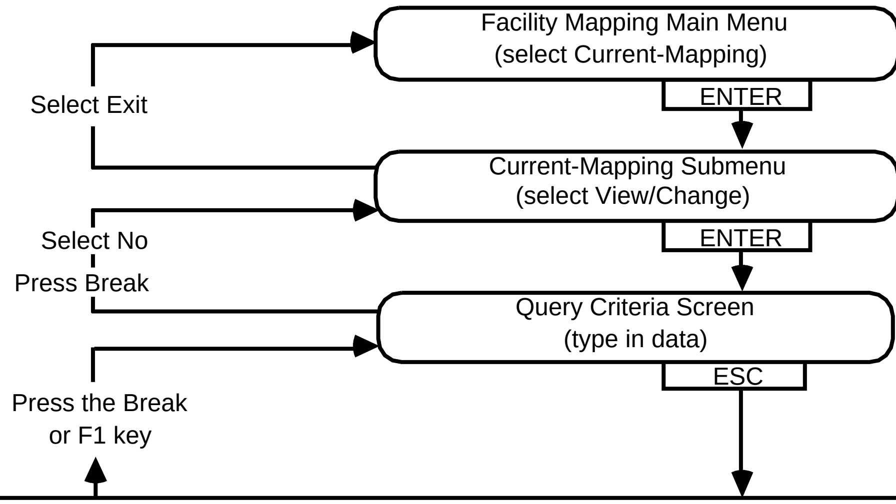


Fig. 7-3
Flowchart of the Facility Mapping Menus And Screens



Facility Mapping Database Query Result

Node Name	Facility Type	Facility Name	Facility Id
SL1-DA	C	CG1	1
SL1-DA	C	CG10	10
SL1-DA	T	TDACA1W	99
SL1-DA	T	TDATX2W	6
SL1-TX	T	TTXDA2W	10
SL1-TX	A	ACO	0

BREAK/F1-Exit	F2-	F3-Next Page	F4-Previous Page	F5-
F6-Add	F7-Delete	F8-Change	F9-	F10-

Fig. 7-4
Viewing the Mappings

Viewing the Table of Existing Mappings

7.11 ***The Procedure for Viewing Existing Facility Mappings.*** To query the database to view the table of facility mappings (see Fig. 7-4) proceed as follows:

(1) Select "Current-Mapping". Press ***ENTER***.
==> The Current-Mapping submenu appears.

(2) Select "View/Change". Press ***ENTER***.
==> The Query Criteria screen appears, with the cursor on the Facility Type field.

(3) Type in the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Node Name, the cursor returns to the Facility Type field.

(4) Press ***ESC.***
==> The mapping are displayed in table form (see Fig. 7-4). Use the ***F3*** and ***F4*** function keys to page through the information.

7.12 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The Query Criteria screen appears.

(2) Press the ***BREAK*** key.
==> The Query Criteria screen reappears with a prompt at the top of the screen: SEARCH FOR OTHER FACILITY MAPPINGS?: YES NO.

(3) Select No. Press ***ENTER.***
==> The Current-Mapping submenu appears.

(4) Select Exit. Press ***ENTER.***
==> The Facility Mapping main menu appeasrs.

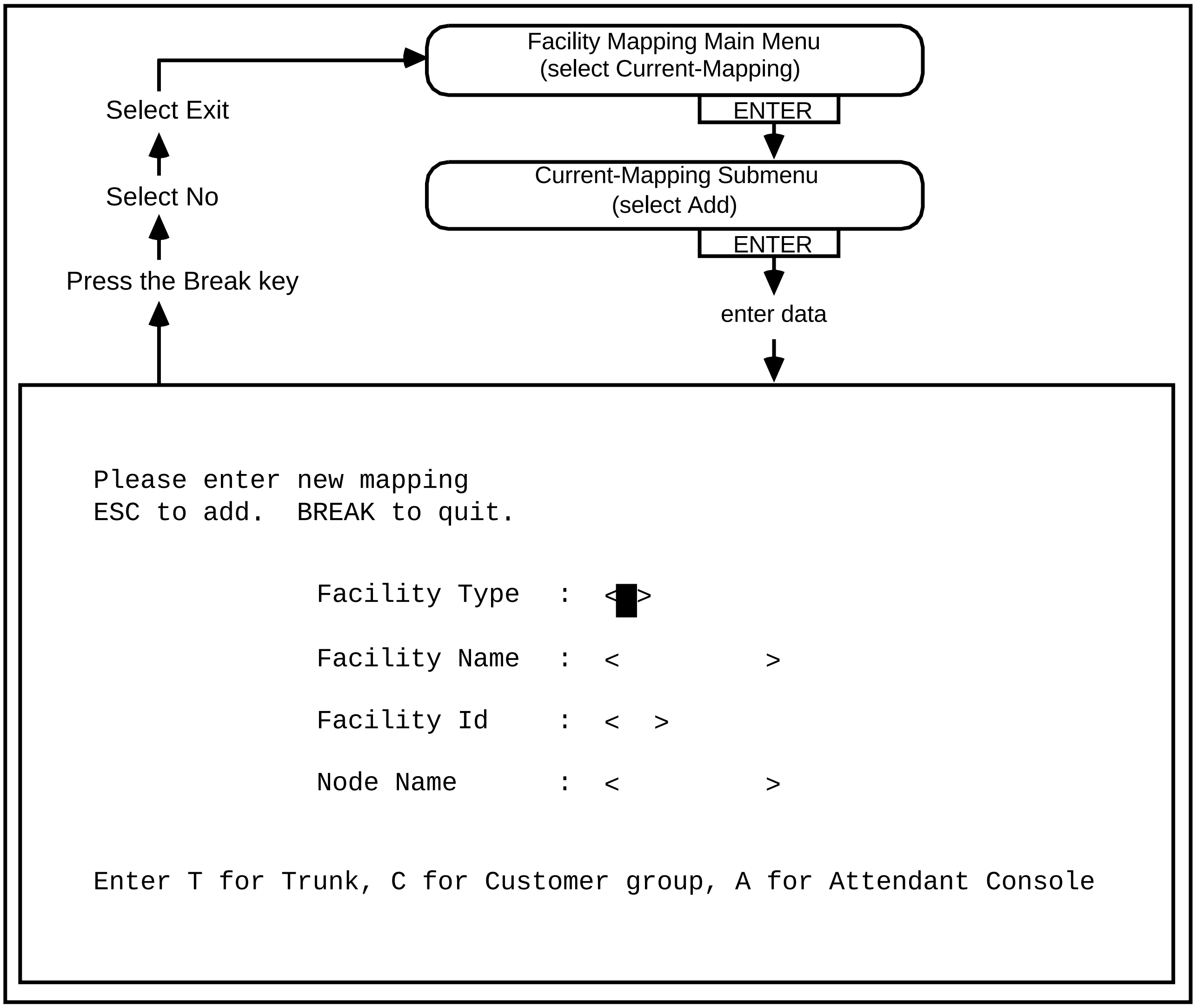


Fig. 7-5
Creating a Facility Mapping

Creating a Facility Mapping

7.13 ***Field Information.*** Using the New Mapping screen, the user can create a facility mapping. The following list describes the information required as data for the fields of the new mapping screen (see Fig. 7-5).

(a) ***Facility Type.*** This one-character field identifies the type of facility to be added. The data entry is either T (trunk), C (customer group), or A (attendant console).

(b) ***Facility Name.*** This field is the name of the facility. A maximum of sixteen characters of data may be entered.

(c) ***Facility Id.*** This field is the numeric identificafion that is used to identify the facility in call detail records. A maximum of four characters of data may be entered.

(d) ***Node Name.*** This field is the name of the node. A maximum of sixteen characters of data may be entered.

7.14 ***The Procedure for Creating a Facility Mapping.*** To add a new facility mapping to the database, proceed as follows:

(1) Select "Current-Mapping". Press ***ENTER***.
==> The Current-Mapping submenu appears.

(2) Select "Add". Press ***ENTER***.
==> The New Mapping screen appears, with the cursor on the Facility Type field.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Node Name, the cursor returns to the Facility Type field.

(4) Press ***ESC.***
==> The new facility mapping is added.

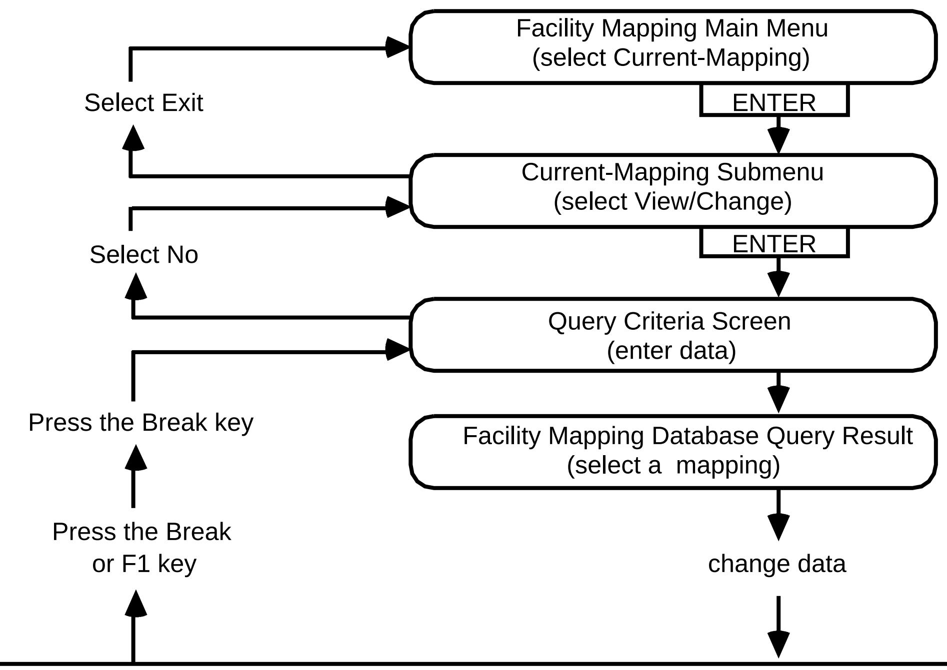
Note: To add another mapping, return to Step 3.

7.15 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** key .
==> The New-Mapping screen reappears with a prompt at the top of the screen: ADD ANOTHER ENTRY?: YES NO.

(2) Select No. Press ***ENTER.***
==> The Current-Mapping submenu appears.

(3) Select Exit. Press ***ENTER.***
==> The Facility Mapping main menu appears.



[redacted]

Facility Mapping Database Query Result

Node Name	Facility Type	Facility Name	Facility Id
SL1-DA	C	CG1	1
SL1-DA	C	CG10	10
[redacted]	T	TDACA1W	99
SL1-DA	T	TDATX2W	6
SL1-TX	T	TTXDA2W	10
SL1-TX	A	ACO	0

BREAK/F1-Exit	F2-	F3-Next Page	F4-Previous Page	F5-
F6-Add	F7-Delete	F8-Change	F9-	F10-

Enter new node name. Hit return to retain current value.

Fig. 7-6
Changing a Facility Mapping

Changing a Facility Mapping

7.16 ***The Procedure for Changing a Facility Mapping.*** To change a facility mapping (see Fig. 7-6) proceed as follows:

(1) Select "Current-Mapping". Press ***ENTER***.
==> The Current-Mapping submenu appears.

(2) Select "View/Change". Press ***ENTER***.
==> The Query Criteria screen appears.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Node Name, the cursor returns to the Facility Type field.

(4) Press ***ESC.***
==> The current mapping of facilities is displayed in table form.

(5) Use the ***F3*** and ***F4*** function keys to page through the information. Place the cursor on the mapping that you wish to change. Press the ***F8*** key .
==> The table reappears, with the fields of the selected mapping in reverse video. The cursor appears on the Node Name field.

(6) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Facility Id, the cursor returns to the Node Name field.

(7) Press ***ESC.***
==> The changed mapping is added to the database.

Note: To change another mapping, return to Step 5.

7.17 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The Query Criteria screen appears.

(2) Press the ***BREAK*** key.
==> The Query Criteria screen reappears with a prompt at the top of the screen: SEARCH FOR OTHER FACILITY MAPPINGS?: YES NO.

(3) Select No. Press ***ENTER.***
==> The Current-Mapping submenu appears.

(4) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

Deleting a Facility Mapping

7.18 ***The Procedure for Deleting a Facility Mapping.*** To delete a facility mapping, proceed as follows:

(1) Select "Current-Mapping". Press ***ENTER***.
==> The Current-Mapping submenu appears.

(2) Select "View/Change". Press ***ENTER***.
==> The Query Criteria screen appears.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Node Name, the cursor returns to the Facility Type field.

(4) Press ***ESC.***
==> The current mapping of facilities is displayed in table form.

(5) Use the ***F3*** and ***F4*** function keys to page through the information. Place the cursor on the mapping that you wish to delete. Press the ***F7*** key .
==> The Current Mapping table reappears with a prompt at the top of the screen: CONFIRM DELETE?: YES NO.

(6) Select Yes. Press ***ENTER.***
==> The mapping is deleted from the current mapping table.

7.19 ***Exiting.*** To return to the facility mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The system returns you to the Query Criteria screen.

(2) Press the ***BREAK*** key.
==> The Query Criteria screen reappears with a prompt at the top of the screen: SEARCH FOR OTHER FACILITY MAPPINGS?: YES NO.

(3) Select No. Press ***ENTER.***
==> The Current-Mapping submenu appears.

(4) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

VIEWING, CREATING, AND CHANGING MAPPING SCHEDULES

The Future-Mapping Query Criteria Screen

7.20 ***Field Information.*** The Future-Mapping Query Criteria screen (see Fig. 7-7) is used to access the Mapping Schedule table for the purpose of viewing the mapping schedules, changing a mapping schedule, and deleting a mapping schedule (see Fig. 7-8). The following list describes the information required as data for the fields of the query criteria screen.

> ***Note:*** The fields of the Query Criteria screen overflow into an input window that appears at the bottom of the screen. That is, if you type data to the limit of the field as it first appears on the screen , an input window appears which accomodates up to 80 characters of data.

(a) ***Node Name.*** This field is the name of the node.

(b) ***Changing Date.*** This field is the date that the facility mapping comes into effect. The form of the date is yy/mm/dd.

(c) ***Changing Time.*** This field is the hour and the minute that the facility mapping comes into effect. The acceptable values for the hour range from 0 through 23. The acceptable values for the minute range from 0 through 59.

```
Please enter query criteria:
ESC to query. BREAK to quit.


          Node Name  :  <         >

      Changing Date  :  <                >

        Changing Time:  <   :   >


Enter node name pattern. Default is any node.
```

Fig. 7-7
Fields of the Query Criteria Screen

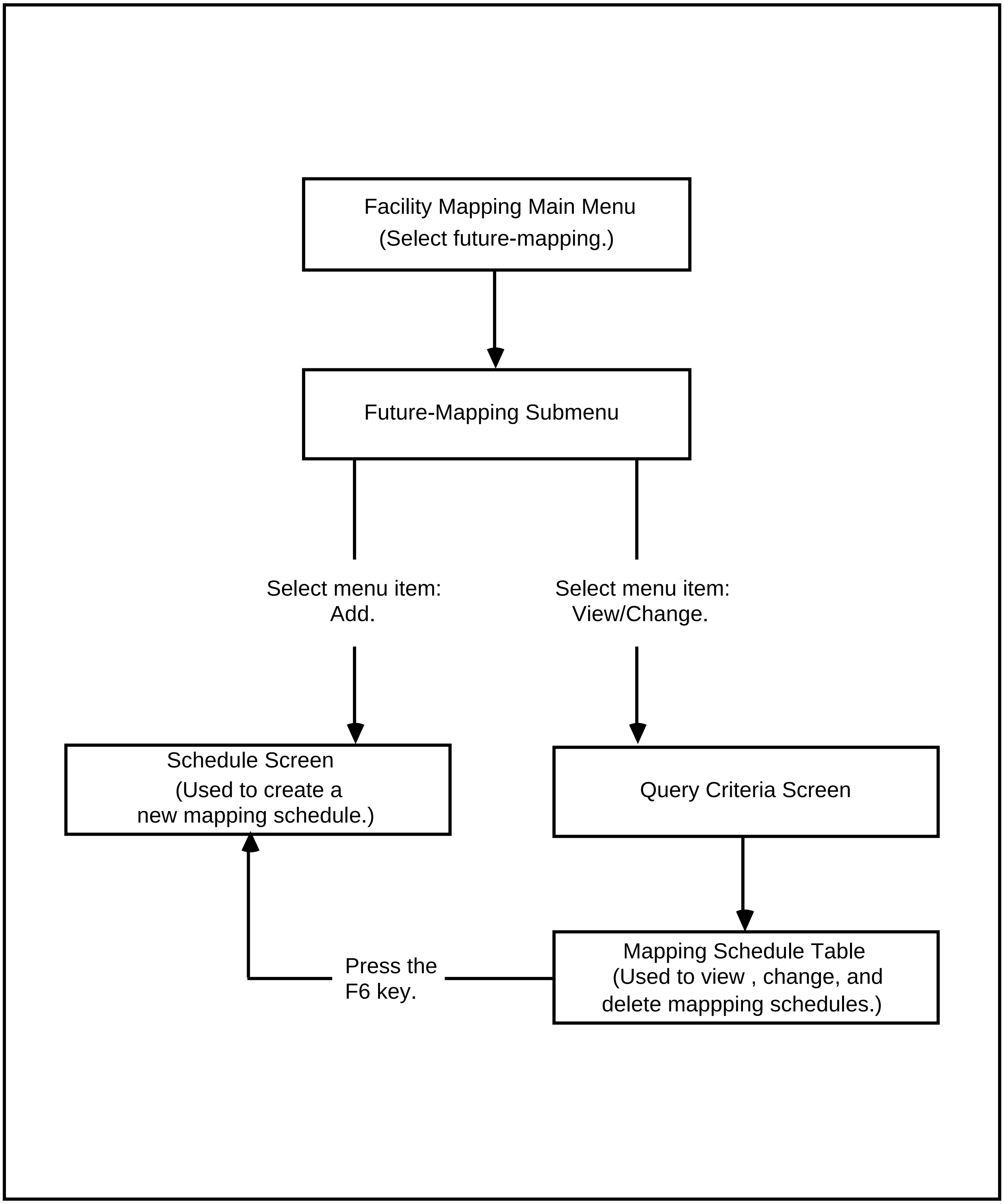


Fig. 7-8
Flowchart of Mapping Schedule Menus and Screens

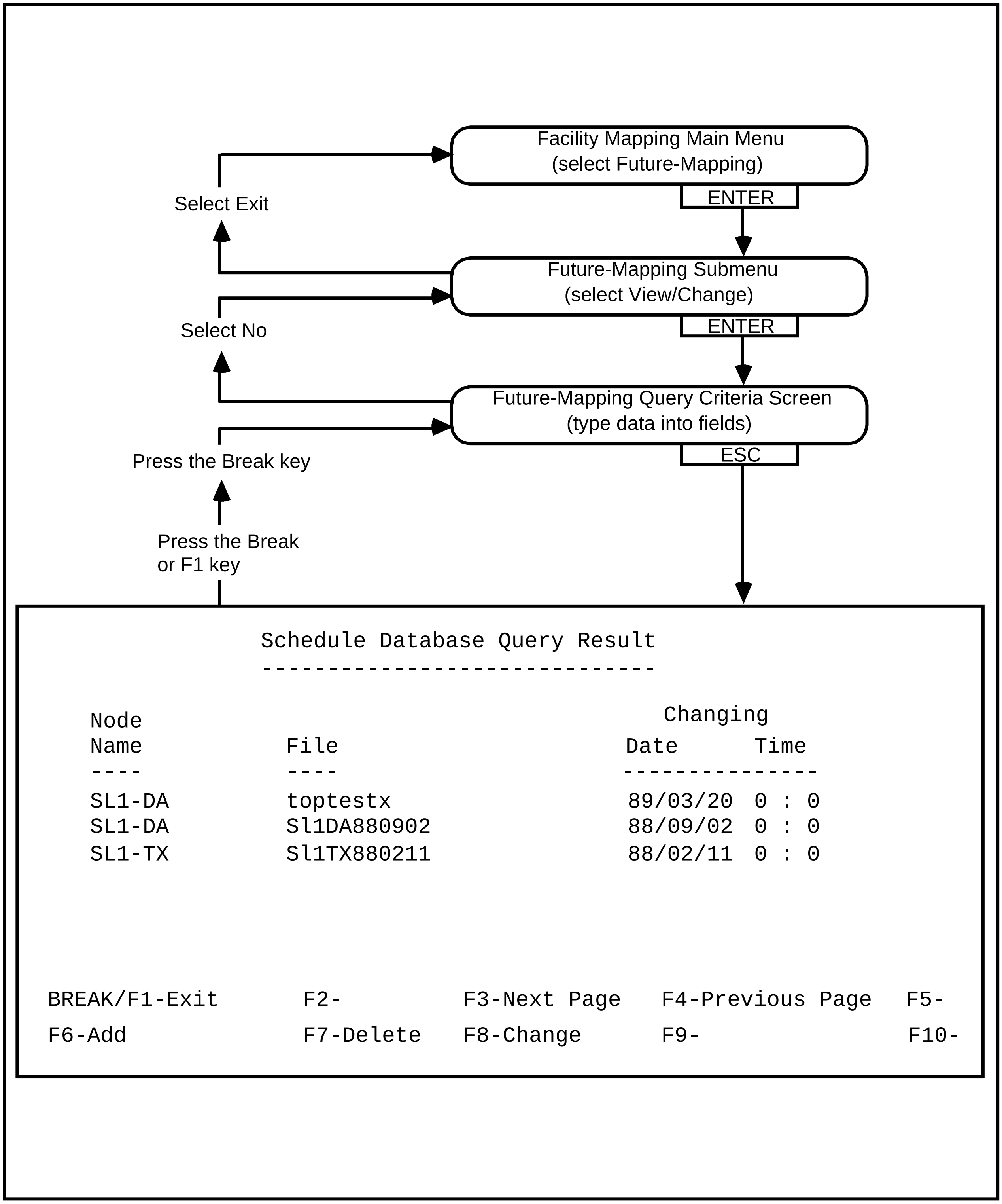


Fig. 7-9
Viewing the Mapping Schedule

Viewing the Mapping Schedule

7.21 ***The Procedure for Viewing the Mapping Schedule.*** To query the mapping schedule (see Fig. 7-9) proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "View/Change". Press ***ENTER***.
==> The Query Criteria screen appears.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Changing Time, the cursor returns to the Node Name field.

(4) Press ***ESC.***
==> The schedule of the facilities is displayed in table form. Use the ***F3*** and ***F4*** function keys to page through the information.

7.22 ***Exiting.*** To return to the facility mapping main menu, proceed as follows:

(1) Press the ***F1*** key.
==> The system returns you to the Query Criteria screen.

(2) Press the ***BREAK*** key.
==> The Query Criteria screen reappears with a prompt at the top of the screen: SEARCH FOR OTHER FACILITY MAPPINGS?: YES NO.

(3) Select No. Press ***ENTER.***
==> The Future-Mapping submenu appears.

(4) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

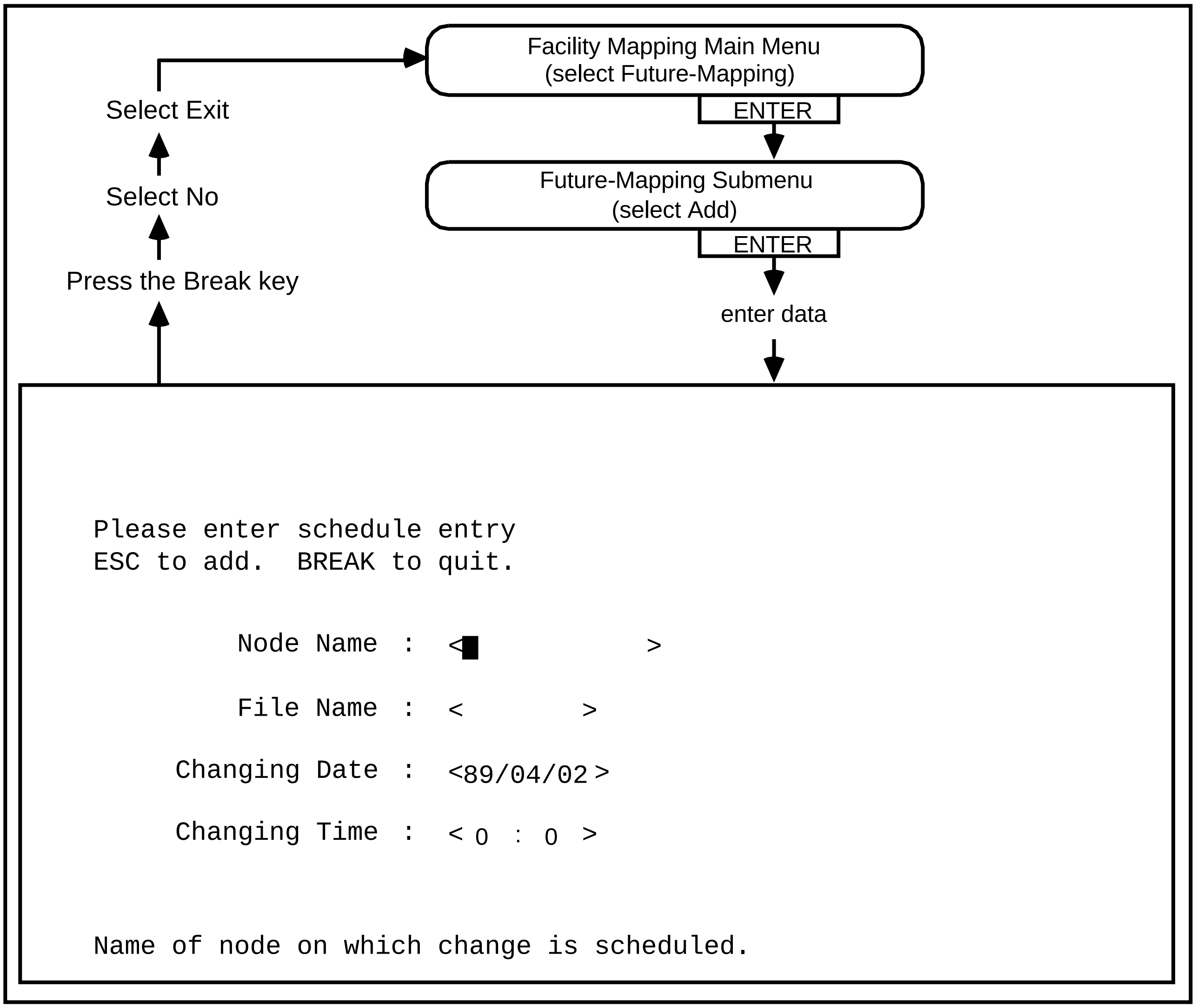


Fig. 7-10
Creating a Mapping Schedule

Creating a Mapping Schedule

7.23 ***Field Information.*** Using the schedule screen (see Fig. 7-10) the user can create a mapping schedule. The following list describes the information required as data for the fields of the schedule screen .

(a) ***Node Name.*** This field is the name of the node for which the schedule is being created. A maximum of sixteen characters of data may be entered.

(b) ***Mapping File.*** This field is the name of the file that contains the facility mapping of the node. A maximum of ten characters of data may be entered.

(c) ***Changing Date.*** This field is the date that the facility mapping comes into effect. The form of the date is yy/mm/dd. A maximum of ten characters are allowed in this field. The default is today's date.

(d) ***Changing Time.*** This field is the hour and the minute that the facility mapping comes into effect. The acceptable values for the hour range from 0 through 23. The acceptable values for the minute range from 0 through 59. A maximum of two digits are allowed in both the hour and minute field. The default is 0 for the hour and 0 for the minute.

7.24 ***The Procedure for Creating a Mapping Schedule.*** To add a new mapping schedule to the database (see Fig. 7-10) proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "Add". Press ***ENTER***.
==> The schedule screen appears.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Changing Time, the cursor returns to the Node Name field.

(4) Press ***ESC.***
==> The new schedule is inserted in the schedule table.

Note 1: To add another schedule, return to Step 3.

Note 2: Before accepting the mapping and inserting it into the schedule database, the system checks to ensure that the file data agrees with the BNM Node table; that the mapping file is compatible with the node; that the same mapping file has not already been created; and that the node identification and changing time are unique in the mapping schedule table. If either the file does not exist or it has not been validated, an error message is displayed. To validate a file, refer to the procedure "Validating a Mapping File," located in this chapter.

Note 3: After successful insertion of a mapping schedule into the Schedule table, the file has read-only access.

7.25 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** key.
==> The schedule screen reappears with a prompt at the top of the screen: ADD ANOTHER ENTRY?: YES NO.

(2) Select No. Press ***ENTER.***
==> The Future-Mapping submenu appears.

(3) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

Changing a Mapping Schedule

7.26 ***The Procedure for Changing a Mapping Schedule.*** To change a facility mapping (see Fig. 7-11) proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "View/Change". Press ***ENTER***.
==> The Query Criteria screen appears.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Changing Time, the cursor returns to the Node Name field.

(4) Press ***ESC.***
==> The mapping schedule is displayed in table form.

(5) Use the ***F3*** and ***F4*** function keys to page through the information. Place the cursor on the schedule that you wish to change. Press the ***F8*** key .
==> The table reappears, with the fields of the selected schedule in reverse video. The cursor appears on the Node Name field.

(6) Type in the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the Changing Time field, the cursor returns to the Node Name Field.

(7) Press ***ESC.***
The changed schedule is added to the schedule database.

Note: To change another schedule, return to Step 5.

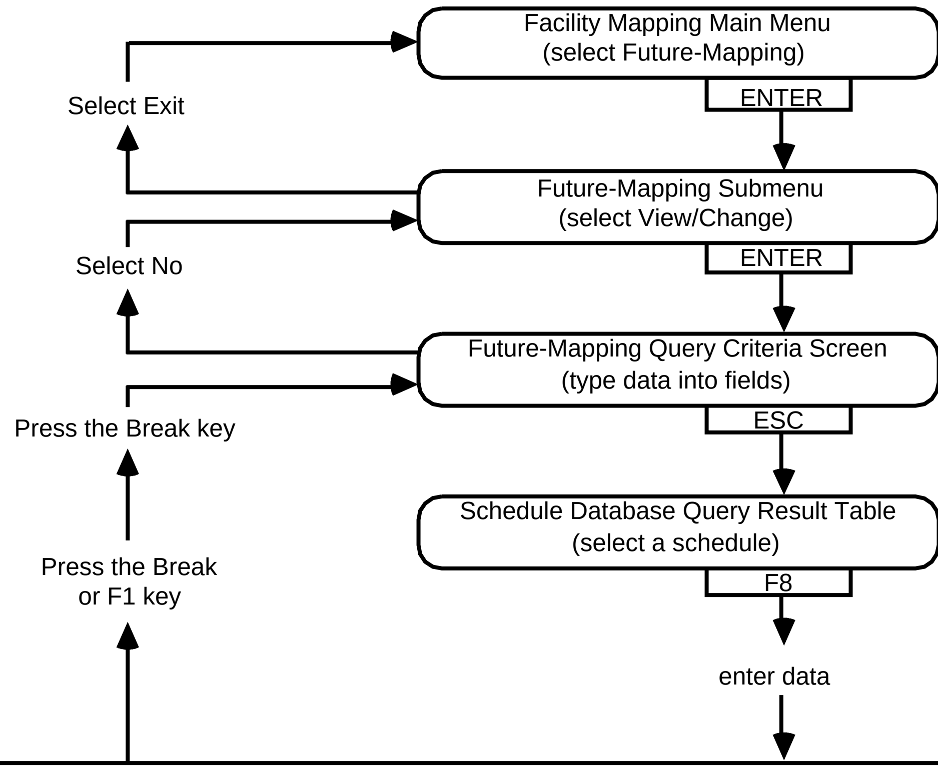
7.27 ***Exiting.*** To return to the facility mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The system returns you to the Query Criteria screen.

(2) Press the ***BREAK*** key.
==> The Query Criteria screen reappears with a prompt at the top of the screen: SEARCH FOR OTHER SCHEDULES?: YES NO.

(3) Select No. Press ***ENTER.***
==> The Future-Mapping submenu appears.

(4) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.



[redacted]

Schedule Database Query Result

Node Name	File	Changing Date	Time
[redacted]	toptestx	89/03/20	0 : 0
SL1-DA	Sl1DA880902	88/09/02	0 : 0
SL1-TX	Sl1TX880211	88/02/11	0 : 0

BREAK/F1-Exit	F2-	F3-Next Page	F4-Previous Page	F5-
F6-Add	F7-Delete	F8-Change	F9-	F10-

Enter new node name. Hit return to retain current value.

Fig. 7-11
Changing a Mapping Schedule

Deleting a Mapping Schedule

7.28 ***The Procedure for Deleting a Facility Mapping.*** To delete a facility mapping, proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "View/Change". Press ***ENTER***.
==> The Query Criteria screen appears.

(3) Type the data for the fields, pressing ***ENTER*** at each field to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field Changing Time, the cursor returns to the Node Name field.

(4) Press ***ESC.***
==> The mapping schedule is displayed in table form.

(5) Use the ***F3*** and ***F4*** function keys to page through the information. Place the cursor on the mapping that you wish to delete. Press the ***F7*** key .
==> The mapping schedule table reappears with a prompt at the top of the screen: CONFIRM DELETE?: YES NO.

(6) Select Yes. Press ***ENTER.***
==> The schedule is deleted.

7.29 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The system returns you to the Query Criteria screen.

(2) Press the ***BREAK*** key.
==> The Query Criteria screen reappears with a prompt at the top of the screen: SEARCH FOR OTHER SCHEDULES?: YES NO.

(3) Select No. Press ***ENTER.***
==> The Future-Mapping submenu appears.

(4) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

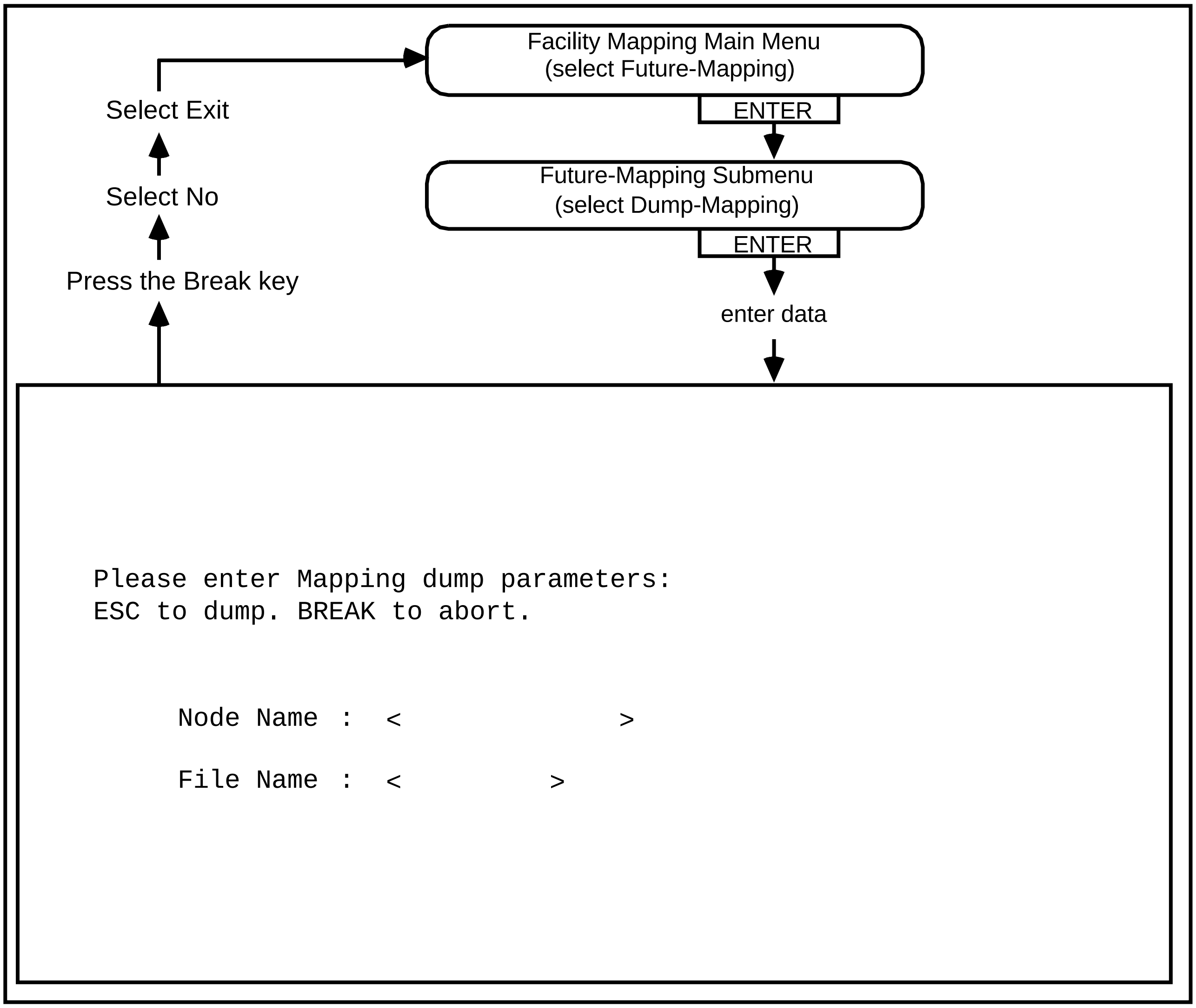


Fig. 7-12
Generating a Mapping File from the Current Database

GENERATING, EDITING, AND VALIDATING A MAPPING FILE

Generating a Mapping File from the Current Database

7.30 ***Field Information.*** Using the mapping dump screen (see Fig. 7-12) the user can generate a mapping file for editing and future inclusion in the database. The following list describes the information required as data for the fields of the mapping dump screen.

(a) ***Node Name.*** This field is the name of the node whose facility mapping will be dumped to a file. A maximum of sixteen characters of data may be entered.

(b) ***File Name.*** This field is the name of the file that will contain the facility mapping. A maximum of ten characters of data may be entered.

7.31 ***The Procedure for Dumping a Mapping to a File.*** To generate a mapping file (see Fig. 7-12) proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "Dump mapping". Press ***ENTER***.
==> The Mapping Dump screen appears.

(3) Type the data for the fields, pressing ***ENTER*** to move from field to field.
==> After you have pressed ***ENTER*** for the last field, that is, the field File Name, the cursor returns to the Node Name field.

(4) Press ***ESC.***
==> The mapping is dumped to the file, and a prompt appears at the top of the screen: DUMP ANIOTHER MAPPING?: YES NO.

(5) To dump another mapping, select Yes and press ***ENTER***.
==> The system returns you to Step 3.

7.32 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** key.
==> The Mapping-Dump Parameters screen reappears with a prompt at the top of the screen: DUMP ANOTHER MAPPING?: YES NO.

(2) Select No. Press ***ENTER.***
==> The Future-Mapping submenu appears.

(3) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

Editing a Dumped Mapping File

7.33 To edit a dumped mapping file (see Fig. 7-13) proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "Change-Mapping". Press ***ENTER***.
==> A list of the mapping files appears (see Fig. 7-13).

(3) Select the file that you want to edit. Press ***F7***.
==> A file is opened and the system provides you with the standard UNIX "vi" editor.

Note: For instructions on using the editor, refer to the Northern Telecom manual titled: Meridian / Data Voice System / DVIX V* (Volume 2).

(4) Make the desired changes to the file. To save the file and quit the vi editor, hold down the ***SHIFT*** key and press the ***Z*** key twice.
==> The file is saved, and the mapping file list reappears.

Note: To edit another mapping file, return to Step 3.

7.34 ***Exiting.*** To return to the facility mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The system returns you to the Future-Mapping submenu.

(2) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

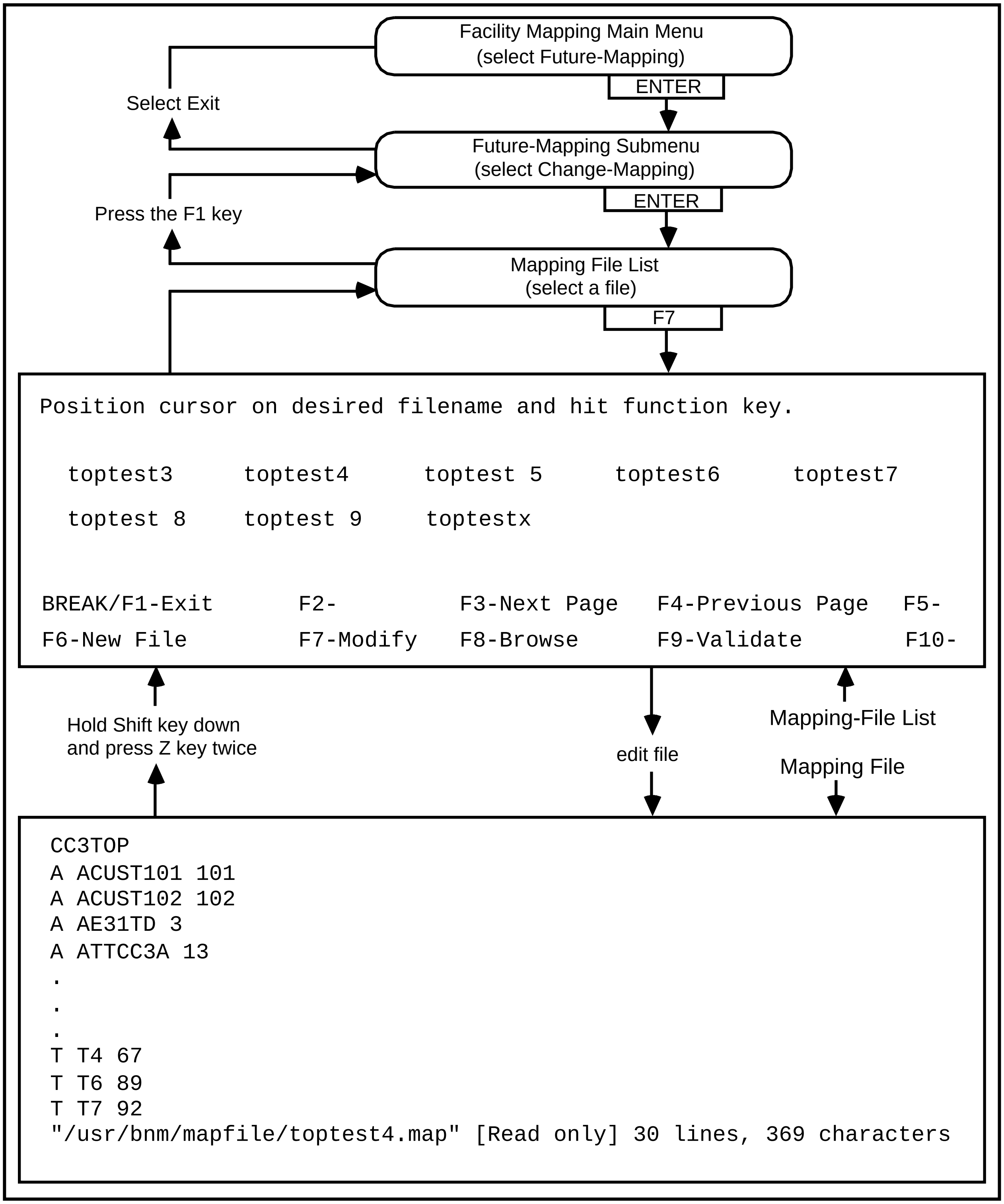


Fig. 7-13
Editing a Mapping File

Validating a Mapping File

7.35 During the validation of a mapping file, the system checks to ensure that the file data agrees with the BNM Node table; that the mapping file is compatible with the node; that the same mapping file has not already been created; and that the node identification and changing time are unique in the mapping schedule table.

7.36 To validate a mapping file, proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "Change-Mapping". Press ***ENTER***.
==> A list of mapping files appears.

(3) Select the file that you want to validate. Press ***F9***.
==> At the top of the screen, the system responds with VALIDATION IN PROGRESS.... When validation is successfully completed, the system responds with FILE VALIDATED SUCCESSFULLY.

Note: If validation fails, the system responds with ERROR(S) FOUND IN THE FILE. EDIT THE FILE FOR DETAILS. At this point, follow the procedure "Editing A Facility Mapping File" to enter the file and correct the errors. The errors are flagged in the file.

7.37 ***Exiting.*** To return to the Facility Mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The system returns you to the Future-Mapping submenu.

(2) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.

USING THE EDITOR TO CREATE A NEW MAPPING FILE

7.38 To create a new mapping file, proceed as follows:

(1) Select "Future Mapping". Press ***ENTER***.
==> The Future-Mapping submenu appears.

(2) Select "Change-Mapping". Press ***ENTER***.
==> A list of the mapping files appears.

(3) Press the ***F6*** key.
==> A prompt appears at the top of the screen: ENTER NEW FILE NAME (MAX. 10 CHAR LONG).

(4) Enter the name of the file that you want to create. Press ***ENTER.***
==> A new file is opened. The system provides you with the standard UNIX "vi" editor.

(5) Type data into the file. To save the file and quit the vi editor, hold down the ***SHIFT*** key and press the ***Z*** key twice.
==> The file is saved, and the mapping file list reappears.

7.39 ***Exiting.*** To return to the facility mapping main menu, proceed as follows:

(1) Press the ***BREAK*** or ***F1*** key.
==> The system returns you to the Future-Mapping submenu.

(2) Select Exit. Press ***ENTER.***
The Facility Mapping main menu appears.