



HP 3000 Computer Systems

HPMENU

Administration Manual



**HEWLETT
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OVERVIEW

SECTION

I

HPMenu provides users with a friendly, menu-driven, customizable interface for transitions between system functions (including HP products), user-written applications, and MPE commands. HPMenu is designed for all HP3000 users.

There are some terms used in this manual that you may or may not be familiar with. Look over the terms and definitions that follow; they will come in handy as you read through this document.

- Choice** - Refers to a function or a menu.
- Classify** - Refers to the act of identifying a new choice as a menu or a function.
- Customize** - Refers to the user's ability to change the menus and functions that comprise HPMenu.
- Customizer** - A person designated to customize HPMenu.
- Function** - Refers to one or more commands (generally MPE commands) which, when executed, perform one or more actions; e.g., the commands required to run HPSLATE and print a file.
- Menu** - Refers to a list of choices displayed on the terminal.
- Point and Push-** Refers to the act of pushing a function key to move a highlighted box from one choice to another on a menu.

Overview

HPMenu is easy to learn, and the Customization facility allows each user to tailor menus to match his or her own needs. Each user may have different names for the same functions and organize them in different ways, and a single user can set up several sets of menus corresponding to the tasks to be performed.

Inexperienced users can invoke system functions without being aware of the MPE programs and file structures which support them. Users select from a menu by "point and push", by number, or by typing a name. They can choose by recognition rather than recall, with three keystrokes or fewer. In addition, HPMenu allows experienced users to access functions by name.

HPMenu has the following features:

- It provides an easy-to-understand interface with MPE.
- It provides a set of menus for selection of system functions. Users needn't remember anything (names, syntax, etc.) to invoke a choice from a menu. If a choice is known, however, it can be typed by name to bypass intermediate menus.
- It allows the user to customize the set of menus that appear.
- It enhances the usability of the system.
- It enables users to invoke most system functions with minimal keystrokes.
- It recovers customization information in the event of a system crash.

INSTALLATION INSTRUCTIONS

Installation instructions are provided on the Master Installation Tape (MIT). They are contained in the file named G00G112A.HP32112.HPPL85. (The product code letter (A in GOOG112A) may be different depending on the version of HPMenu that you have. To verify this letter, log on to HPMenu and check the Copyright message.)

USING HPMENU: EXAMPLE

Here's an example of how simple it is to use HPMenu. After you log on, let's assume you want to access HPDRAW to continue working on a slide, but you don't remember the file name for the slide. You'll need to use LISTF. Let's assume this is on the "MPE Commands" menu. You choose to use "point and push" to highlight your choice. To do so you press **NEXT CHOICE** until "MPE Commands" is highlighted.

HPMENU	Selection	Menu: Main Menu
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
■ Choice Number		
* 1 Office Functions		
* 2 MPE Commands		
* 3 Special Function		
- OR -		
[REDACTED] Name of any Known Choice		
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Custom-ization	REFRESH
	HELP	EXIT HPMENU



Overview

Now press **PERFORM CHOICE**. (You could also press the **COMMAND MODE** key and type "LISTF" at the "!" prompt.)

HPMENUSelectionMenu: Main Menu

Press **PREVIOUS CHOICE** or **NEXT CHOICE** until the desired choice is highlighted
OR type a choice number OR any known name. Then press **PERFORM CHOICE**.

■ Choice Number

- * 1 Office Functions
- * 2 **MPE Commands**
- * 3 Special Function

- OR -

Name of any Known Choice

PERFORM CHOICEPREVIOUS CHOICENEXT CHOICECOMMAND MODE

Custom-izationREFRESHHELPEXIT HPMENU



Next, the "MPE Commands" menu appears. Here you type the number for LISTF in the Choice Number box as shown on the next screen and press **PERFORM CHOICE**.

Overview

HPMENU	Selection	Menu: MPE Commands
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
2 Choice Number		
1	Fcopy	11 Showtime
2	Listf	12 Editor
3	ListUser	13 HPWORD
4	Recall	14 HPSLATE
5	ShowDev	15 ListDir2
6	ShowIn	16 ListEq2
7	ShowJob (Jobs)	
8	Show Sessions	
9	ShowMe	
10	ShowOut	
- OR -		
	Name of any Known Choice	
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Custom-ization	REFRESH
	HELP	First Menu



The screen clears, and MPE lists your files.

FILENAME

MEMOSKEL MENUCAST QTRREPT REVIEWS SALES STATUSM USERUDC
XEQ

Press RETURN to Continue >

Overview

When you see this list you remember that the name of the slide file is REVIEWS. Next, you press RETURN to redisplay the previous menu, with the last choice you made highlighted.

HPMENU	Selection	Menu: MPE Commands
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
■ Choice Number		
1	Fcopy	11 Showtime
2	Listf	12 Editor
3	ListUser	13 HPWORD
4	Recall	14 HPSLATE
5	ShowDev	15 ListDir2
6	ShowIn	16 ListEq2
7	ShowJob (Jobs)	
8	Show Sessions	
9	ShowMe	
10	ShowOut	
- OR -		
	Name of any Known Choice	
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Custom-ization	REFRESH
	HELP	First Menu

Overview

Now that you know the name of the slide file (REVIEWS) you type "HPDRAW" in the Choice Box so you can make the revisions.

HPMENU	Selection	Menu: MPE Commands
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
■ Choice Number		
1 Fcopy	11 Showtime	
2 Listf	12 Editor	
3 ListUser	13 HPWORD	
4 Recall	14 HPSLATE	
5 ShowDev	15 ListDir2	
6 ShowIn	16 ListEq2	
7 ShowJob (Jobs)		
8 Show Sessions		
9 ShowMe		
10 ShowOut		
- OR -		
HPDRAW	Name of any Known Choice	
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Custom-ization	REFRESH
	HELP	First Menu



That's all there is to it. The next section of this manual describes how to customize HPMenu.

CUSTOMIZING HPMENU

SECTION

II

CHANGING THE FACE OF HPMENU

When you receive HPMenu it contains choices that may not be available on your system. To make sure that the choices on your system are reflected in HPMenu, you must customize HPMenu. To do so type:

```
:HELLO HPMENU.HPOFFICE
```

```
:RUN HPMENU.PUB.SYS; INFO="OKCUSTOM"
```

The first screen that appears will contain a function key labeled "Customization". Press this key to customize HPMenu. (For more information on how to customize for specific groups and how individual users can customize their own customization file, see "Invoking HPMenu".)

The following are examples of how to customize HPMenu to meet your needs. These examples are intended to provide you with step-by-step descriptions of typical activities performed with HPMenu. At each step, the screen displayed by HPMenu is shown and the function key used to perform the action is discussed.

The following topics are covered in this section:

- Customizing by editing a function
- Customizing by replacing the first menu with another
- Deleting a menu
- Saving Customization
- Customizing by renaming a function
- Deleting a function
- Creating a menu
- Customizing by copying an existing choice and editing it
- Creating a function
- Adding a function to a menu

Customizing HPMENU

Let's begin. We'll assume that the screen that follows is the first one displayed by HPMenu.

HPMENU	Selection	Menu: Pick-a-menu
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
■ Choice Number		
* 1	Office Functions	
* 2	MPE Commands	
* 3	Memo	
* 4	Languages	
* 5	Finance	
- OR -		
	■	Name of any Known Choice
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Customization	REFRESH
	HELP	EXIT HPMENU

Customizing HPMENU

Customizing by editing a function. Suppose you want to make a change in the definition of a function. To do so you must customize HPMenu. You begin by pressing the function key labeled **Customization**.

HPMENU	Selection	Menu: Pick-a-menu
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
■ Choice Number		
* 1	Office Functions	
* 2	MPE Commands	
* 3	Memo	
* 4	Languages	
* 5	Finance	
- OR -		
	■	Name of any Known Choice
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Customization	REFRESH
	HELP	EXIT HPMENU



Customizing HPMENU

This is the Main Customization screen. Let's say you want to edit a function called "weekly" by adding the MPE command LISTF and the HPMenu Reserved command "\$WAIT". These additions mean that when the function is executed, a list of your files will be displayed automatically and HPMenu will wait for you to press RETURN to continue. To indicate that you want to edit "weekly" you type in the word "weekly" and press Create/Edit.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	* 29	Subsystems		
* 10	MPE Commands	20	Show Sessions	* 30	Languages		
- OR -							
weekly		Name of any New or Known Choice					
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom



Customizing HPMENU

HPMenu recognizes the choice as a function and displays the Define Function screen, initialized with the current list of commands entered for "weekly". This function already has more than a page of commands, so you press NEXT LINES to add the commands to the end.

HPMENU		Define Function					
Type in the commands used to perform the function named below. To add more commands, press NEXT LINES. To save changes, press SAVE FUNCTION; to cancel them, press CANCEL CHANGES.							
This Function: Weekly							
\$message Starting to do the weekly reports from info in file SALESFIG.							
file suminput=salesfig							
run sumweek.joe.accting							
file memovar=sumout							
run genmemo.joe.accting							
\$message Now drawing the pictures							
run picture.pub.accting;info="PieChart"							
run picture.pub.accting;info="BarGraph"							
\$message Getting year-to-date figures from database.							
stream queryjob							
showjob							
\$wait							
SAVE FUNCTION		NEXT LINES			REFRESH	HELP	CANCEL CHANGES



Customizing HPMENU

Customizing by replacing the first menu with another. Suppose you want to replace the present first menu that appears when you invoke HPMenu with one called "Office Functions". To do so you press **OTHER KEYS** on the Main Customization screen. HPMenu displays a new set of function keys.

HPMENU		Main Customization	
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.			
■ Choice Number			
* 1	Menu Selection	11	Fcopy
2	HPSLATE	12	Help for MPE
3	HPWORD	13	Listf
4	HPMAIL	14	ListUser
5	HPEasyChart	15	Recall
6	HPDRAW	16	ShowDev
7	DSG	17	ShowIn
8	Inform	18	ShowJob (All)
9	IDSCHAR	19	ShowJob (Jobs)
* 10	MPE Commands	20	Show Sessions
		21	ShowMe
		22	ShowOut
		23	Weekly
		24	ShowTime
		25	BASIC
		26	COBOL
		27	FORTTRAN
		28	Pascal
		* 29	Subsystems
		* 30	Languages
- OR -			
Name of any New or Known Choice			
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS
Delete	REFRESH	HELP	End Custom



Customizing HPMENU

Now type "Office Functions" in the box at the lower left and press **Select 1st Menu**.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	* 29	Subsystems		
* 10	MPE Commands	20	Show Sessions	* 30	Languages		
- OR -							
Office Functions		Name of any New or Known Choice					
Select 1st Menu	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Copy/ Rename	REFRESH	HELP	End Custom



Customizing HPMENU

Deleting a menu. Let's say you want to delete the menu called "Languages" from the list below. "Languages" is number 30 on the list. Type the number in the box provided and press **Delete**.

HPMENU		Main Customization	
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.			
30 Choice Number			
* 1 Menu Selection	11 Fcopy	21 ShowMe	
2 HPSLATE	12 Help for MPE	22 ShowOut	
3 HPWORD	13 Listf	23 Weekly	
4 HPMAIL	14 ListUser	24 ShowTime	
5 HPEasyChart	15 Recall	25 BASIC	
6 HPDRAW	16 ShowDev	26 COBOL	
7 DSG	17 ShowIn	27 FORTRAN	
8 Inform	18 ShowJob (All)	28 Pascal	
9 IDSCHAR	19 ShowJob (Jobs)	* 29 Subsystems	
* 10 MPE Commands	20 Show Sessions	* 30 Languages	
- OR -			
Name of any New or Known Choice			
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS
Delete		REFRESH	HELP
End Custom			



Customizing HPMENU

HPMenu displays the "Languages" menu so you can confirm the deletion. Do so by pressing **YES**.

The screenshot shows a terminal window titled "HPMENU" with a subtitle "Delete Menu". The main text asks, "Do you wish to delete the menu shown below? Press YES or NO." Below this, it specifies "This Menu: Languages" and lists the following programming languages: BASIC, COBOL, FORTRAN, Pascal, RPG, and SPL. At the bottom of the window, there are several buttons: "YES", three unlabeled buttons, "REFRESH", "HELP", and "NO". An upward-pointing arrow is located below the "YES" button.

After you confirm the deletion, HPMenu returns to Main Customization. Note that deleting the menu does not delete these choices from other menus in HPMenu.

Customizing HPMENU

Saving Customization. After customizing, press **End Custom**. HPMenu then gives you one last chance to save or reject the customization changes you've made.

HPMENU **Main Customization**

Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.

■ **Choice Number**

* 1 Menu Selection	11 Fcopy	21 ShowMe
2 HPSLATE	12 Help for MPE	22 ShowOut
3 HPWORD	13 Listf	23 Weekly
4 HPMAIL	14 ListUser	24 ShowTime
5 HPEasyChart	15 Recall	25 BASIC
6 HPDRAW	16 ShowDev	26 COBOL
7 DSG	17 ShowIn	27 FORTRAN
8 Inform	18 ShowJob (All)	28 Pascal
9 IDSCHAR	19 ShowJob (Jobs)	* 29 Subsystems
* 10 MPE Commands	20 Show Sessions	30 Sort

- OR -

[] Name of any New or Known Choice

Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom
-------------------------	--------------------------	----------------------	-----------------------	---------------	----------------	-------------	-----------------------



Customizing HPMENU

Press **YES** to save the changes or **NO** to leave the customization as it was when you last entered customization from the Selection menu.

The screenshot shows a terminal window titled "HPMENU" with a subtitle "Yes or No". The main text asks "Save this Customization?" and "Press YES or NO function key.". At the bottom, there is a row of function keys: YES, three unlabeled keys, REFRESH, HELP, and NO. An arrow points to the YES key.

HPMENU	Yes or No						
Save this Customization?							
Press YES or NO function key.							
YES					REFRESH	HELP	NO



Customizing HPMENU

Customizing by renaming a function. Suppose you want to rename the function "HPEasyChart" to "GRAPH". Here's how to do it. First, press **OTHER KEYS**.

HPMENU		Main Customization	
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.			
■ Choice Number			
* 1 Menu Selection	11 Fcopy	21 ShowMe	
2 HPSLATE	12 Help for MPE	22 ShowOut	
3 HPWORD	13 Listf	23 Weekly	
4 HPMAIL	14 ListUser	24 ShowTime	
5 HPEasyChart	15 Recall	25 BASIC	
6 HPDRAW	16 ShowDev	26 COBOL	
7 DSG	17 ShowIn	27 FORTRAN	
8 Inform	18 ShowJob (All)	28 Pascal	
9 IDSCHAR	19 ShowJob (Jobs)	* 29 Subsystems	
* 10 MPE Commands	20 Show Sessions	30 Sort	
- OR -			
Name of any New or Known Choice			
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS
Delete		REFRESH	HELP
		End Custom	



Customizing HPMENU

Next, type the number of the function you wish to change (5) and press Copy/Rename. (You could also type the name of the function in the box provided.)

HPMENU		Main Customization	
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.			
5 Choice Number			
* 1	Menu Selection	11	Fcopy
2	HPSLATE	12	Help for MPE
3	HPWORD	13	Listf
4	HPMAIL	14	ListUser
5	HPEasyChart	15	Recall
6	HPDRAW	16	ShowDev
7	DSG	17	ShowIn
8	Inform	18	ShowJob (All)
9	IDSCHAR	19	ShowJob (Jobs)
* 10	MPE Commands	20	Show Sessions
		21	ShowMe
		22	ShowOut
		23	Weekly
		24	ShowTime
		25	BASIC
		26	COBOL
		27	FORTRAN
		28	Pascal
		* 29	Subsystems
		30	Sort
- OR -			
Name of any New or Known Choice			
Select 1st Menu	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS
Copy/ Rename	REFRESH	HELP	End Custom



Customizing HPMENU

HPMenu displays the Copy or Rename screen initialized with the name of the choice you just selected.

HPMENU **Copy or Rename**

Type in the existing choice name and the new name in the highlighted boxes.
Then press COPY to make a copy of the existing choice, with the new name.
- OR -
Press RENAME to rename the choice to the new name.

Copy or Rename

HPEasyChart From

To

COPY **RENAME** **REFRESH** **HELP** **CANCEL**

Customizing HPMENU

Type in the information in the To box and press **RENAME**.

HPMENUCopy or Rename

Type in the existing choice name and the new name in the highlighted boxes.
Then press **COPY** to make a copy of the existing choice, with the new name.
- OR -
Press **RENAME** to rename the choice to the new name.

Copy or Rename

HPEasyChart From

GRAPH To

COPYRENAME REFRESHHELPCANCEL



Then HPMenu returns to Main Customization.

Customizing HPMENU

Deleting a function. Suppose you want to delete a function called "Sort". Suppose also that the function "Sort" is the only function in another choice called "Subsystems" (29). To delete this function you would type in the word "Sort" (or the number 30) and press **Delete**.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	* 29	Subsystems		
* 10	MPE Commands	20	Show Sessions	30	Sort		
- OR -							
sort		Name of any New or Known Choice					
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom



Customizing HPMENU

HPMenu displays the command definition for "Sort", and you confirm the deletion.

HPMENU		Delete Function				
Do you wish to delete the function shown below? Press YES or NO. (There may be more definition lines than shown here.)						
This Function: Sort						
run sort.pub.sys						
YES				REFRESH	HELP	NO



Customizing HPMENU

HPMenu deletes "Sort" and since "Sort" is the only remaining function on the menu "Subsystems", HPMenu automatically deletes "Subsystems" too. It then returns to Main Customization. (Notice on the screen shown here that "Subsystems", which used to be number 29, is gone.)

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	MPE Commands	20	Show Sessions	30	SPL		
- OR -							
Name of any New or Known Choice							
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom

Customizing HPMENU

Creating a menu. Suppose you want to create a menu called "Finance". Here's how it's done. After entering Main Customization, you type the name of the new menu in the box provided and press **Create/Edit**.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	MPE Commands	20	Show Sessions	30	SPL		
- OR -							
Finance		Name of any New or Known Choice					
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom



Customizing HPMENU

When HPMenu displays the Classify New Choice screen, identify "Finance" as a new menu by pressing the New Menu key.

HPMENU		Classify New Choice					
Classify the new choice shown below by pressing the appropriate function key. - OR - Press CANCEL if you don't want to create this new choice at all.							
New Choice: Finance							
New Menu	New Function				REFRESH	HELP	CANCEL



Customizing HPMENU

HPMenu goes to the Define Menu screen.

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: Finance			
Column 1	Column 2	Column 3	<u>Known Choices</u>
			* Menu Selection
			HPSLATE
			HPWORD
			HPMAIL
			HPEasyChart
			HPDRAW
			DSG
			Inform
			IDSCHAR
			* MPE Commands
SAVE MENU	PREVIOUS KNOWNS	NEXT KNOWNS	
			REFRESH
			HELP
			CANCEL CHANGES

Customizing HPMENU

Fill in the names of the functions and menus you want to appear on the new menu and press SAVE MENU.

HPMENUDefine Menu

Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.

This Menu: Finance

Column 1	Column 2	Column 3	
Account 4U			<u>Known Choices</u> * Menu Selection HPSLATE HPWORD HPMAIL HPEasyChart HPDRAW DSG Inform IDSCHAR * MPE Commands
Inventory			
Make-a-Memo			
Inform			
office functions			
payroll			
budget			

SAVE MENUPREVIOUS KNOWNSNEXT KNOWNS

REFRESHHELPCANCEL CHANGES



Customizing HPMENU

Before HPMenu can save this menu, all the choices on the list must exist. Any new choice that you may have entered on the new menu must be defined. In this example, "Account 4U", "Inventory", and "Make-a-Memo" are unknown choices, so HPMenu asks you to classify each of the new choices as either a new menu or a new function. The Classify New Choice screen is displayed. You identify "Account 4U" as a function by pressing New Function.

HPMENU		Classify New Choice			
Classify the new choice shown below by pressing the appropriate function key. - OR - Press CANCEL if you don't want to create this new choice at all.					
New Choice: Account 4U					
New Menu	New Function			REFRESH	HELP CANCEL



Customizing HPMENU

When you save this function, HPMenu returns to the Classify New Choice screen so you can classify the next choice ("Inventory") on your new "Finance" menu. Let's say you identify "Inventory" as a function.

HPMENUClassify New Choice

Classify the new choice shown below by pressing the appropriate function key.
- OR -
Press CANCEL if you don't want to create this new choice at all.

New Choice: Inventory

New
Menu

New
Function

REFRESH

HELP

CANCEL

↑

Customizing HPMENU

After you save the function, HPMenu moves on to the next new choice on the "Finance" menu, again starting with the Classify New Choice screen. This time you are asked if the choice, "Make-a-Memo", is a new menu or a new function. You identify it as a new menu.

HPMENU		Classify New Choice					
Classify the new choice shown below by pressing the appropriate function key. - OR - Press CANCEL if you don't want to create this new choice at all.							
New Choice: Make-a-Memo							
New Menu	New Function				REFRESH	HELP	CANCEL



Customizing HPMENU

HPMenu displays the Define Menu screen.

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: Make-a-Memo			
Column 1	Column 2	Column 3	<u>Known Choices</u>
			* Menu Selection
			HPSLATE
			HPWORD
			HPMAIL
			HPEasyChart
			HPDRAW
			DSG
			Inform
			IDSCHAR
			* MPE Commands
SAVE MENU	PREVIOUS KNOWNS	NEXT KNOWNS	
			REFRESH
			HELP
			CANCEL CHANGES

Customizing HPMENU

Type the list of choices that you want to include on your new menu. In this example, you also add the menu name "Finance" so you can return there easily. (Even though you are still in the middle of defining "Finance", adding it to the menu will present no problems because you identified "Finance" previously.) Finally, you save the menu. If any of the choices on this menu are new, HPMenu continues as before to ask for the definition of each new choice. This process continues until all choices on all submenus of the menu "Finance" are defined.

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: Make-a-Memo			
Column 1	Column 2	Column 3	Known Choices
hpword			* Menu Selection
hpmail			HPSLATE
graph			HPWORD
Finance			HPMAIL
			HPEasyChart
			HPDRAW
			DSG
			Inform
			IDSCHAR
			* MPE Commands
SAVE MENU	PREVIOUS KNOWNS	NEXT KNOWNS	
			REFRESH
			HELP
			CANCEL CHANGES



After all the choices are defined, HPMenu returns to Main Customization.

Customizing HPMENU

Customizing by copying an existing choice and editing it. Suppose you want to make a copy of your "MPE Commands" menu and replace some of the subsystems with system manager commands. On Main Customization, you begin by pressing **OTHER KEYS**.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	MPE Commands	20	Show Sessions	30	SPL		
- OR -							
		Name of any New or Known Choice					
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom



Customizing HPMENU

HPMenu changes the key labels. Next, you type the number of the "MPE Commands" menu and press Copy/Rename.

HPMENU		Main Customization	
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.			
10 Choice Number			
* 1	Menu Selection	11	Fcopy
2	HPSLATE	12	Help for MPE
3	HPWORD	13	Listf
4	HPMAIL	14	ListUser
5	HPEasyChart	15	Recall
6	HPDRAW	16	ShowDev
7	DSG	17	ShowIn
8	Inform	18	ShowJob (All)
9	IDSCHAR	19	ShowJob (Jobs)
* 10	MPE Commands	20	Show Sessions
		21	ShowMe
		22	ShowOut
		23	Weekly
		24	ShowTime
		25	BASIC
		26	COBOL
		27	FORTRAN
		28	Pascal
		29	RPG
		30	SPL
- OR -			
Name of any New or Known Choice			
Select 1st Menu	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS
Copy/ Rename		REFRESH	HELP
End Custom			



Customizing HPMENU

Type the name of the new menu for MPE commands and press **COPY**.

HPMENU Copy or Rename

Type in the existing choice name and the new name in the highlighted boxes.
Then press **COPY** to make a copy of the existing choice, with the new name.
- OR -
Press **RENAME** to rename the choice to the new name.

Copy or Rename

MPE Commands From

System Manager To

COPY **RENAME** **REFRESH** **HELP** **CANCEL**



Customizing HPMENU

HPMenu creates a copy as directed and returns to Main Customization. Next, you must press **OTHER KEYS** twice to change the function key labels. (The first function key should be labeled **Create/Edit**.)

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	System Manager	20	Show Sessions	30	SPL		
- OR -							
Name of any New or Known Choice							
Select 1st Menu	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Copy/ Rename	REFRESH	HELP	End Custom



Customizing HPMENU

Now, to edit the new copy so you can include the system manager commands, type the name of the new choice ("System Manager") in the box provided and press **Create/Edit**.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	System Manager	20	Show Sessions	30	SPL		
- OR -							
System Manager		Name of any New or Known Choice					
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom



Customizing HPMENU

HPMenu displays the Define Menu screen, initialized with the current list for "System Manager" (which is the same as the "MPE Commands" menu at this point).

Type the new choices over the old ones to replace them, then save the menu.

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: System Manager			
Column 1	Column 2	Column 3	Known Choices
Fcopy	Showme	ALTACCT	* Menu Selection
Help for MPE	Showout	ALTGROUP	HPSLATE
Listf	ShowQ	ALTUSER	HPWORD
ListUser	Showtime	SHOWALLOW	HPMAIL
Recall	BASIC	ListDir2	HPEasyChart
ShowDev	COBOL	ListEq2	HPDRAW
ShowIn	FORTRAN	Opt	DSG
ShowJob (All)	Pascal	Sort	Inform
ShowJob (Jobs)	RPG	Son of overLord	IDSCHAR
Show Sessions	SPL	Spook	* MPE Commands
SAVE MENU	PREVIOUS KNOWNNS	NEXT KNOWNNS	REFRESH
			HELP
			CANCEL CHANGES



HPMenu asks you to define each new choice and to save the changes; then it returns to Main Customization.

Customizing HPMENU

Creating a function. You want to create a function that lets you make a new version of a program, including all associated activities. To do so you type the new name and press **Create/Edit**.

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	System Manager	20	Show Sessions	30	SPL		
- OR -							
Update Version		Name of any New or Known Choice					
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom



Customizing HPMENU

Since this is a new choice, HPMenu displays the Classify New Choice screen. You press the function key New Function.

HPMENU Classify New Choice

Classify the new choice shown below by pressing the appropriate function key.
- OR -
Press CANCEL if you don't want to create this new choice at all.

New Choice: Update Version

New Menu New Function [] [] [] REFRESH HELP CANCEL

↑

Customizing HPMENU

Next, HPMenu displays the Define Function screen. You then type the commands you want to invoke this function. If they don't fit on a single page, you can move to the next page by pressing **NEXT LINES**.

HPMENU		Define Function					
Type in the commands used to perform the function named below. To add more commands, press NEXT LINES . To save changes, press SAVE FUNCTION ; to cancel them, press CANCEL CHANGES .							
This Function: Update Version							
rename progfile,oldprog							
purge listing							
build listing,rec=-130,,v,ascii,cctl							
purge pasul							
\$message Begin compile							
\$parm 1=\$STDLIST							
file pastext=%Source file name%							
file paslist=%List file name%							
run pascal.pub.sys;parm=3							
\$message Compile has finished							
file listout;dev=pp;cctl;env=lp602.env2680a.sys							
run pascal.pub.sys;parm=3							
SAVE FUNCTION		NEXT LINES			REFRESH	HELP	CANCEL CHANGES



Customizing HPMENU

Adding a function to a menu. In this example, you are shown how to add a function (in this case, the function called "Update Version") to a menu called "Engineering". The first thing you do is type the name of the menu ("Engineering") in the Choice name box and press Create/Edit.

HPMENU		Main Customization	
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.			
■ Choice Number			
* 1	Menu Selection	11	Fcopy
2	HPSLATE	12	Help for MPE
3	HPWORD	13	Listf
4	HPMAIL	14	ListUser
5	HPEasyChart	15	Recall
6	HPDRAW	16	ShowDev
7	DSG	17	ShowIn
8	Inform	18	ShowJob (All)
9	IDSCHAR	19	ShowJob (Jobs)
* 10	System Manager	20	Show Sessions
		21	ShowMe
		22	ShowOut
		23	Weekly
		24	ShowTime
		25	BASIC
		26	COBOL
		27	FORTTRAN
		28	Pascal
		29	RPG
		30	SPL
- OR -			
	Engineering	Name of any New or Known Choice	
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS
	Delete	REFRESH	HELP
			End Custom



Customizing HPMENU

HPMenu shows the current list for "Engineering" on the Define Menu screen.

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: Engineering			
Column 1	Column 2	Column 3	Known Choices
Edit			* Menu Selection
Pascal			HPSLATE
Son of Overlord			HPWORD
Spook			HPMAIL
Opt			HPEasyChart
Listf			HPDRAW
			DSG
			Inform
			IDSCHAR
			* MPE Commands
SAVE MENU	PREVIOUS KNOWNS	NEXT KNOWNS	REFRESH
			HELP
			CANCEL CHANGES

Customizing HPMENU

Type the new function name at the end of this list and save the changed menu.

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: Engineering			
Column 1	Column 2	Column 3	Known Choices
Edit			* Menu Selection
Pascal			HPSLATE
Son of Overlord			HPWORD
Spook			HPMAIL
Opt			HPEasyChart
Listf			HPDRAW
Update Version			DSG
			Inform
			IDSCHAR
			* MPE Commands
SAVE MENU	PREVIOUS KNOWNS	NEXT KNOWNS	
			REFRESH
			HELP
			CANCEL CHANGES



The menu is updated, and HPMenu returns to Main Customization.

SPECIFICATIONS AND DESCRIPTIONS

SECTION

III

TERMINAL REQUIREMENTS

HPMenu runs on any block-mode terminal (except the 2644A) which supports VPLUS/3000.

USER DOCUMENTATION REQUIREMENTS

HPMenu has an on-line Help facility and a Quick Reference Guide (Part No. 32112-90002) for new users. The Administration Manual, aimed at the System Manager, is the only manual required for HPMenu.

DETAILED FUNCTIONAL SPECIFICATIONS

HPMenu provides access to most system functions without detailed knowledge of how they operate. Hence, for detailed specifications of any product or program, see the documentation for that product.

INDIVIDUAL FUNCTION DESCRIPTIONS

Invoking HPMENU

HPMenu is invoked for two reasons: to customize and to use. There are three occasions when you will invoke HPMenu to customize it: (1) to reflect the choices available on your system (initial customization), (2) to organize choices for a particular group, and (3) to set it up for an individual's use.

Specifications and Descriptions

Initial Customization. After receiving HPMenu, it must be customized to make sure that the choices on the menus accurately reflect the choices available on your system. To invoke HPMenu to make these changes type:

```
:HELLO HPMENU.HPOFFICE
```

```
:RUN HPMENU.PUB.SYS;INFO="OKCUSTOM"
```

Customizing for a particular group. Needs within an organization differ depending on the functions performed within the organization. To customize HPMenu to meet those needs, use the following procedures. Type:

```
:HELLO USER.ACCOUNT,GROUP
```

```
:RUN HPMENU.PUB.SYS;INFO="OKCUSTOM"
```

Individual Customization. Individuals within an organization may want to customize HPMenu for their own purposes. These changes are also possible using HPMenu. To do so, type:

```
:RUN HPMENU.PUB.SYS;INFO="OKCUSTOM"
```

To protect any customization file you create, consider assigning a lockword. This security measure is discussed in the section of this manual entitled "Security Specifications".

As with most products, HPMenu can be invoked with a UDC.

Several UDCs are provided with HPMenu (see the installation instructions) to show the kinds of options available. The most important of these options are the Logon option, which brings up HPMenu automatically upon logon (and hence limits the user's access to MPE), and the Info parameter of the "RUN" command.

With the Info parameter, the configurator can select several HPMenu execution options. The format for the HPMenu "RUN" command is:

```
:RUN HPMENU.PUB.SYS;INFO="<first option>; ...;<last option>"
```

The "options" referred to are OKMPE (which allows access to Command Mode), OKCUSTOM (which allows access to Customization), and the Recovery options. See "Recovering from System Crash".

Specifications and Descriptions

Selecting System Functions

In HPMenu, the user is presented with a set of menus. Each menu contains a list of choices. (Choices identified with an asterisk (*) are menus.) After the user chooses, HPMenu may display another menu, or it may invoke a system function, including user-written applications, HP subsystems, on-line training programs, and MPE commands. Each choice has a simple name. When a choice is defined with HPMenu (using the Customization facility), all commands, programs, etc. invoked to perform it are specified once. Subsequently, users need not remember this list of commands, but only the name of the choice. HPMenu is installed with a default set of menus, and users can easily perform customization for someone else. If a user chooses not to customize, he or she still has access to all of the system functions without typing complex command syntax, file equations, or program names.

HPMenu allows users to make choices in three ways: by point and push, number, or name. In the first method, the user presses a function key until the desired choice is highlighted. For the second, the user types the number associated with the choice selected. For the third, the user can type the name of a choice, including one not listed on the current menu.

Simulating MPE (Command Mode)

Users who are comfortable with MPE commands can direct HPMenu to imitate the MPE interface from any Selection menu. HPMenu displays the prompt "@" and waits for an MPE command. See Appendix B. Commands are performed and, if appropriate, error messages are displayed. A run-time option is available to allow access to Command Mode (see "Invoking HPMenu"). If Command Mode is not allowed, the function key used to access it is disabled and will not appear on the screen.

Customizing Choices (Customization)

The Customization facility, available from all Selection menus, allows each user to define the menus and functions HPMenu displays. The user can create menus or functions; or edit, delete, rename, or copy old ones. Users can also designate which menu will be the First Menu. Lastly, there are some utilities available to merge files of function definitions (such as UDCs) with HPMenu choices and for getting a printed copy of all choices and their definitions. A run-time option is available to allow access to Customization (see "Invoking HPMenu"). Unless this option is used, the function key used to invoke Customization is disabled and will not appear on the screen.

Specifications and Descriptions

Menu lists contain names of functions and/or other menus. Defining a menu or function does not automatically place it on a menu list. This must be done separately by editing the menu which is to contain the new choice. In general, when a menu is created or edited, the list displayed on that menu is redefined. When a function is created or edited, the sequence of commands, programs, etc. that are invoked to perform that function are also redefined. Note that an existing function can be moved or added to a menu without being redefined.

HPMenu does not impose any restrictions on menu structure. Also, the same choice may appear on more than one menu. For example, if a user sets up a menu for each of several roles assumed, a favorite editor could well be on several menus. This flexibility allows the user to organize menus to optimize access to common functions and transitions between functions.

To insure proper recovery in the event of a system crash, HPMenu does not allow users in the same group to customize simultaneously. A file, MLQ8X2Z, is used to insure exclusive access to Customization.

To customize a file, HPMenu requires that the user log on to the group in which the customization file is stored. This insures that the locking mechanism above is effective and simplifies recovery. Users can still access a customization file (to select its functions and menus) from any other group and account as long as they comply with MPE security restrictions.

Setting Up System Functions

An HPMenu function is composed of MPE commands and HPMenu Reserved commands (special commands recognized by HPMenu but not MPE). Appendix A shows all Reserved commands and how they are used. Some MPE commands can only be accessed in limited ways. See Appendix B. An HPMenu choice can not be used as a command name in a function definition, nor can an MPE or Reserved command be performed from a Selection menu.

A special screen is used to define a function. Commands are typed much as they are when executing them under MPE. Multiple commands are allowed. Each new command, including Reserved commands, must begin on a new line. A maximum of 30 definition lines is permitted.

Functions can be set up to run any program or set of programs, perform most MPE commands, print messages to the user, and prompt for input. In addition, certain Reserved commands direct HPMenu to require a password to access the function, list steps as they are being performed, pause between steps, or wait for the user to direct that the next step be executed. Functions can be very powerful and flexible.

Specifications and Descriptions

Choosing a Menu Set

HPMenu stores all customization information in a customization file. When HPMenu is installed, a default customization file is included. HPMenu uses the menus from this file for any user who does not create his or her own files. In addition, if a customization file is accidentally destroyed, the default file acts as a backup file until the destroyed file is restored (from a temporary backup tape or through recustomization).

To make a copy of an existing customization file, use FCOPY as follows:

```
:RUN FCOPY.PUB.SYS;FROM=oldfile;TO=newfile;NEW
```

Notice that the file you are copying to must be new and FCOPY must be used so that the new file is built properly.

Unless otherwise specified, a user's customization file is stored in the group from which HPMenu is run, under the name MENCUCUST. HPMenu identifies users by group, so if several users share the same group, HPMenu associates the same menu set with all of them. If one user changes the customization file, the changes are made for all the users of that file. Since HPMenu is designed to provide individualized menus, it is strongly recommended that a single user be responsible for customizing each file. This prevents users from undoing each other's customization changes.

You may use a file equation to identify the customization file you want for HPMenu. See Appendix C. The installation instructions show how to set up a UDC to identify the customization file you want. You do so by typing the command followed by the name of the customization file. The name you give the file allows HPMenu to distinguish one customization file from another. To change from one customization file to another, the user has to exit HPMenu and invoke it again using the specific customization filename he or she wants. The file named need not exist before HPMenu is invoked. If it doesn't, HPMenu automatically creates one by copying the default customization file. (For the default customization file to be created however, the user must have SF (Save Files) capability.) If the default file cannot be found, HPMenu displays a dummy First Menu with no choices on it which the user must customize from scratch. If the file named does exist, HPMenu edits it whenever customization changes are made.

Specifications and Descriptions

Recovering from System Crash

HPMenu automatically recovers the user's customization information after a system crash. Because backup may degrade HPMenu's performance, a run-time option is available to allow the user to choose the level of backup (see "Invoking HPMenu"). If an error prevents HPMenu from performing backup at the requested level, the user cannot enter the Customization facility. Options are:

- | | |
|--------------------|---|
| TRANSACT | A backup is made after HPMenu is customized (whenever the user returns to the Main Customization screen), and a separate backup is kept of the last version the user explicitly saved after leaving the Customization facility. If the user is customizing when a system crash occurs, HPMenu gives the user the choice of which of the two backup versions to recover. |
| ON_SAVE | A backup is made only when the user leaves the Customization facility. The user can lose, at most, only the customization changes made at the time the system crashed. |
| NEVER
(default) | No backup is done at all. This means that file errors and other problems with the recovery system do not prevent the user from customizing. However, such errors may result in loss of or damage to the user's customization file which would force the user to restore the customization file (from a system backup tape or the default customization file). |

After a system crash, HPMenu redisplay the First Menu (as indicated in the customization version chosen for recovery).

Specifications and Descriptions

USER INTERFACE

HPMenu's interface is entirely menu-driven, so that users need not remember any command syntax.

All of HPMenu's functions are selected with function keys. Function keys cause a programmatic ENTER, unless the function invoked effectively cancels the operation in progress. Even functions that simply read and process a screen (as ENTER would do) are given descriptive names and placed on function keys. There is never a need to press the ENTER key. If the user hits ENTER, HPMenu directs the user to choose a function key.

The following pages show the screens used within HPMenu and describe the purpose of the function keys associated with each screen. Not only does the same function occupy the same key position on every screen where it is used, similar functions on different screens use the same function key. Keys that always have the same function are not discussed in the menu explanations. Two such keys are:

- f6 (REFRESH)** This key may be used to refresh the screen with the most recent form displayed and the last data read. HPMenu uses VPLUS/3000's Refresh function.

- f7 (HELP)** This key may be used to invoke the Help facility which consists of one or more text screens. The user can use Help to look through the on-line documentation and then return to the screen from which Help was invoked.

Function key labels are in upper case and in some cases in upper and lower case. Function keys with upper case labels such as **HELP** perform a final function. Function keys with upper and lower case labels such as **Delete** mean that further action is required of the user.

Specifications and Descriptions

HPMENU	Selection	Menu: Menu Selection
Press PREVIOUS CHOICE or NEXT CHOICE until the desired choice is highlighted OR type a choice number OR any known name. Then press PERFORM CHOICE.		
■ Choice Number		
* 1	Office Functions	
* 2	MPE Commands	
* 3	Special Function	
- OR -		
	Name of any Known Choice	
PERFORM CHOICE	PREVIOUS CHOICE	NEXT CHOICE
COMMAND MODE	Custom-ization	REFRESH
	HELP	EXIT HPMENU

Figure 3-1. Selection Menu

Menu: The name of this menu is shown in the upper righthand corner.

Choice Number: Type the number corresponding to the desired choice on the menu. If you fill in this box, do not fill in a Name. This overrides any choice selected with point and push. (See f2 and 3.)

Name of any Known Choice: Type in the name of the desired function or menu. The choice name need not be listed on the current menu. This overrides any choice selected with point and push. (See f2 and f3.)

Specifications and Descriptions

- f1:** If you select a menu, indicated by a *, that menu is displayed. If you select a function, that function is invoked and you are returned to this menu.
- f2:** This key is used to move the highlighted box backward along the menu list. This feature is referred to as "point and push".
- f3:** This key moves the highlighted box forward along the menu list to the desired menu.
- f4:** Command mode is invoked with this key. It allows you to enter MPE commands much as you would outside HPMenu. (This key is labeled only when HPMenu is invoked using the OKMPE option in the INFO string. See "Command Mode".)
- f5:** This key invokes the Customization facility, transferring control to the Main Customization screen. When you finish customizing, HPMenu returns to the menu from which you pressed this key. (This key is labeled only when HPMenu is invoked using OKCUSTOM in the INFO string.)
- f8:** On the First Menu, this key is used to exit HPMenu. On all other Selection menus, this key transfers control to the First Menu.

Specifications and Descriptions

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	MPE Commands	20	Show Sessions	30	SPL		
- OR -							
■ Name of any New or Known Choice							
Create/ Edit	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Delete	REFRESH	HELP	End Custom

Figure 3-2. Main Customization

Choice Number: Type in the number of the choice you wish to customize. If you fill in this box, do not fill in a Name.

Name of any New or Known Choice: Type in the name of the choice you wish to customize. The name need not be listed on the current screen. If you fill in this box, do not fill in a Choice Number.

Specifications and Descriptions

- f1:** This key creates a choice, if it is new, or edits it, if it is already defined in HPMenu. (Figure 3-2 shows choices which have already been defined.) If the choice is new, this key transfers control to the Classify New Choice screen; otherwise, it transfers control to the screen for redefining the choice (either Define Menu or Define Function). When the choice has been created or edited, HPMenu redisplay the Main Customization screen.
- f2:** This key displays the previous page from the list of known choices. If the first page is currently shown, it displays the last page.
- f3:** Use this key to display the next page from the list of known choices. If the last page is currently shown, this key may be used to display the first page.
- f4:** This key is used to display other function keys associated with Main Customization.
- f5:** This key deletes your choice. It transfers control to either the Delete Menu screen or the Delete Function screen, which displays the choice to be deleted and lets you confirm or cancel the deletion. Control then returns to Main Customization.
- f8:** Use this key to exit Customization. If any changes were made, HPMenu asks you whether or not to save the customization changes on the Yes or No screen. In any case, control returns to the Selection menu from which you invoked Customization.

Specifications and Descriptions

HPMENU Main Customization

Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.

Choice Number

* 1 Menu Selection	11 Fcopy	21 ShowMe
2 HPSLATE	12 Help for MPE	22 ShowOut
3 HPWORD	13 Listf	23 Weekly
4 HPMAIL	14 ListUser	24 ShowTime
5 HPEasyChart	15 Recall	25 BASIC
6 HPDRAW	16 ShowDev	26 COBOL
7 DSG	17 ShowIn	27 FORTRAN
8 Inform	18 ShowJob (All)	28 Pascal
9 IDSCHAR	19 ShowJob (Jobs)	29 RPG
* 10 MPE Commands	20 Show Sessions	30 SPL

- OR -

Name of any New or Known Choice

Select 1st Menu PREVIOUS PAGE NEXT PAGE OTHER KEYS Copy/Rename REFRESH HELP End Custom

Figure 3-3. Main Customization (second key set)

- f1: This key transfers control to the Select First Menu screen, where you can choose which of your menus is to be the First Menu displayed when HPMenu is invoked. The choice made on Main Customization is placed in the box for the New First Menu, although you can still type over this box. When this operation is completed, control is returned to this screen.
- f2: Press this key to display the previous page from the list of known choices. If the first page is currently shown, it displays the last page.

Specifications and Descriptions

- f3:** This key displays the next page from the list of known choices. If the last page is currently shown, it displays the first page.
- f4:** This key displays a new set of function keys to access Customization utilities. The new labels are shown in Figure 3-4.
- f5:** This key transfers control to the Copy or Rename screen, where you can rename a choice or make a copy of it with a new name. If you select a choice on Main Customization, it is placed in the **From** box, although you can still type over this box. When this operation is completed, you return to Main Customization.
- f8:** Use this key to exit Customization. If any changes were made, HPMenu asks you whether or not you want to save the customization changes by displaying the Yes or No screen. In any case, control returns to the Selection menu from which you invoked Customization.

Specifications and Descriptions

HPMENU		Main Customization					
Type in the number OR name of the choice you wish to customize. Then press the function key for the desired operation.							
■ Choice Number							
* 1	Menu Selection	11	Fcopy	21	ShowMe		
2	HPSLATE	12	Help for MPE	22	ShowOut		
3	HPWORD	13	Listf	23	Weekly		
4	HPMAIL	14	ListUser	24	ShowTime		
5	HPEasyChart	15	Recall	25	BASIC		
6	HPDRAW	16	ShowDev	26	COBOL		
7	DSG	17	ShowIn	27	FORTTRAN		
8	Inform	18	ShowJob (All)	28	Pascal		
9	IDSCHAR	19	ShowJob (Jobs)	29	RPG		
* 10	MPE Commands	20	Show Sessions	30	SPL		
- OR -							
■ Name of any New or Known Choice							
PRINT CHOICES	PREVIOUS PAGE	NEXT PAGE	OTHER KEYS	Merge File	REFRESH	HELP	End Custom

Figure 3-4. Main Customization (third key set)

- f1: This key generates a listing of all HPMenu choices and their definitions. For a menu, this means the list of choices on that menu, and for a function, it means the list of command lines used to execute the function. The choices are printed in the same order they appear in Main Customization. Output is directed to *MENULIST. This file can be redirected (see Appendix C). Control then returns to this screen.
- f2: This key displays the previous page from the list of known choices. If the first page is the current page, then this key is used to display the last page.

Specifications and Descriptions

- f3:** Use this key to display the next page of known choices. If the last page is currently shown, then this key is used to display the first page.
- f4:** Use this key to display the original set of function keys associated with Main Customization.
- f5:** This key transfers control to the Merge ASCII File screen, where you can read HPMenu function definitions from an ASCII file. See Figure 3-12.
- f8:** Use this key to exit Customization. If any changes were made, HPMenu asks you whether or not you want to save the customization changes by displaying the Yes or No screen. In any case, control returns to the Selection menu from which you invoked Customization.

Specifications and Descriptions

HPMENU Classify New Choice

Classify the new choice shown below by pressing the appropriate function key.
- OR -
Press CANCEL if you don't want to create this new choice at all.

New Choice: a new choice

New Menu New Function REFRESH HELP CANCEL

Figure 3-5. Classify New Choice

- f1: This key identifies the new choice as a menu. It transfers control to the Define Menu screen so you can type the choices you want on the new menu.
- f2: This identifies the new choice as a function. It transfers control to the Define Function screen so you can type the commands used to invoke the new function.
- f8: This key cancels the creation of the choice and returns control to the Main Customization screen.

Specifications and Descriptions

HPMENU		Define Menu	
Type in the function or menu names desired for this menu. To save changes, press SAVE MENU; to cancel them, press CANCEL CHANGES.			
This Menu: A NEW Menu			
Column 1	Column 2	Column 3	Known Choices
			* Menu Selection
			HPSLATE
			HPWORD
			HPMAIL
			HPEasyChart
			HPDRAW
			DSG
			Inform
			IDSCHAR
			* MPE Commands
SAVE MENU	PREVIOUS KNOWNS	NEXT KNOWNS	
			REFRESH
			HELP
			CANCEL CHANGES

Figure 3-6. Define Menu

Columns 1, 2, and 3 (30 input lines): These lines are used to type the choices you want to appear on a menu. Blank lines are ignored so that the menu list is displayed on sequential lines. Choices will appear in the order used to number them on the menu, so they should be filled in in sequential order. To help you identify known choices, HPMenu lists them on the right. You can page through this list. If you fill in less than 10 choices, the choices will appear in the center column; if you fill in more than 10 choices, the choices will appear in column 1 first, then column 2, then (if more than 20 choices) column 3.

Specifications and Descriptions

- f1:** Use this key to save the menu list. If any choices on the list have not been defined, HPMenu prompts for their definitions in what would be numbered order (if numbers were shown). For each new choice HPMenu displays the Classify New Choice screen and then the appropriate Define screen. This is an iterative process which continues until all choices have been defined. Then control returns to Main Customization.
- f2:** This displays the previous page from the list of known choices on the right. If the first page is currently shown, it displays the last page.
- f3:** This displays the next page from the list of known choices. If the last page is currently shown, HPMenu displays the first page.
- f8:** To cancel the creation/editing of the menu, press this key. If you are creating a menu, it is not created. If you are editing a menu, the changes do not take effect, and the menu still contains the old menu list. Finally, you are returned to Main Customization.

Specifications and Descriptions

HPMENU		Define Function	
Type in the commands used to perform the function named below. To add more commands, press NEXT LINES. To save changes, press SAVE FUNCTION; to cancel them, press CANCEL CHANGES.			
This Function: My Editor			
[12 highlighted blank lines for command entry]			
SAVE FUNCTION		NEXT LINES	
			REFRESH
			HELP
			CANCEL CHANGES

Figure 3-7. Define Function

(12 highlighted blank lines): Type in the MPE and Reserved commands used to invoke the function, starting each command on a new line. The screen should look just like it would if you typed each line for MPE (after the ":" prompt). Reserved commands should be typed as shown in Appendix A. You can type up to 30 commands spanning several pages. You can also use the function keys to page through the commands that comprise a function.

f1: This key saves all the commands entered for this function on all pages (not just the current page). Then control is returned to Main Customization.

Specifications and Descriptions

- f2:** If there are command lines before the current page, this key is labeled **Previous Lines** and displays the previous page of commands (otherwise this key is not labeled and has no function). For continuity, the first three lines of the current page are displayed at the bottom of the new page.
- f3:** If there are command lines after the current page, this key displays the next page of commands. If there are no more commands, this key displays a new page so you can type in more commands. For continuity, the last three lines of the current page are shown at the top of the new page.
- f8:** This key cancels the creation/editing of this function. If you were creating a function, it is not created. If you were editing a known function, the editing changes do not take effect, and the function is invoked using the old list of commands. Then control returns to **Main Customization**.

It is suggested that before a function is defined in **HPMenu**, that it be tested and, if necessary, debugged.

Specifications and Descriptions

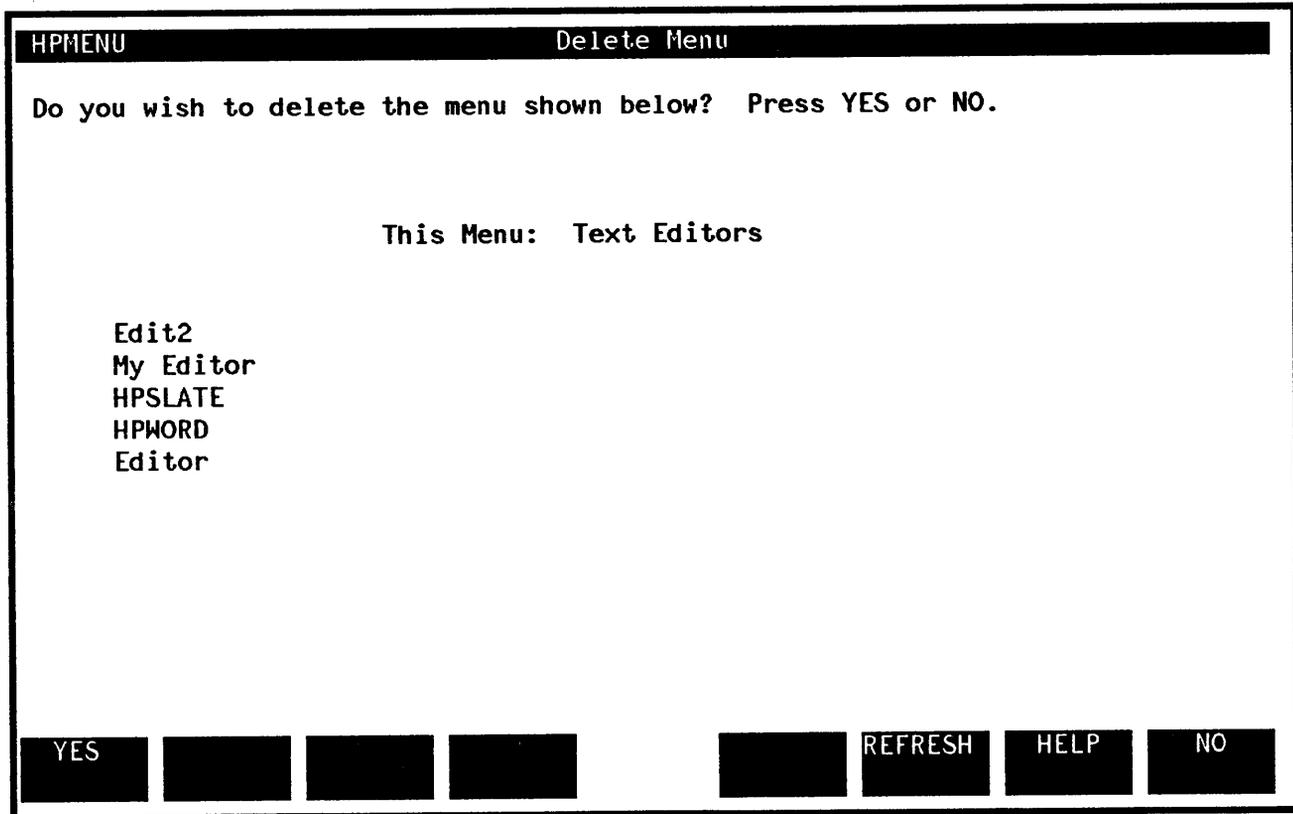


Figure 3-8. Delete Menu

f1: This key confirms the deletion of the menu shown. Any menus which become empty as a result of this deletion are also deleted. Control then returns to Main Customization.

f8: This cancels deletion of the menu shown. No change occurs, and control returns to Main Customization.

Specifications and Descriptions

HPMENU Delete Function

Do you wish to delete the function shown below? Press YES or NO.
(There may be more definition lines than shown here.)

This Function: Pascal

```
$Parm 1=$STDLIST  
FILE PASTEXT=%Enter Source File name%  
FILE PASLIST=%1Enter List File name%  
RUN PASCAL.PUB.SYS;PARAM=3
```

YES REFRESH HELP NO

Figure 3-9. Delete Function

- f1: This key confirms deletion of the function shown. Any menus which become empty as a result of this deletion are also deleted. Control then returns to Main Customization.
- f8: This key cancels deletion of the function shown. No change occurs, and control returns to Main Customization.

Specifications and Descriptions

The screenshot shows a terminal window titled 'HPMENU' with a sub-header 'Select First Menu'. The main text reads: 'To alter which menu appears when you first enter HPMENU, type the name of the desired existing menu in the box below and press PERFORM CHANGE. - OR - To keep the same first menu, press CANCEL.' Below this text are two columns of labels: 'Menu Selection' and 'Current First Menu'. Under 'Menu Selection' is a black rectangular input box. Under 'Current First Menu' is the text 'New First Menu'. At the bottom of the window is a row of buttons: 'PERFORM CHANGE', three black buttons, 'REFRESH', 'HELP', and 'CANCEL'.

Figure 3-10. Select First Menu

New First Menu: Type in the name of the menu you want to be the First Menu. (HPMenu automatically places the choice you selected on Main Customization in the New First Menu box.) The menu you choose as the new first menu must already have been defined.

f1: This key changes the First Menu and then returns control to Main Customization.

f8: This key cancels the change. The First Menu is the same as before, and control returns to Main Customization.

Specifications and Descriptions

The screenshot shows a dialog box titled "HPMENU" with the subtitle "Copy or Rename". The main text reads: "Type in the existing choice name and the new name in the highlighted boxes. Then press COPY to make a copy of the existing choice, with the new name. - OR - Press RENAME to rename the choice to the new name." Below this text, there are two input fields labeled "From" and "To". At the bottom of the dialog, there are several buttons: "COPY", "RENAME", two unlabeled buttons, "REFRESH", "HELP", and "CANCEL".

Figure 3-11. Copy or Rename

From: Type the name of the choice you wish to rename or copy. (HPMenu automatically places the choice you selected on Main Customization in the **From** box.) The choice must be previously defined in HPMenu.

To: Type in the new name.

f1: This key makes a copy of the choice in the **From** box, creating a choice with the **To** name. Control then returns to Main Customization.

Specifications and Descriptions

- f2:** This key renames the choice in the **From** box to the name in the **To** box. **HPMenu** then returns control to **Main Customization**.
- f8:** To cancel the operation, press this key. No change is made, and control returns to **Main Customization**.

Specifications and Descriptions

HPMENU Merge ASCII File

Type in the name of the ASCII file which contains the functions you wish to merge with your customization file. Then press PERFORM MERGE to merge the file or CANCEL to cancel this operation.

ASCII File

PERFORM MERGE REFRESH HELP CANCEL

Figure 3-12. Merge ASCII File

ASCII File: Type in the name of the file in which the function definitions are stored. Use normal MPE file name format: Filename/Lockword.Group.Account. The file should contain a list of function definitions, each in the following format:

Specifications and Descriptions

Function Name

First Command Line

.

.

.

Last Command Line

*

The Function Name uses the first 16 characters of the line, not counting leading blanks. Each command line may be up to 79 characters long, and functions must be separated by a line whose first nonblank character is "*". There is a maximum of 30 commands (first through last). Any commands in a function which number more than 30 will be ignored. Remember, there is a maximum of 100 choices allowed in HPMenu, so make sure the file you are merging does not increase the total choices to over 100.

If the ASCII file has a lockword associated with it, the lockword must be specified as shown:

```
Somefile/LOCKWORD.Group.Account
```

If the file is not in the correct format or is not an ASCII file, HPMenu copies it in as best it can, but the results are likely to be almost meaningless.

f1: This key merges the file named with the current set of choices. If the file contains a name which matches a known choice, a warning is displayed and the choice is not added. A message is also displayed when the entire file has been processed.

f8: This key returns you to the Main Customization (3rd key set) screen.

Specifications and Descriptions

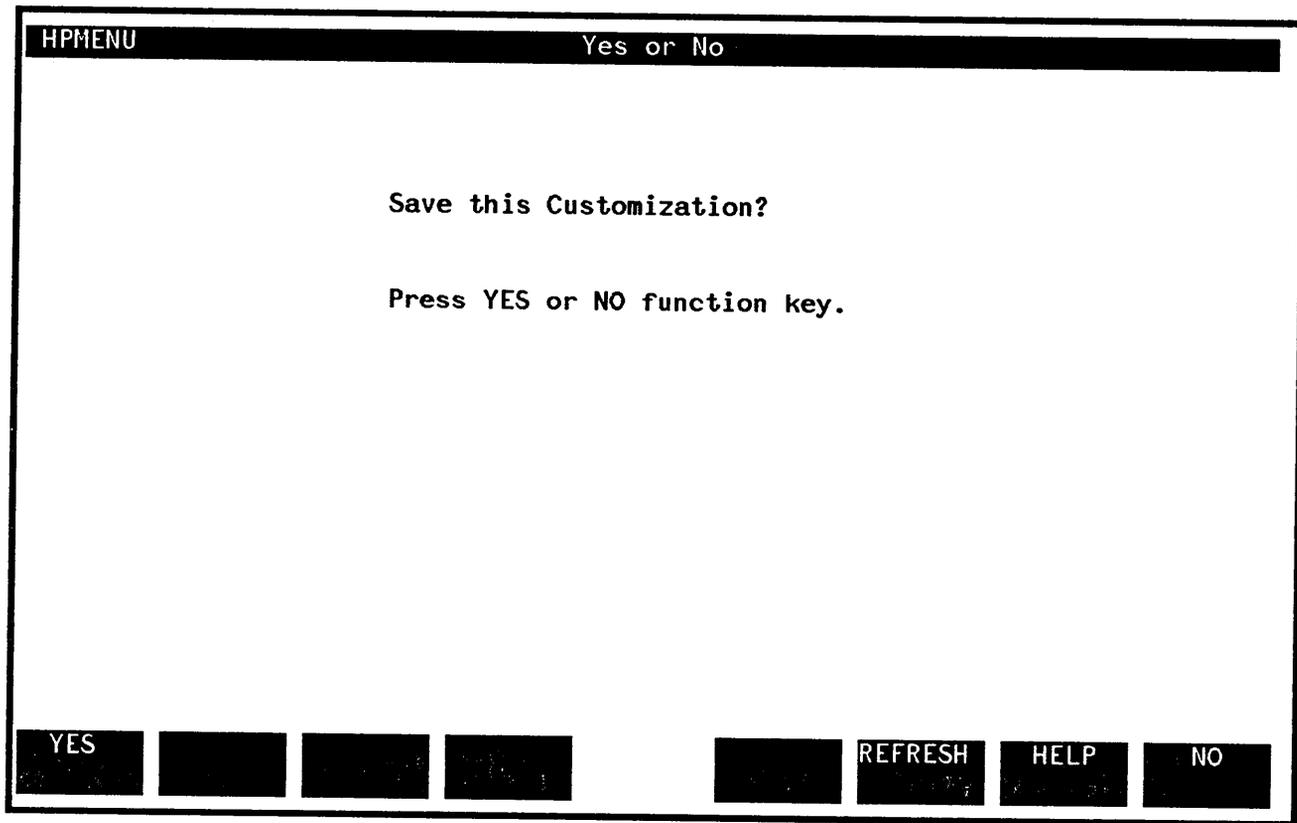


Figure 3-13. Yes or No

- f1:** This key confirms all changes made since you entered Customization. The changes are saved permanently in your customization file, and control returns to the menu from which you invoked Customization.
- f8:** This key cancels all changes made since you entered Customization. Your menus and all customization information is restored to the state it was in before this customization, and control returns to the menu from which you invoked Customization.

Specifications and Descriptions

COMMAND MODE

When you press the Command Mode key, HPMenu clears the screen and the "!" prompt appears. Type commands just as you would for MPE. Lines must be limited to 79 characters and continuation lines are permitted. HPMenu displays the same output and error messages as MPE. Type "resume" and press RETURN to go back to the menu from which you invoked Command Mode.

Here the only difference between Command Mode and the actual MPE interface is that MPE requires some commands to be invoked programmatically in a different way from the normal interactive interface. See Appendix B for a description of commands which are invoked differently, including commands which cannot be accessed in Command Mode.

To enable the Command Mode key type the following when you invoke HPMenu:

```
:RUN HPMENU;INFO="OKMPE"
```

Certain commands are used in subsystems to signal to MPE the end-of-file. These commands (":EOF", ":EOD", or simply ":") force an end-of-file in such a way that HPMenu may not be able to recover.

NOTE

Avoid using any command beginning with a colon (:) in either Command Mode or in a function definition statement. Because of this limitation, HPMenu does not support interactive compilation with compilers other than BASIC. If HPMenu encounters an end-of-file, you may have I/O problems until you exit HPMenu and start again.

Specifications and Descriptions

COMPATIBILITY SPECIFICATIONS

Applications run under HPMenu just as they run under the MPE Command Interpreter. The only requirements HPMenu imposes on the applications it runs are those necessary to protect HPMenu itself and any of the programs run from within HPMenu. Be aware that the application program may not be running under the MPE Command Interpreter, but under HPMenu. Therefore, avoid using intrinsics which affect processes other than your own, such as QUITPROG.

Set up file equations exactly as you wish to use them each time. Use unique filenames to avoid one function changing the file equation of another function and to prevent overwriting data.

The following suggestions are made to enhance HPMenu's usability.

1. Don't explicitly enable the Break key, so that HPMenu (or other monitors) can disable it for all processes.
2. If you design an application program that might run under HPMenu, be sure to reinitialize the function keys because HPMenu will not do so for you.

SECURITY SPECIFICATIONS

HPMenu stores customization information for each user (and, of course, the files needed to run HPMenu). File security for these files is provided by MPE. HPMenu's files are kept in a public group in which user access is restricted. The customization file for each user can reside in any group to which the user has access. Modification or even deletion of such files does not compromise HPMenu, but it may force the user to recreate customized menus. It is up to individuals who share group access to regulate the use and modification of customization files.

MPE provides the capabilities necessary to prevent users from inadvertently accessing another user's data. Users who wish to maintain their own customization file in a group can put a lockword on the file. All users who attempt to use this customization file must then specify the lockword when HPMenu is invoked using the formal file designator MENU CUST. See Appendix C. HPMenu will not allow modification of a customization file across groups.

Specifications and Descriptions

In addition to MPE security, HPMenu allows passwords to be specified in a function definition. When the function is performed, HPMenu prompts for the password (Enter Function Password >) at the point of execution indicated in the definition. Terminal echo is turned off, and the user has three chances to type the password correctly. If it is typed incorrectly on the third try, HPMenu terminates the function. For more information about passwords, refer to Appendix A.

NOTE

Since the correct password is listed in the function definition, any user that can customize the file containing that function can see the password. Also, if the \$Liston option is in effect when the password is checked, HPMenu lists the correct password before prompting for it.

Access to MPE commands is also available through such programs as TDP, EDITK, and EDITOR. If you want to restrict the used of MPE commands through these programs, refer to the reference manual for the product that allows MPE access.

Because HPMenu does not operate in Privileged Mode, or execute privileged code, it poses no threat to system data.

UDCs. It is recommended that user-level UDCs be used for log on to HPMenu. It is possible to use an Account-wide UDC, but to do so make sure:

1. the manager of the Account does not use the same log on UDC and,
2. the manger of the Account can delete other user's UDCs.

WARNING

Do not use an Account-wide UDC with a log on UDC.

Specifications and Descriptions

DATA RECOVERY

HPMenu is designed to ensure that customization data is never lost. Unless the user requests backup level NEVER, HPMenu keeps a version of the last customization saved in a file named MOQ8X2Zx (where "x" is either a blank, a digit 0-9, or a letter A-Z). This file is always available for backup. In addition, if the backup level is set to TRANSACT, HPMenu saves the customization-in-progress each time the user returns to the Main Customization screen. Therefore, the user can lose no more than the last customization operation performed. The experienced user may choose to suppress the latter backup or all backup in order to increase performance. See "Recovering from System Crash". The default is NEVER.

WARNING

customization file backup is done only if requested with an INFO option (ON_SAVE or TRANSACT) when HPMenu is invoked. Under normal circumstances, backup is not necessary. If, however, you are making critical changes in Customization, use a backup option (or make sure to have a backup copy of your customization file). Never delete files with the name MOQ8X2Zx. HPMenu will do it when necessary.

When HPMenu is restarted after a system crash, it knows if someone was customizing the user's file when the crash occurred. If there was no customization-in-progress, HPMenu recovers automatically; otherwise, it gives the user the choice of recovering from the current version or from the last saved version (in which case all work done since someone last saved customization for this file is lost).

Because of the file manipulation required for backup, many backup errors can be corrected only by the System Manager (or some other experienced MPE user). This reference manual contains a list of all HPMenu errors, along with suggested corrective action. (See Appendix D.)

Specifications and Descriptions

TERMINAL/SCREEN RECOVERY

Pressing the COMMAND key on terminals such as the 2642 and 2647A, may disturb the function key labels. Pressing COMMAND a second time should correct this problem.

Should a terminal freeze under unusual error conditions, users are advised to try a hard reset followed by **f6 (REFRESH)**. (On 262x terminals, press the **USER KEYS** key before pressing **REFRESH**.) If an HPMenu menu does not appear, press ESC and the colon (:). Type "resume", and when the terminal prints "READ PENDING", hit REFRESH. If after pressing REFRESH only a few fields appear or an error message appears, try it one more time. If these measures don't work, refer to the documentation for the program or function which led to the error. As a last resort, turn the terminal off and then back on.

SPECIAL CAPABILITIES/SPECIAL FEATURES

Consider assigning a Configurator to make any modifications to the default backup customization file supplied with HPMenu. The Configurator could be the only user with the ability to alter this file, so other users cannot inadvertently destroy or invalidate it. This file can be updated as new functions are added or function definitions (file equations, etc.) change. To customize the default file, MENUCAST.HPMENU.HPOFFICE, the Configurator should type:

```
:RUN HPMENU.PUB.SYS; INFO="OKCUSTOM"
```

The special capabilities of the Configurator are only defined through MPE access capabilities and are not handled by HPMenu directly. It is therefore recommended that the HPOFFICE account and/or the HPMenu group be protected with passwords. This also means that HPMenu cannot recover cleanly from an attempted misuse of these capabilities. If a user without write capability to MENUCAST.HPMENU.HPOFFICE attempts to alter it, MPE aborts HPMenu.

RESERVED COMMANDS

APPENDIX

A

The following special commands can be used to define a function. They are called "Reserved" because they are not recognized by MPE but are available for use by HPMenu. To use a Reserved command, type it on a line of its own on the Define Function screen.

These commands are recognized as part of a function definition and may not be used as names of choices. For example, if you type the Reserved command "\$Wait" in the "Name" box on a menu, the command will not be performed. Also, Reserved commands are not recognized in Command Mode. HPMenu's MPE simulation (Command Mode) displays the same command error message that MPE would give if a command such as "\$Wait" were typed.

You can, however, name your choices any way you wish, including names starting with "\$" or any other special character. For example, you can define a function called "\$Wait" and have it do something totally unrelated to the \$Wait command. (This practice is not recommended, however, because it is likely to create confusion.)

Here are the Reserved commands recognized by HPMenu:

- \$Listoff** This command disables the listing option for functions (see \$Liston) so that commands following this Reserved command are not displayed on the terminal before they are executed. \$Listoff is the default. Use \$Listoff only if \$Liston has been used earlier in the function definition.
- \$Liston** This command enables the listing option for functions. Before each command in the function definition is executed, HPMenu displays the command line on the terminal. This helps in finding errors in function definitions, since it is easy to see which command caused the error. The listing option is automatically turned off when the function finishes executing, or it can be turned off using \$Listoff. Thus, users can enable this option for only part of a function definition. The option is not turned on until this command is executed, so \$Liston itself is not displayed (unless the option is on).

Reserved Commands

\$Liston (Continued) Here's an example of the \$Liston option as it applies to functions.

Suppose you have defined a function named TFE (for Temporary Files and Equations) and you want to make sure it works. The function defined contains four statements:

```
$Liston
run listeq2.pub.sys
$message This is the final command.
listff
```

You include the \$Liston option in the function definition so any errors that may occur during the execution of the function are identified.

You start by typing in the name of the function in the selection box of a menu, say a Selection or a Customization menu.

When the choice is performed the following information appears on the screen:

```
run listeq2.pub.sys
LISTEQ2 C.01.00 (C) HEWLETT-PACKARD CO., 1978

***NO TEMP FILES
***FILE EQUATIONS

:FILE PP;DEV=PP
:FILE TAPE;DEV=TAPE
:FILE EDTXT=LILMOMS
:FILE MENULIST;DEV=LP
:FILE LISTED=ALPHARC
```

```
This is the final command.
listff
```

```
MPE Error...
UNKNOWN COMMAND NAME. (CIERR 975)
In function Definition Statement # 4
```

```
Press RETURN to continue >
```

Reserved Commands

\$Liston (Continued)

Notice that the listf command is misspelled in the function definition. Because the \$Liston option is used with this function, however, errors in functions are displayed and the listing remains on the screen until you press RETURN.

You are then returned to the menu from which you ran the function. An error message appears at the top of the menu to remind you of your mistake. In the example above, the following message is displayed:

```
MENUERR 19 An unknown MPE command was found in
function definition.
```

\$Message s

Here, s represents a string no longer than 72 characters.

This command displays the string s on the terminal. It is useful to prompt the user with instructions, etc. If the message you want is longer than 72 characters, simply use several \$Message commands in a row. This command is often followed by \$Pause or \$Wait.

\$MPE

This command invokes Command Mode, just as if you pressed the COMMAND MODE key. For example, you might use this command to execute a variable sequence of MPE commands while executing a function.

\$Parm i=text

Here, i represents an integer between 0 and 9, and text represents a string no longer than 71 characters. Text may contain any printing characters but may not contain continuation lines.

This command sets one of the ten function-dependent parameters (identified by i) to the string text. These parameters are used to substitute values in function definition commands, usually with information entered by the user when the function is performed. You may define up to 10 parameters per function. Because these parameters are defined for a particular function, there is no risk of altering a parameter in one function by changing the same parameter in another function.

Setting the parameter with this Reserved command establishes an initial value. For example, in the command

```
$Parm 3=MyFile/Lockword.MyGroup.MyAcct
```

Reserved Commands

\$Parm i=text
(Continued)

Parm 3 is equated to the string "MyFile/Lockword.MyGroup.MyAcct", so Parm 3 can later be used to set a file equation. The ten parameters (0-9) are initialized to the null string when a function is invoked.

You can also prompt the user for a parameter or substitution value at execution time as follows:

```
command-part %i prompt% command-part
```

(Note that the blanks above are not necessary, but the percent signs are.) Here, **command-part** represents all or part of any command which could be used in an HPMenu function definition (except for Reserved commands), **i** identifies the parameter, and **prompt** represents a message which prompts the user for input. **Command-part**, **i**, and **prompt** are all optional; however, **i** or **prompt** must be specified.

When HPMenu executes a command containing %, the string delimited by the percent signs and the percent signs themselves are substituted as follows:

1. If **prompt** is specified, the prompt message is displayed on the terminal followed by a blank and the HPMenu prompt character, >. HPMenu waits for the user to respond and press RETURN. If **i** was omitted (in the above syntax), a response is required. If the user presses RETURN only, HPMenu repeats the prompt until a value is entered.
2. If **i** is specified, the next step depends on whether **prompt** is specified. If it is, HPMenu takes the user's response (other than RETURN) as the substitute value and as the value for **i**. If the user doesn't respond--that is, the user presses RETURN--or **prompt** is omitted, HPMenu uses the current value of **i** as the substitution value.
3. Now, HPMenu has a substitution value. Everything between (and including) the percent signs is replaced with the substitution value, and the resulting command is executed.

Reserved Commands

\$Parm i=text
(Continued)

There are three primary reasons to prompt for user input.

1. To take the user's response and perform a one-time action. For example, in the command

```
PURGE %Enter the file name you wish to purge%
```

When the function containing this MPE command and prompt are run, it will look like this on the screen:

```
Enter the file name you wish to purge >
```

When the user types in a file name, it is combined with the PURGE command to purge the specified file. This operation is performed only once and the file name typed by the user is not kept.

2. To prompt for information with a default value provided. The user response is kept and used as a default value for subsequent operations. For example, in the command

```
$Parm 0=hp@.pub.sys
```

```
LISTF %0Files to be listed%
```

the following prompt appears on the terminal when the function is run:

```
Files to be listed >
```

If the user hits RETURN without typing a value, HPMenu uses the current value of parameter 0 (set by the Reserved command \$Parm" to "HP@.PUB.SYS"). If the user types "@", a complete listing of the files in the user's logon group and account will be displayed and parameter 0 is set to @.usergroup.useraccount for any subsequent operation which uses the specified string.

Reserved Commands

\$Parm i=text
(Continued)

3. To prompt for a value (or values) which is used for several operations. For example, when the function containing the following commands is run,

```
$Parm 6=BACKUP
```

```
RENAME %Old file name%, %6New file name%
```

```
LISTF %6%,2
```

the following will appear on the screen:

```
Old file name >
```

When the user fills in a name, the following prompt will appear:

```
New file name >
```

If the user presses RETURN in response to the second prompt, the old file is renamed to the default value which in this case is the value of parm 6, BACKUP. If the user types a new name, the file is renamed and the value of parm 6 becomes the new file name.

The outcome of these commands is for a file to be renamed and for HPMenu to perform a LISTF showing the new file name.

\$Password p

Here, **p** represents a string no longer than 69 characters.

This command provides controlled access to HPMenu functions by allowing the person customizing HPMenu to assign a password. The password may contain leading blanks; however, HPMenu ignores trailing blanks and case. The password prompt and check occurs when this Reserved command is executed, regardless of where it appears in a function. If the user fails to match the password in the three tries permitted, the function is terminated.

Reserved Commands

\$Pause=n

Here, **n** represents an integer between 0 and 32767.

When executed, this command suspends further execution for the number of seconds indicated by **n**. Typically, **\$Pause** is used to give the user time to read a message displayed on the terminal.

\$Wait

When executed as part of a function, this command displays the following message on the terminal: "Press RETURN to Continue >". When the user presses RETURN, **HPMenu** continues.

This command is often used after an **MPE** command that displays information on the terminal that you want the user to browse through. When ready, the user presses RETURN to continue.

MPE COMMANDS NOT AVAILABLE IN HPMENU

APPENDIX

B

Some MPE commands operate under different restrictions when they are invoked programatically and others are completely inaccessible. Here is a list of all MPE operations which cannot be invoked from HPMenu the same as from MPE:

BASIC	BASICGO	BASICOMP
BASICPREP	COBOL	COBOLGO
COBOLPREP	EDITOR	FCOPY
FORGO	FORTRAN	FORTPREP
PREP	PREPRUN	RPG
RPGGO	RPGPREP	SEGMENTER
SPL	SPLGO	SPLPREP

1. The following MPE commands are not available in HPMenu.

BYE	DEBUG	DSCOPY
HELLO	MRJE	RJE
SETCATALOG	SHOWCATALOG	SYSDUMP
VINIT	VSUSER	

2. **Segmenter**

The Segmenter can only be invoked programatically with a "RUN" command, as follows: "RUN SEG DVR.PUB.SYS". It should be noted that some Segmenter errors call the QUITPROG intrinsic, which causes MPE to terminate HPMenu.

3. **Prep**

The PREP command is available programatically only through the Segmenter (see above). To access PREP within HPMenu, run the Segmenter and use the "Prepare" command. The Customizer can use \$Message and/or MPE's COMMENT statement to lead a user through the steps necessary to do this.

MPE Commands Not Available in HPMENU

4. Preprun

Do the Prep in the same way as the Prep command, and add commands to the function definition which save and run the program file.

5. Editor

Like Segmenter, this subsystem must be invoked with the "RUN" command.

```
RUN EDITOR.PUB.SYS
```

The Editor allows the user to text a file and to keep it automatically when the program is exited. Prompt for the file, and set the required file equations. See "7) compiler commands".

6. Fcopy

When the Fcopy command is invoked programmatically, the "from" and "to" parameters must be specified as part of the run-time Info option:

```
RUN FCOPY.PUB.SYS;INFO="FROM=FromFile;TO=ToFile;NEW" ("NEW" is optional)
```

In HPMenu, it is easy to use the parameter facility (see Appendix A) to prompt for file names and the "new" option (or to use two different functions, one for copying over old files, and one for creating new ones). For example:

```
RUN FCOPY.PUB.SYS;INFO="FROM=%From File name%;TO=%To File name (+ ;new)%"
```

When this function is performed, it looks like this: (User input is underlined.)

```
From File name > EditFile  
To File name (+ ;new) > Backup;new
```

FCOPY creates a file called Backup as a copy of EditFile.

MPE Commands Not Available in HPMENU

7. All compiler commands

In MPE, compilers are set up so that the file name parameters can be typed with the compiler name (e.g. "PASCAL source,listfile"). This feature is not available programmatically. Fortunately, the same effect can be achieved with file equations and a run-time parameter indicating which files are being equated. The HPMenu parameter feature (see Appendix A) also allows the user to specify the desired file names. Here is an example of how to define a compiler function in HPMenu:

```
$Parm 0=SOURCE
$Parm 1=$STDLIST
FILE PASTEXT=%0Enter Source File name (Default is SOURCE)%
FILE PASLIST=%1Enter List File name (RETURN for terminal)%
RUN PASCAL.PUB.SYS;PARAM=3
```

The function compiles the first file named (or reads the program directly from the terminal if no name is specified) and prints a listing to the second file named (or to the terminal if no name is specified). When the function is performed, it looks like this:

```
Enter Source File name (RETURN to input from terminal) > MyProg
```

```
Enter List File name (RETURN for terminal) >
```

Pascal displays its banner, compiles MyProg, and lists the results on the terminal (because the user did not specify a list file). The PascalPrep command is defined by the steps needed to run Pascal followed by the steps to Prep. The PascalGo command requires the PascalPrep commands followed by commands to save and run the compiled program.

As with the Segmenter, some compiler errors call the QUITPROG intrinsic which causes MPE to terminate execution of HPMenu.

8. All subsystem commands

There are many commands which invoke subsystems from MPE. Examples include "Editor" and "Fcopy", which are discussed previously. In general, these commands are not available programmatically. Refer to the examples in this appendix and the subsystem manuals when defining these functions for HPMenu. (Usually, it is as simple as finding the name of the program you can "Run" to invoke the subsystem.)

MPE Commands Not Available in HPMENU

9. All UDCs

MPE does not make UDCs programmatically accessible. However, HPMenu does provide a utility which reads in any ASCII file in UDC format and merges the function names found within the user's customization file. This gives users the functionality of their current UDCs without requiring any typing on their part. UDCs with If-Then-Else logic or other features not available within HPMenu can be copied, but will cause errors when executed. It is suggested that users with UDCs edit them to utilize HPMenu commands, either before or after invoking the Merge ASCII File utility.

10. Commands beginning with colon (":")

Commands beginning with a colon cause problems for HPMenu because they signal end-of-file to MPE and interfere with subsequent terminal I/O. For this reason, these commands should not be used in function definitions or in Command Mode.

FORMAL FILE DESIGNATORS

APPENDIX

C

Here are the formal designators of all files equated in HPMenu, along with the purpose of each.

MENUCUST

This is the customization file HPMenu reads in. To change the customization file HPMenu is using, equate MENUCUST with the desired file. If you wish to use Customization, the customization file must be a file in the logon group and account. Also, if the file has a lockword, it is best to specify the lockword with the file equation. If no file is specified, HPMenu looks for a file called MENUCUST in the logon group and account. Here is an example of a file equation using MENUCUST.

```
:File MENUCUST=SOMEFILE/LOCKWORD.GRP.ACT
```

In this file equation, LOCKWORD is optional. If you specify a lockword, it is recommended that you do so using a file equation. Specifying a lockword outside a file equation may cause HPMenu to abort.

MENULIST

This is the output file for lists of choices (when the **PRINT CHOICES** utility is invoked from Customization). If no output file is specified, the listing is sent to the system line printer (a device of class LP). To redirect the output, use a file equation to equate MENULIST to the desired device number. For example,

```
:File MENULIST;Dev=34
```

If no such file equation is found when **PRINT CHOICES** is pressed, it generates the file equation: File MENULIST;Dev=LP.

ERROR MESSAGES AND RECOVERY

APPENDIX

D

Here are the errors and warnings generated by HPMenu. The number in parentheses is the error number. Next to the number is the message as it is displayed by HPMenu. Following the message is a description of what may have caused the error and what corrective action may be taken.

INTERNAL ERRORS are errors within the system or the HPMenu program. If such errors appear while using HPMenu, please report the problem immediately. These are HPMenu errors only. Errors caused by other subsystems are readily identified by looking at the error label. For example, FSERR refers to a file system error, CIERR refers to a command interpreter error, VERR refers to a VPLUS/3000 error, and PASCERR refers to a Pascal run-time system error. When these errors are encountered, refer to the specific system or subsystem manual for recovery procedures.

In this appendix, error numbers are placed at the front of the error message itself. This is done for your convenience. When running HPMenu, however, error message numbers appear at the end of the error message.

Example:

The form file is missing or cannot be opened. (MENUERR 3)

A list of the error messages associated with HPMenu follows:

ERROR MESSAGE	MEANING	ACTION
0 HPMenu's Message file cannot be opened. See the System Manager. (MENUERR 0)	HPMenu was unable to access the catalog containing its messages, prompts, etc. Without this information, you cannot use HPMenu.	Ask the System Manager to correct the message file problem. The System Manager should make sure the HPMenu Error Message Catalog is in MENUMSG .HPMENU.HPOFFICE. HPMenu accesses it by this name, and it should not reside under another name.
2 This terminal is not a supported type or cannot be opened. (MENUERR 2)	VPLUS/3000 could not open the terminal.	Make sure the terminal supports HPMenu.
3 The form file is missing or cannot be opened. (MENUERR 3)	VPLUS/3000 could not open the form file.	Look for files MOMFORM and MOMFORM2 in HPMENU .HPOFFICE and make sure they can be accessed.
4 The required form is missing or cannot be displayed. (MENUERR 4)	The forms file in HPMENU .HPOFFICE has been damaged.	Check MOMFORM if you are using a 264x terminal, and MOMFORM2 if you are using a 262x terminal.
5 That function key has no function here. Press another key. (MENUERR 5)	The user has pressed a function key with no label. Such keys perform no function.	Select another (labeled) key.
7 Your data was saved. Now press a function key. (WARNING 7)	The user has pressed the ENTER key, which simply saves the data on the current screen.	Press one of the labeled function keys to select the desired function.

ERROR MESSAGE	MEANING	ACTION
<p>9 Unable to copy from indicated file. See the manual for more info. (MENUERR 9)</p>	<p>This error is caused by trying to copy a file under one of several conditions: 1) the customization file requested was being initialized from the default information; 2) during recovery, HPMenu was restoring the customization file from the backup file, 3) in Customization, HPMenu is performing backup. In any case, the file being copied could not be opened. Under these conditions, HPMenu is unable to continue.</p>	<p>Make sure no one else is customizing your customization file and try again. If the error is repeated, call the System Manager. The System Manager should check the file named in the terminating message. This file could not be opened for shared read access.</p>
<p>10 Unable to copy to indicated file. See the manual for more info. (MENUERR 10)</p>	<p>This error is caused by trying to copy a file under one of several conditions: 1) the customization file requested was being initialized from the default information; 2) during recovery, HPMenu was restoring the customization file from the backup file, 3) in Customization, HPMenu is performing backup. In any case, the file being copied into could not be opened. Under these circumstances, HPMenu is unable to continue.</p>	<p>Make sure no one else is using your customization file (during startup or with Customization) and try again. If the error is repeated, call the System Manager. The System Manager should check the file named in the terminating message. This file could not be opened for exclusive write access.</p>
<p>13 INTERNAL ERROR: Unable to create dummy First Menu. (MENUERR 13)</p>	<p>HPMenu was unable to find the First Menu for the user.</p>	<p>The problem may be corrected by customizing and selecting another First Menu. Try the procedure again and make sure to report this error.</p>

ERROR MESSAGE	MEANING	ACTION
14 Type the name of a known choice in the From box. (MENUERR 14)	On the Copy or Rename screen, the user has tried to do a Copy or Rename without first filling in the input field labeled From.	Type the name of an existing choice in the From box.
15 No menu exists by that name. Select a known menu. (MENUERR 15)	On the Select First Menu screen, the New First Menu typed was not a known choice (possibly mistyped).	Correct the name and try again.
16 Type a known menu name in the box provided. (MENUERR 16)	On the Select First Menu screen, the user has left the input field blank.	Type a known menu name in the highlighted box.
17 This To name already exists. Type in a new name. (MENUERR 17)	On the Copy or Rename screen, the user has specified a To choice which already exists. This is allowed only when Renaming a choice to change its capitalization.	Type a new name in the To box.
18 The choice was not found. Type in a known choice. (MENUERR 18)	The user has typed the name of an unknown choice in the Name box on one of the menus.	Type in a known choice name, or follow the menus to find the desired choice.
19 An unknown MPE command was found in the function definition. (MENUERR 19)	In trying to perform a function, HPMenu has encountered a command that is not Reserved and is not recognized by MPE. It may be that the command would not be an error if typed at the MPE Command Interpreter, but it cannot be executed programmatically. (See Appendix A for a list of commands which cannot be executed within HPMenu.)	Check the function definition with Customization.

ERROR MESSAGE	MEANING	ACTION
20 HPMenu cannot be run in batch mode. (Don't "STREAM" HPMenu). (MENUERR 20)	HPMenu was invoked from a job stream.	Run HPMenu interactively from your session.
21 Type a name in the To box. (MENUERR 21)	On the Copy or Rename screen, the user has tried to do a Copy or Rename without first filling in the input field labeled To.	Type the desired new name in the To box.
22 There are no other pages of Known Choices. That key was ignored. (WARNING 22)	The user pressed NEXT KNOWN s or PREVIOUS KNOWN s, but there are no other pages of Known Choices. Therefore, those keys have no function.	Select another function key.
23 Type the name of an ASCII file in the ASCII File box. (MENUERR 23)	On the Merge ASCII File screen, the user pressed PERFORM MERGE without first typing a file name in the input field.	Type the name of the file you want to Merge in the box labeled ASCII File and try again.
24 Type either a choice number or name, but not both. (MENUERR 24)	The user has typed both a Choice Number and Name on one of the Selection menus or on the Main Customization screen.	Fill in only one of these boxes and try again.
25 INTERNAL ERROR: Couldn't find Help for this screen. (MENUERR 25)	The user has pressed the Help key on a screen but Help was not found.	Try again and report the problem. If it persists, have the System Manager check MENUMSG.HPMENU.HPOFFICE . It may have been damaged.
26 The "Choice Number" box may have only a number or a blank in it. (MENUERR 26)	The user has typed an illegal character in the Choice Number box on one of the Selection menus or on the Main Customization screen.	Either type a number in that field or leave it blank. Remember to use the TAB key if you are filling in the Name box.

ERROR MESSAGE	MEANING	ACTION
27 "RUN" command failed in function definition statement. (MENUERR 27)	In trying to perform a function, HPMenu has encountered a "RUN" command that could not be executed. A more specific error should have been displayed as soon as the error was detected (before returning to the Selection menu). This message remains on the menu to remind you that there was an error.	Check the function definition using Customization, and follow the directions under the specific error that was displayed.
28 There is no choice which matches that number on this menu. (MENUERR 28)	On one of the Selection menus or on the Main Customization screen the user has typed a Choice Number greater than the maximum number on the list.	If you select by number, choose a number shown next to one of the choices on the screen.
29 This From name is unknown. Type in a known choice. (MENUERR 29)	On the Copy or Rename screen, the user has specified a From choice which does not exist.	Fill in the From box with the name of a known choice.
30 Your First Menu was not found. This is a "dummy" menu. (WARNING 30)	HPMenu was unable to find the First Menu for the user.	The problem can be corrected by using Customization to select a new First Menu. In the meantime, HPMenu creates a "dummy" menu with a made-up name, consisting of a single choice.
31 This Choice is unknown. Type in a known choice to be deleted. (MENUERR 31)	From Main Customization, the user pressed Delete, but the choice specified is not a known choice.	Page through the list until you see the choice you want to delete, and then type its number in the top box and try again.

ERROR MESSAGE	MEANING	ACTION
<p>32 INTERNAL ERROR: An illegal parameter was passed to "GetKnown". (MENUERR 32)</p>	<p>An error occurred while HPMenu was trying to display the list of known choices (either on Main Customization or Define Menu). The list of known choices may be incorrect or incomplete, but the functionality of HPMenu is unaffected.</p>	<p>REFRESH may cause the screen to appear correctly. In any case, report this error.</p>
<p>33 INTERNAL ERROR: Search found an alias with an illegal type. (MENUERR 33)</p>	<p>An internal error may have caused the customization operation you were doing to be canceled.</p>	<p>Retry the customization procedure that led to this error and report it.</p>
<p>34 The menu you were on is gone. Returned to First Menu instead. (WARNING 34)</p>	<p>While in Customization, the user deleted the menu from which the Customization key was pressed, so HPMenu could not return to this menu. HPMenu returns to the user's First Menu.</p>	<p>Continue to use HPMenu as before.</p>
<p>35 "RUN" command parse error found in the function definition. (MENUERR 35)</p>	<p>In trying to perform a function, HPMenu has encountered a "RUN" command that could not be executed. A more specific error should have been displayed as soon as the error was detected (before returning to the Selection menu). This message remains on the menu upon return to remind you that there was an error.</p>	<p>Check the function definition with Customization, and follow the directions under the specific error that was displayed.</p>

ERROR MESSAGE	MEANING	ACTION
<p>36 The MPE Error Message File (CATALOG.PUB.SYS) can't be opened. (MENUERR 36)</p>	<p>HPMenu attempted to open the MPE error message file CATALOG.PUB.SYS but couldn't. This means you will not be able to see MPE errors when they occur. Instead, error 38 will appear.</p>	<p>Ask the System Manager to correct the message file problem, and when error 38 occurs, check the function you were trying to perform for errors. The System Manager should make sure the MPE Error Message File is in CATALOG.PUB.SYS. MPE accesses it by this name, and it should not reside under another name.</p>
<p>37 VPLUS/3000 Error Message File (VERRMSG.S.PUB.SYS) can't be opened. (MENUERR 37)</p>	<p>HPMenu attempted to open the VPLUS/3000 error message file VERRMSG.S.PUB.SYS, but couldn't. This means you will not be able to see VPLUS/3000 errors when they occur. Instead, error 39 will appear.</p>	<p>Ask the System Manager to correct the message file problem. The System Manager should make sure the VPLUS/3000 Error Message file is in VERRMSG.S.PUB.SYS. VPLUS/3000 accesses it by this name and it should not reside under another name.</p>
<p>38 Error in reading message from MPE message file. (MENUERR 38)</p>	<p>In trying to perform a function, an MPE error occurred. HPMenu attempted to get the MPE error message from CATALOG.PUB.SYS, but there was an error in retrieving it. This means you cannot see the real error which occurred.</p>	<p>Check the function for errors and the MPE message file.</p>

ERROR MESSAGE	MEANING	ACTION
39 Error in reading message from VPLUS/3000 message file. (MENUERR 39)	An error occurred in the screen interface. HPMenu attempted to get the VPLUS/3000 error message from VERRMSG.S.PUB.SYS, but there was an error in retrieving it. This means you cannot see the real error which occurred.	Check the VPLUS/3000 message file.
40 INTERNAL ERROR: Selection value not within limits. (MENUERR 40)	When PERFORM CHOICE was pressed, the routine which gets the choice was passed an invalid reference.	Try again and be sure to report this error.
41 INTERNAL ERROR: No Current Index found in GetSelection. (MENUERR 41)	When transferring to another Selection menu, contradictory references were found for the new menu.	If what you did is inconsistent with what HPMenu generated, try again and report this error.
42 INTERNAL ERROR: Invalid Alias type found in GetSelection. (MENUERR 42)	When PERFORM CHOICE was pressed, contradictory information about the choice was found.	Try the choice again and report this error.
43 INTERNAL ERROR: Can't find menu entry in GetDetailOfMenuList. (MENUERR 43)	Due to internal inconsistencies, HPMenu canceled an entry from the menu being defined.	Edit the menu in question so that it has the entries you want.
44 The menu just defined has no entries, so it has been deleted. (WARNING 44)	The menu being created or edited has been defined but has no choices listed on it. Since there is no meaning to a blank menu, it is automatically deleted.	If you want to save the menu, put at least one entry on it.

ERROR MESSAGE	MEANING	ACTION
45 INTERNAL ERROR: RunStr Array index out of bounds. (MENUERR 45)	While defining a function, HPMenu generated a reference to a command line greater than 30. Since there is a maximum of 30 lines, this indicates problems with the internal data.	If you save the function, it may not be stored correctly, and there may be other problems (with the screen display, for example). It is therefore a good idea, if you are editing a function, to cancel the changes and try again.
46 INTERNAL ERROR: Field number is zero. (MENUERR 46)	The data used by HPMenu to read input on the screens is in error and references an invalid field (location).	Your input may not be processed, so try again and be sure to report this error.
47 FATAL ERROR: The terminal cannot be reopened. (MENUERR 47)	VPLUS/3000 cannot reopen the terminal after performing a function or resuming from Command Mode. This indicates a temporary problem with the terminal (pressing RESET at the wrong time could produce this error). HPMenu cannot continue without access to the terminal, so this is a fatal error.	Start HPMenu again. If this problem occurs repeatedly, have the System Manager check your terminal.
48 Error in reading message from Pascal message file. (MENUERR 48)	An error was reported by Pascal. HPMenu attempted to get the Pascal error message from PASCAT.PUB.SYS, but there was an error in retrieving it. This means you cannot see the real error which occurred.	Ask the System Manager to check for a message file problem.
50 "RUN" command syntax error: LIB must be followed by "=". (MENUERR 50)	While executing a function, HPMenu encountered a "RUN" command with the "LIB" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.

ERROR MESSAGE	MEANING	ACTION
51 "RUN" command syntax error: LIB must be P, G, or S. (MENUERR 51)	While executing a function, HPMenu encountered a "RUN" command with the "LIB" option. This option specifies a library to search, either "P", "G", or "S". The function in question set this option to some other value.	Simply customize it to correct the syntax.
52 "RUN" command syntax error: INFO must be followed by "=". (MENUERR 52)	While executing a function, HPMenu encountered a "RUN" command with the "INFO" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.
53 "RUN" command syntax error: INFO string must be in quotes. (MENUERR 53)	While executing a function, HPMenu encountered a "RUN" command with the "INFO" option. This option specifies a string which must be typed in quotes but no quotes were found for the function in question.	Customize the function to correct the syntax.
54 "RUN" command syntax error: PARM must be followed by "=". (MENUERR 54)	While executing a function, HPMenu encountered a "RUN" command with the "PARM" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.
55 "RUN" command syntax error: PARM must be between -32768 and 32767. (MENUERR 55)	While executing a function, HPMenu encountered a "RUN" command with the "PARM" option. This option requires a number in the range specified by the message. The function in question set this option to some other value.	Customize the function to correct the syntax.

ERROR MESSAGE	MEANING	ACTION
56 "RUN" command syntax error: STACK must be followed by "=". (MENUERR 56)	While executing a function, HPMenu encountered a "RUN" command with the "STACK" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.
57 "RUN" command syntax error: STACK must be between 511 and 32767. (MENUERR 57)	While executing a function, HPMenu encountered a "RUN" command with the "STACK" option. This option requires a number in the range specified by the message but the function in question set this option to some other value.	Customize the function to correct the syntax.
58 "RUN" command syntax error: DL must be followed by "=". (MENUERR 58)	While executing a function, HPMenu encountered a "RUN" command with the "DL" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.
59 "RUN" command syntax error: DL must be between -1 and 32767. (MENUERR 59)	While executing a function, HPMenu encountered a "RUN" command with the "DL" option. This option requires a number in the range specified by the message. The function in question set this option to some other value.	Customize the function to correct the syntax.
60 "RUN" command syntax error: MAXDATA must be followed by "=". (MENUERR 60)	While executing a function, HPMenu encountered a "RUN" command with the "MAXDATA" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.

ERROR MESSAGE	MEANING	ACTION
61 "RUN" command syntax error: MAXDATA must be between -1 and 32767. (MENUERR 61)	While executing a function, HPMenu encountered a "RUN" command with the "MAXDATA" option. This option requires a number in the range specified by the message but the function in question set this option to some other value.	Customize the function to correct the syntax.
62 "RUN" command syntax error: STDIN must be followed by "=". (MENUERR 62)	While executing a function, HPMenu encountered a "RUN" command with the "STDIN" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.
63 "RUN" command syntax error: STDLIST must be followed by "=". (MENUERR 63)	While executing a function, HPMenu encountered a "RUN" command with the "STDLIST" option. This option requires a "=", and there was none.	Customize the function in question to correct the syntax of this option.
64 "RUN" command syntax error: Unknown option specified. (MENUERR 64)	While executing a function, HPMenu encountered a "RUN" command with an option that does not match any of the options available for "RUN". (Some other syntax error may have generated this error.)	Customize the function in question to correct the "RUN" syntax.
65 "RUN" command syntax error: Option LIB already used. (MENUERR 65)	While executing a function, HPMenu encountered a "RUN" command with the "LIB" option specified more than once.	Customize the function in question to correct the "RUN" syntax.

ERROR MESSAGE	MEANING	ACTION
66 "RUN" command syntax error: Option INFO already used. (MENUERR 66)	While executing a function, HPMenu encountered a "RUN" command with the "INFO" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
67 "RUN" command syntax error: Option PARM already used. (MENUERR 67)	While executing a function, HPMenu encountered a "RUN" command with the "PARM" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
68 "RUN" command syntax error: Option STACK already used. (MENUERR 68)	While executing a function, HPMenu encountered a "RUN" command with the "STACK" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
69 "RUN" command syntax error: Option DL already used. (MENUERR 69)	While executing a function, HPMenu encountered a "RUN" command with the "DL" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
70 "RUN" command syntax error: Option MAXDATA already used. (MENUERR 70)	While executing a function, HPMenu encountered a "RUN" command with the "MAXDATA" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
71 "RUN" command syntax error: Option STDLIST already used. (MENUERR 71)	While executing a function, HPMenu encountered a "RUN" command with the "STDLIST" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
72 "RUN" command syntax error: Option STDIN already used. (MENUERR 72)	While executing a function, HPMenu encountered a "RUN" command with the "STDIN" option specified more than once.	Customize the function in question to correct the "RUN" syntax.

ERROR MESSAGE	MEANING	ACTION
73 "RUN" command syntax error: Option NOCB already used. (MENUERR 73)	While executing a function, HPMenu encountered a "RUN" command with the "NOCB" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
74 "RUN" command syntax error: Option DEBUG already used. (MENUERR 74)	While executing a function, HPMenu encountered a "RUN" command with the "DEBUG" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
75 "RUN" command syntax error: Option LMAP already used. (MENUERR 75)	While executing a function, HPMenu encountered a "RUN" command with the "LMAP" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
76 "RUN" command syntax error: Option NOPRIV already used. (MENUERR 76)	While executing a function, HPMenu encountered a "RUN" command with the "NOPRIV" option specified more than once.	Customize the function in question to correct the "RUN" syntax.
77 "RUN" command syntax error: Length can't exceed 268 characters. (MENUERR 77)	While executing a function, HPMenu encountered a "RUN" command longer than 268 characters, which is the maximum "RUN" command length accepted by MPE.	Customize the function in question to shorten the "RUN" command. (The length limit should be sufficient for any options desired.)
78 "RUN" command syntax error: Bad numeric data. (MENUERR 78)	While executing a function, HPMenu encountered a "RUN" command with an option specifying a numeric value ("PARM", "STACK", "DL", or "MAXDATA"), where the value specified is not a number between -32768 and 32767 or the value is not specified properly (because the value contains letters, a decimal point, etc.)	Customize the function in question to correct the option value.

ERROR MESSAGE	MEANING	ACTION
79 INTERNAL ERROR: Unknown "RUN" command parse error. (MENUERR 79)	Due to internal problems, a "RUN" command in the function being performed could not be parsed. Therefore, the program was not invoked.	Try again and report this problem.
80 "RUN" must be immediately followed by a blank. (MENUERR 80)	While executing a function, HPMenu encountered a command beginning with "RUN", but that word was not followed by a blank. This is a syntax error.	Customize the function in question to correct the syntax.
81 "Password" Reserved command needs a blank and the password. (MENUERR 81)	While executing a function, HPMenu encountered the Reserved command "\$Password" with a syntax error. Either there was no blank after the word, or there was no "secret word" (i.e. password) specified.	Customize the function in question to correct the syntax of "\$Password".
82 INCORRECT PASSWORD: The function has been terminated. (MENUERR 82)	The function executing was defined with a password. When prompted for it, the user did not enter the correct password in the three tries allowed. HPMenu therefore does not allow the user to continue with the function in question and returns to the Selection menu immediately.	If you simply mistyped the password, try the function again. If you were not given the password, and you have a need for it, talk to the Customizer about getting the password.

ERROR MESSAGE	MEANING	ACTION
83 The Pascal Error Message File (PASCAT.PUB.SYS) can't be opened. (MENUERR 83)	HPMenu attempted to open the Pascal error message file PASCAT.PUB.SYS, but couldn't. This means you will not be able to see Pascal errors when they occur. Instead, error 48 will appear.	Ask the System Manager to correct the message file problem.
84 A function with no definition was found, so it was deleted. (WARNING 84)	The function being created or edited has been defined to have no function definition lines. Since there is no meaning to such a function, it was automatically deleted.	If you want to save the function, put at least one line on it. If you aren't sure how to define it, use a harmless command such as "\$Message Not yet defined".
85 File System error occurred in a function definition statement. (MENUERR 85)	While executing a function, a nonfatal file system error was encountered. A more specific error should have been displayed during execution (before returning to the Selection menu). This message remains on the menu to remind you that there was an error.	Check the command which causes this error. It may be helpful to use \$LISTON to find which command generates the error.
86 Too many commands were found for a function in the Merge File. (MENUERR 86)	While merging a file, HPMenu encountered a function with more than 30 definition lines. Since 30 is the maximum allowed by HPMenu, all lines past 30 were ignored.	When the merge has completed, edit the function to make sure it is defined as you want.
87 Unable to open the Merge File specified. (MENUERR 87)	On the Merge ASCII File screen, the file specified could not be opened, so the merge was not done.	Check the file specification, making sure that you have typed the correct lockword, group, and account.

ERROR MESSAGE	MEANING	ACTION
88 No functions were created from the Merge File. It may be empty. (WARNING 88)	When performing a merge, no functions were found in the specified file. Nothing has changed in HPMenu.	No corrective action is required, but you may want to check the file and make sure it was the one you wanted.
89 Unable to open *MENULIST. Check your file equation. (MENUERR 89)	The user hit PRINT CHOICES , but the output device (for the listing) could not be opened. The operation was canceled.	Check the file equation for MENULIST , and make sure the device specified is available. If you have no file equation, check the system line printer (device class LP) and make sure it is accessible.
90 Unknown Reserved command entered. (MENUERR 90)	While executing a function, HPMenu encountered a command beginning with "\$", but the command is not one of the Reserved commands listed in Appendix A.	Customize the function in question to make sure all Reserved commands are valid.
91 "Pause" Reserved command must be followed by an equal sign ("="). (MENUERR 91)	While executing a function, HPMenu encountered the Reserved command "\$Pause", but the word was not followed by "=".	Customize the function in question to correct the syntax of "\$Pause".
92 "Pause" Reserved command needs "=" and a number from 0 to 32767. (MENUERR 92)	While executing a function, HPMenu encountered the Reserved command "\$Pause" with a syntax error. This word must be followed by an equals sign ("=") and a number in the range specified.	Customize the function in question to correct the syntax of "\$Pause".

ERROR MESSAGE	MEANING	ACTION
<p>93 Reserved command failed in a function definition statement. (MENUERR 93)</p>	<p>In trying to perform a function, HPMenu has encountered a Reserved command that could not be executed. A more specific error should have been displayed as soon as the error was detected (before returning to the Selection menu). This message remains on the menu upon return to remind you that there was an error.</p>	<p>Check the function definition with Customization and follow the directions under the specific error in this section.</p>
<p>94 Command Mode Error: Only 79 characters per line, but "&" works. (MENUERR 94)</p>	<p>In Command Mode, the user typed a command line longer than 79 characters. Although the MPE Command Interpreter accepts longer lines, HPMenu Command Mode allows a maximum of 79 characters per line.</p>	<p>If the desired command is longer than this, use the continuation character (&) to type the command as several shorter lines.</p>
<p>95 "Message" Reserved command needs a blank followed by text. (MENUERR 95)</p>	<p>While executing a function, HPMenu encountered the Reserved command "\$Message" with a syntax error. Either there is no blank after the word, or there is no text message specified.</p>	<p>Customize the function in question to correct the syntax of "\$Message".</p>
<p>96 INTERNAL ERROR: Can't add Nil Alias. (MENUERR 96)</p>	<p>The user saved a choice that was created or edited. The internal routine that saves the choice definition was given no information to store, so it made no changes. The result is as if the user canceled the creation/editing of the choice.</p>	<p>Unless this problem appears all the time, it is likely that recreating or reediting will work.</p>

ERROR MESSAGE	MEANING	ACTION
97 "Pause" Reserved command needs a number between 0 and 32767. (MENUERR 97)	While executing a function, HPMenu encountered the Reserved command "\$Pause", but the number specified was not in the correct range.	Customize the function in question to correct the syntax of "\$Pause".
99 INTERNAL ERROR: Alias of type "Del" found in GetOneAlias. (MENUERR 99)	An internal routine looking for names of choices was given a reference to a choice which was deleted. Side effects are probably minimal. The choices for a menu may not be properly displayed.	REFRESH may cause the menu to be redisplayed correctly. This error should be reported.
100 INTERNAL ERROR: Alias of type "None" found in GetOneAlias. (MENUERR 100)	An internal routine looking for names of choices was given a reference to a nonexistent choice. Side effects are probably minimal. The choices for a menu may not be properly displayed.	REFRESH may cause the menu to be redisplayed correctly. In any case, this error should be reported.
101 INTERNAL ERROR: Expected MENU but found COMD in SelectMenu. (MENUERR 101)	An internal routine which processes menus was passed a choice which is not a menu. The processing is not done, which probably results in a menu list being displayed improperly.	Hit REFRESH, or cancel the operation you are doing and try it again.
102 INTERNAL ERROR: Couldn't find specified menu in SelectMenu. (MENUERR 102)	An internal routine which processes menus could not find the referenced menu. The processing is not done, which probably results in a menu list not being properly displayed.	Hit REFRESH, or cancel the operation you are doing and try it again.

ERROR MESSAGE	MEANING	ACTION
103 INTERNAL ERROR: Expected COMD but found MENU in SelectThisAlias. (MENUERR 103)	An internal routine which processes functions was passed a choice which is not a function. The processing is not done, which probably results in a function definition not being properly displayed.	Hit REFRESH, or cancel the operation you are doing and try it again.
104 INTERNAL ERROR: Can't update recovery info. End Customization. (MENUERR 104)	HPMenu could not update the information that tells it when recovery is needed. There is no loss of data, but if the system should crash, HPMenu may not recover correctly.	If you are customizing, it is advisable to save your information and reenter Customization. Call the System Manager. The System Manager should check the file MRQ8X2Z in the group in question, as well as the I/O to that disc. HPMenu was unable to FWRITEDIR to that file.
105 INTERNAL ERROR: Recovery index is too large. End Customization. (MENUERR 105)	HPMenu could not update the information that tells it when recovery is needed. There is no loss of data, but if the system should crash, HPMenu may not recover correctly.	If you are customizing, it is advisable to save your information and reenter Customization. Please report this error.
106 INTERNAL ERROR: Illegal AType found. (MENUERR 106)	In Copy or Rename, the From choice was found with invalid information. The Copy or Rename operation is canceled.	Unless this problem appears all the time, it is likely that retrying the same operation will work. However, this implies some inconsistent internal data, and the problem should be reported.

ERROR MESSAGE	MEANING	ACTION
107 INTERNAL ERROR: MakeAlias is Nil. (MENUERR 107)	In Copy or Rename, the routine which creates the new choice was unable to do so. This error is usually caused by error 106. It may also occur if the program stack is too small (and you have done a lot of customizing). The Copy or Rename operation is canceled.	Unless this problem appears all the time, it is likely that retrying the same operation will work.
108 INTERNAL ERROR: MenuList is empty. (MENUERR 108)	The menu being created or edited has been defined but HPMenu could not find the list of choices for it. The menu has been saved, but it is probably blank.	Edit the menu so it contains the desired entries.
109 INTERNAL ERROR: No "Last" in GetRunList. (MENUERR 109)	The function may not be properly saved.	Try again and report the error.
110 INTERNAL ERROR: No "Last" in GetDetailOfMenuList. (MENUERR 110)	The menu may not be properly saved.	Try it again and report this error.
111 INTERNAL ERROR: No last page found in SetTotalPages. (MENUERR 111)	Selecting and performing choices should still work, but HPMenu may have lost information it needs to display the list of Known Choices (where this appears in Customization, including the Main Customization screen). Customization is still possible by remembering the names of the desired functions, but the Known Choices list cannot be recovered.	Adding or deleting a choice may recover the list of Known Choices.

ERROR MESSAGE	MEANING	ACTION
112 Type either "1" or "2" only and then press RETURN. (MENUERR 112) >	During recovery after a system crash or abort, HPMenu asked the user to choose between two files by typing either "1" or "2". Some other response was given.	Type either the number "1" or "2" and press RETURN.
120 Your customization file is incomplete and must be restored. (MENUERR 120)	HPMenu was reading in your customization file at startup, and only a partial file was found. This means that your file was not completely written when it was last customized. There should have been an error at that time with more information about the problem.	You must restore the file either from MENUUCUST.HPMENU.HPOFFICE or by using a backup tape from before the last time your file was customized. (Ask your System Manager about the latter option.)
122 "PURGE" failed on backup file. This may affect future recovery. (WARNING 122)	During customization, HPMenu regularly makes backup files so that it can recover in the event of a system crash. This error indicates that HPMenu was unable to delete a backup file that is no longer current. If recovery is required later, HPMenu may mistakenly recover from the old backup file, causing the user to lose all customization done after this error occurs.	The user should finish customizing as quickly as possible. Once the customization has been saved, it is safe to start customizing again. The System Manager should then check the recovery file to see which backup files for this user have not been purged, and purge all such files (unless they are already being reused). Search for a record with the user's customization file name and look for file names beginning with M0Q8X2Z. If these names are repeated in other "valid" records, they are already being reused. This error may indicate a system problem, since it implies that the MPE PURGE command failed.

ERROR MESSAGE	MEANING	ACTION
<p>123 Unknown backup state. Recovery may not get the latest version. (WARNING 123)</p>	<p>The backup files found for this user imply an unknown state. HPMenu can only guess what the appropriate customization file should be, which it does.</p>	<p>The information is valid, but it may be old, so some recustomization may be required.</p>
<p>124 Unlock failed, so your group can't customize until you exit. (WARNING 124)</p>	<p>HPMenu only allows one user per group to customize at once. Due to file errors, it is unable to indicate that you have finished customizing. This should be fixed automatically when you exit, but until it is fixed, no one in your group can use Customization.</p>	<p>If there are others in your group who wish to customize, exit HPMenu and start again. If this still doesn't work, call your System Manager. The System Manager should check file MLQ8X2Z in the group in question. HPMenu was unable to close this file for exclusive access. You must make the file accessible exclusively for group members to use Customization.</p>
<p>125 The Lockfile needed for Customization is missing. See the System Manager. (MENUERR 125)</p>	<p>HPMenu uses a file in your group to indicate if group users can access the Customization facility. This file does not exist in your group and HPMenu cannot create it, so you cannot customize.</p>	<p>If you want to use this facility, have your System Manager add the required file to your group.</p>
<p>126 Someone else in your group is customizing. Try again later. (MENUERR 126)</p>	<p>HPMenu only allows one user per group to customize at once. Someone else in your group is using the Customization facility, and until they have finished, you may only use the other HPMenu features.</p>	<p>Try again later, or find out who is customizing and work something out with them. If no one else in your group is customizing, report this to your System Manager. If there is no one in the group using Customization, the System Manager should treat this the same as error 127.</p>

ERROR MESSAGE	MEANING	ACTION
<p>127 Unable to lock Customization. See the System Manager. (MENUERR 127)</p>	<p>The file that allows HPMenu to permit only one user at a time to customize is damaged, missing, or otherwise inaccessible. Have your System Manager fix it. Until then, no one in your group can access Customization.</p>	<p>The System Manager should check file MLQ8X2Z in the group in question. HPMenu cannot open this file for exclusive access.</p>
<p>128 Unable to check if recovery is needed, so none was performed. (WARNING 128)</p>	<p>HPMenu cannot access the information that tells it when recovery is needed. Unless the system crashed the last time you were in HPMenu and you were in Customization at the time of the crash, no recovery is needed for you. There is no cause for worry, but you should report this error to the System Manager because it may cause problems later.</p>	<p>If you think you were in need of recovery, check whether HPMenu has the correct customization information. If it doesn't, have the System Manager try to set up your customization files correctly. The System Manager should check file MRQ8X2Z in the group in question. HPMenu was unable to open this file. If the user needs manual recovery, look in this file for a record with the user's customization file name. Examine all files named in that record (beginning with MQQ8X2Z). One of these is the file the user wants, unless the file the user wants is the one he got; that is, the one the user names when invoking HPMenu (MENCUST by default). Rename the desired file to the name used to invoke HPMenu and purge all the other ones.</p>

ERROR MESSAGE	MEANING	ACTION
<p>129 Unable to read all recovery status. Recovery may be needed. (WARNING 129)</p>	<p>HPMenu could not read all of the information that tells it when recovery is needed. Unless the system crashed the last time you were in HPMenu and you were in Customization at the time of the crash, no recovery is needed for you. Please report this error to the System Manager, however, because it may cause problems later.</p>	<p>If you think you were in need of recovery, check whether HPMenu has the correct customization information. If it doesn't, have the System Manager try to set up your customization files correctly. The System Manager should check file MLQ8X2Z in the group in question, as well as the I/O to that disc. HPMenu was unable to read a record from this file. If the user needs manual recovery, look in this file for a record with the user's customization file name. Examine all files named in that record (beginning with MLQ8X2Z). One of these is the file the user wants, unless the file the user wants is the one the user got; that is the file the user names to invoke HPMenu (MENCUST by default). Rename the desired file to the name used to invoke HPMenu and purge the others.</p>
<p>130 Can't save recovery information, so Customization isn't safe. (MENUERR 130)</p>	<p>Due to problems with the file in which HPMenu keeps backup information, it cannot backup at the level you requested. Rather than letting you customize unsafely, HPMenu doesn't let you access Customization.</p>	<p>If you don't mind risking loss of information, you can exit HPMenu and run it again with backup level NEVER. Otherwise, simply call your System Manager. The System Manager should check file MLQ8X2Z in the group in question. Either HPMenu could not open the file, or the file did not exist and HPMenu could not create it.</p>

ERROR MESSAGE	MEANING	ACTION
<p>131 Out of backup files. Can't customize until someone recovers. (MENUERR 131)</p>	<p>There have been a great many system crashes on your system, and not enough people in your group have run HPMenu since. HPMenu recovers automatically when run after a crash, but if the user doesn't run HPMenu, the backup files stay around the system. This error occurred because there are so many of these files that HPMenu cannot get any more backup files. Since it cannot perform backup at the level you requested, HPMenu doesn't let you access Customization.</p>	<p>If you don't mind risking loss of information, you can exit HPMenu and run it again with backup level NEVER. Otherwise, try to encourage users in your group to run HPMenu (even if they don't do anything), or call your System Manager. The System Manager may need to purge backup files for customization files which are no longer used. Look in file MLQ8X2Z in that group for records with the desired customization file names, and purge all the files named in those records (names starting with MLQ8X2Z).</p>
<p>132 INTERNAL ERROR: Unknown file name in recovery status file. (MENUERR 132)</p>	<p>HPMenu keeps a list of files it uses for backup. These files have a certain format, and HPMenu has encountered a file name that does not fit the format. This has no effect on backup for you, but you should notify the System Manager.</p>	<p>The System Manager should check the recovery file. This error indicates damage to that file. If you can determine what values should be in the file, edit it. Otherwise, find a valid backup version of the recovery file and restore it. If this is impossible, simply blank out the names of backup files that do not match the format and mark completely mangled records "Empty". Some recovery information is likely to be lost anyway, but at least further error messages will be suppressed. If this problem occurs again, please report it.</p>

ERROR MESSAGE	MEANING	ACTION
133 Type a choice number greater than 0, or the name of a choice. (MENUERR 133)	On Main Customization, the user has pressed Create/Edit or Delete without first selecting a valid choice, either by typing a choice number greater than 0, or a name.	Select a choice and try again.
134 That choice is not a menu. Type an existing menu name. (MENUERR 134)	On the Select First Menu screen, the New First Menu typed was not a menu.	Type a known menu name in the box and try again.
135 Unable to assign backup files, so Customization is unsafe. (MENUERR 135)	HPMenu could not read all of the information that tells it which backup files are in use. Therefore, it cannot assign backup files without risking overwriting someone else's backup file. Since that could cause another user to lose data, HPMenu doesn't do this and it cannot perform backup for you. Rather than letting you customize unsafely, HPMenu doesn't let you access Customization.	If you don't mind risking loss of information, you can exit HPMenu and run it again with a backup level NEVER. Otherwise, simply call your System Manager. The System Manager should check out the disc for the recovery file (MLQ8X2Z) and other potential I/O problems. This error means that HPMenu could not read at least one record from the recovery file.
136 INTERNAL ERROR: MENCUCUST.HPMENU.HPOFFICE is missing. (MENUERR 136)	The customization file requested does not exist, so HPMenu attempts to initialize it from the default customization file (MENCUCUST.HPMENU.HPOFFICE). This file should never be tampered with.	This file should never be tampered with, so notify the System Manager. The System Manager should make sure this file is installed properly and reinstall it if necessary (or restore it from a backup tape).

ERROR MESSAGE	MEANING	ACTION
138 Functions limited to 30 lines. Lines past 30 weren't saved. (MENUERR 138)	When defining a function, the user attempted to enter more than 30 function definition lines (3 full pages). Since 30 is the maximum allowed, HPMenu ignored all lines past 30.	You may wish to edit the function to make sure that what was saved is what you want.
139 Unable to write to indicated file. Customization was not saved. (MENUERR 139)	HPMenu was trying to save your customization, but it could not open the file to write out the information. Therefore, your customization was not saved, and because this error indicates problems with your customized information, HPMenu is unable to continue.	Make sure no one else is using your customization file (during startup or with Customization) and try again. If the error is repeated, call the System Manager. The System Manager should check the file named in the terminating message. This file could not be opened for exclusive write access.
140 Error in trying to open a file. (MENUERR 140)	HPMenu was unable to open a file, and the error is not covered by one of the other error messages. Recall what you were doing when this error occurred, in as much detail as possible, and report it to the System Manager.	The System Manager should check all files installed with HPMenu, any file equations which may not have been set, and any other files the system may need to run HPMenu. If you cannot locate the cause, report this problem.
142 Still have security violation on file open. Unable to continue. (MENUERR 142)	Someone else was using the customization file you were trying to access which prevented you from doing so. This condition is usually temporary. If after several attempts, however, HPMenu still can't open the file, it gives up. This may indicate a problem with the customization file, so call the System Manager.	The System Manager should check the customization file to be sure it is accessible. If there is no file problem, this error means that there is too much contention for this file. The contention problem is caused by customizing the file, which requires exclusive access. You might consider restricting the hours when customization can occur.

ERROR MESSAGE	MEANING	ACTION
143 An unrecoverable error has occurred. Unable to continue. (MENUERR 143)	An error has occurred from which HPMenu cannot recover. This is usually an internal error. A more specific error message should also be displayed. from the file system, Pascal, VPLUS/3000, etc.	Call the System Manager. Unless the cause is found to be some problem with your system, please report this problem.
144 To customize a file, you must be logged on to the same group. (MENUERR 144)	The customization file being used is stored in a different group from the one you are logged on to. Although you can access such a file for choice selection, you cannot customize it.	To customize this file, exit HPMenu, log on to the appropriate group, and run it again. This error may be generated inappropriately due to errors 146 or 147. If you get this error when you are in the right group, refer to the discussion for errors 146 and 147.
146 INTERNAL ERROR: FFILEINFO failed. (MENUERR 146)	HPMenu could not get the name of your customization file. This may cause problems with Customization and recovery, but it should not interfere with selecting choices.	Try again. If the error continues to occur, note what caused it and call the System Manager. The System Manager should check for possible system problems that would cause the FFILEINFO intrinsic to fail. If none can be found, please report this problem.

ERROR MESSAGE	MEANING	ACTION
<p>147 INTERNAL ERROR: FFILEINFO returned bad formal designator. (WARNING 147)</p>	<p>On entering Customization, HPMenu checks to make sure the file you want to customize is in your logon group. This error means that HPMenu could not determine which group your file was in. Therefore, it gives you the benefit of the doubt and lets you customize. Backup and recovery will be affected if you are in the wrong group, but there will be no other problems.</p>	<p>If you use backup, make sure you are in the same group as the customization file. In any case, try again. If the error continues to occur, call the System Manager. The System Manager may need to investigate the operating system version. This error indicates that the intrinsic FFILEINFO returned a formal file designator with the wrong format (no ".").</p>
<p>149 INTERNAL ERROR: Recovery file was not created with proper EOF. (MENUERR 149)</p>	<p>The user specified some level of backup, and HPMenu was initializing the file that keeps track of who is doing backup and when recovery is needed. HPMenu was unable to finish initializing the file. Backup should not be affected.</p>	<p>Customize as usual, but call the System Manager. The System Manager should make sure file MRQ8X2Z in the group in question has been created with an EOF of 42. In addition, each record should have the proper binary value, which can be found in the last record of a recovery file which was initialized by HPMenu. (All records are initialized to the same value.) If there are records marked "Valid", do not reinitialize them.</p>
<p>150 INTERNAL ERROR: Invalid "which" parameter in DoAReserved. (MENUERR 150)</p>	<p>One of the HPMenu run-time options specified (with the INFO string) may not have been activated.</p>	<p>If you are not sure you have all the desired options, run HPMenu again.</p>

ERROR MESSAGE	MEANING	ACTION
<p>151 INFO string error: Unknown keyword in INFO string for HPMenu. (MENUERR 151)</p>	<p>An unknown run-time option was specified (with the INFO string) when HPMenu was invoked. Run-time options are: OKMPE, OKCUSTOM, TRANSACT, ON_SAVE, and NEVER. For more on these options, see "Invoking HPMenu".</p>	<p>Check your INFO string for possible misspellings, and if you didn't get all the options you wanted, run HPMenu again.</p>
<p>152 INFO string error: Semicolon found with no parameters after it. (MENUERR 152)</p>	<p>The INFO string containing HPMenu run-time options ended with a semicolon. The semicolon is used to separate options, but the string should not end with one.</p>	<p>Make sure you didn't leave out an option. If you did, run HPMenu again.</p>
<p>153 INTERNAL ERROR: Invalid case type in Create Error. (MENUERR 153)</p>	<p>While trying to execute a function, HPMenu encountered an error which it failed to classify (as a syntax error, "RUN" command failure, etc.). An incomplete error message will appear, with only an error number (not an HPMenu message number) and a function definition line number.</p>	<p>Check the function definition carefully for errors and try again.</p>
<p>154 User parameter error: Must have data between percent signs. (MENUERR 154)</p>	<p>The function being performed contains a statement with percent signs with no prompt or parameter number between them. Appendix A describes how to use HPMenu parameters. Since there was no data specified, the percent signs were ignored in executing the statement.</p>	<p>Customize the function in question to correct the syntax.</p>

ERROR MESSAGE	MEANING	ACTION
155 User parameter error: Ending percent sign ("%") is missing. (MENUERR 155)	The function being performed contains a statement with a single percent sign. This character is used for the HPMenu parameter facility (see Appendix A) and has no other uses (except as part of a string). Therefore, it was ignored in executing the statement.	Customize the function to correct the syntax.
156 User parameter ("%...%") failed in the function definition. (MENUERR 156)	In trying to perform a function, an error was found in the use of HPMenu parameters (described in Appendix A). A more specific error should have been displayed as soon as the error was detected (before returning to the Selection menu). This message remains on the menu upon return to remind you that there was an error.	Check the function definition with Customization and follow the directions under the specific error that was displayed.
157 EOF found in input string. The function was canceled. (MENUERR 157)	An end-of-file (EOF) was entered. This may be any command beginning with a colon (":"), and "EOD" in particular.	Such commands should not be typed. If they are input to a subsystem or application, HPMenu may be able to continue performing the function. In any case, it tries to recover the terminal (which EOF effectively closes). With each try, HPMenu redisplay this message.
158 FATAL ERROR: Cannot reopen \$STDINX after EOF (":" found. (MENUERR 158)	An end-of-file (EOF) was entered (see error 157). HPMenu tries to reopen the terminal several times. If it cannot, the program cannot continue and this message is displayed.	Do not type commands beginning with a colon. Run HPMenu again.

ERROR MESSAGE	MEANING	ACTION
159 "Parm" Reserved command requires a number between 0 and 9. (MENUERR 159)	While executing a function, HPMenu encountered the Reserved command "\$Parm", but either no parameter number was specified or the one specified was not in the appropriate range.	Customize the function in question to correct the syntax of "\$Parm".
160 "Parm" Reserved command must be followed by an equal sign ("="). (MENUERR 160)	While executing a function, HPMenu encountered the Reserved command "\$Parm", but the parameter number is not followed by "=".	Customize the function in question to correct the syntax of "\$Parm".
161 "Parm" Reserved command requires a blank before the number. (MENUERR 161)	While executing a function, HPMenu encountered a Reserved command beginning with "\$Parm", but there was no blank after the word. A blank is needed to indicate the end of the word.	Customize the function in question to correct the syntax of "\$Parm".
162 "Parm" requires a blank, a number between 0 and 9, and text. (MENUERR 162)	While executing a function, HPMenu encountered the Reserved command "\$Parm" with a syntax error. This word must be followed by a blank, a number in the specified range to identify the parameter, an equals sign ("="), and the text used to set the parameter value.	Customize the function in question to correct the syntax of "\$Parm".
163 INTERNAL ERROR: Bad Atype in Print Choices. (MENUERR 163)	While doing PRINT CHOICES , HPMenu found a choice with some inconsistent references. This choice was ignored, so your listing may be incomplete.	Try again and report the error.

ERROR MESSAGE	MEANING	ACTION
164 INFO string error: Unexpected char. Probably missing semicolon. (MENUERR 164)	HPMenu found a run-time option in the INFO string, but the option was followed by a character other than a semicolon. Perhaps another character (such as a comma) was used, or the option was misspelled (with an extra character at the end).	Check the "RUN" command for errors, and if you didn't get all the options you wanted, run HPMenu again.
165 Merge File function name already exists and was ignored. (WARNING 165)	While merging a file, HPMenu found a function name which matches an existing function in your customization file. This function was not read for the merge, and the existing function of the same name is unchanged.	If you want the new function merged, either rename it (by editing the file) or rename the existing function of the same name (by customizing).
166 Known Choices input fields are ignored for PRINT CHOICES. (WARNING 166)	On Main Customization, the user filled in either a Choice Number or Name and pressed PRINT CHOICES . These fields have no meaning for that operation, so the data was ignored.	To avoid seeing this warning, leave the screen blank when pressing PRINT CHOICES .
174 There are no more definition lines for this function. (WARNING 174)	In Define Function, the user has pressed NEXT LINES when the last lines are currently being shown.	To add more commands, type them in. If there are other pages of command lines, use PREVIOUS LINES to see them.
175 HPMenu is almost out of room. Suggest you delete some choices. (WARNING 175)	Due to space limitations, HPMenu cannot add many more choices. If space becomes very low, even editing or renaming a choice may be impossible.	Delete any unnecessary choices. If you need to add many more, it may be better to use two different customization files.

ERROR MESSAGE	MEANING	ACTION
176 Out of room in HPMenu. Operation canceled; delete some choices. (MENUERR 176)	Due to space limitations, HPMenu could not perform the last customization operation, so it was canceled.	Delete any unnecessary choices. If you need to add many more, it may be better to use two different customization files.
177 Maximum choices used. Operation canceled; delete some choices. (MENUERR 177)	There is a maximum of 100 choices allowed in HPMenu. You have reached this limit, so the last customization operation was canceled.	If you have been doing a lot of customization this session, there may be some deleted choices still taking up space, and you can get more space by leaving Customization and starting again. Otherwise, delete any unnecessary choices. If you need to add many more, it may be better to use two different customization files.
178 Function canceled because you failed to match function password. (MENUERR 178)	You failed to match the password for a function. Error 82 was displayed before returning to the Selection menu. This message remains on the menu to remind you there was an error.	If you simply mistyped the password, try the function again. If you were not given the password, and you have a need for it, talk to the Customizer about getting the password.
180 INTERNAL ERROR: Illegal run record case. (MENUERR 180)	HPMenu was unable to read a function definition line. If you are performing the function, that line will cause error 19. If the function is being displayed, that line is replaced with an error message.	Edit the function to reenter the command line in error.

ERROR MESSAGE	MEANING	ACTION
<p>181 Unable to Merge entire file. Maximum choices now in use. (MENUERR 181)</p>	<p>HPMenu was merging a file which had more functions than the customization file had room for. There is a maximum of 100 choices per file, and you have reached this limit. Therefore, some of the functions were not merged.</p>	<p>In order to merge the rest of the file, you must first delete some choices. Even after choices are deleted, they use space until you leave Customization, so do this and start again. However, if you have many more functions to merge, it may be better to use two different customization files.</p>
<p>182 INTERNAL ERROR: Local text error in MENUMSG file. (MENUERR 182)</p>	<p>HPMenu was unable to read a line of text from its message file, MENUMSG.HPMENU.HPOFFICE. The prompt, command, key label, etc. corresponding to this line will be blank.</p>	<p>Start HPMenu again. If the error is repeated, see the System Manager. The System Manager should check MENUMSG.HPMENU.HPOFFICE. The error occurred while getting a message from Set 2. The file may be damaged.</p>
<p>183 INTERNAL ERROR: Invalid AType in DelAndCrunch. (MENUERR 183)</p>	<p>After deleting a choice, HPMenu could not identify it as either a menu or a function, so it could not free all the space used by that choice.</p>	<p>This condition is automatically corrected when you exit HPMenu. There is no need to do this unless errors 175 or 176 occur, in which case restarting HPMenu may give you more room. Please report this error.</p>
<p>200 INTERNAL ERROR: Unknown error in "RUN" command. Unable to run. (MENUERR 200)</p>	<p>While executing a function, HPMenu encountered a "RUN" command that failed, but MPE did not indicate a specific error.</p>	<p>Try the function again and if it still fails with this error, check the function definition carefully. This error indicates a problem with an MPE intrinsic which should be reported.</p>

ERROR MESSAGE	MEANING	ACTION
201 User, group, or account lacks PH capability. (MENUERR 201)	While executing a function, HPMenu encountered a "RUN" command. In order to perform such functions, the user running HPMenu must have PH capability (so the logon group and account must also have PH capability).	See the System Manager to have this capability assigned. The System Manager should alter the user, group, and account, if necessary, to have PH capability.
202 INTERNAL ERROR: Required parameter (other than error) omitted. (MENUERR 202)	One of the programs for the function you asked to perform was not run.	Please try again.
203 INTERNAL ERROR: Param address (other than error) out of bounds. (MENUERR 203)	One of the programs for the function you asked to perform was not run.	Please try again.
204 Out of system resources (PCB's, DST's, etc.). (MENUERR 204)	While executing a function, HPMenu encountered a "RUN" command which failed because the system was out of the resources needed to run a program.	Call the System Manager. The System Manager should check the system usage. This error indicates that the system is overburdened and cannot accommodate all its users sufficiently. Perform whatever optimizations you can and contact your HP Sales Representative.
205 INTERNAL ERROR: Process not created due to invalid item number. (MENUERR 205)	One of the programs for the function you asked to perform was not run.	Please try again.
206 Program named does not exist. (MENUERR 206)	While executing a function, HPMenu encountered a "RUN" command specifying a program that could not be found.	Make sure the correct name was used in the function definition.

ERROR MESSAGE	MEANING	ACTION
<p>207 Program name has a syntax error. (MENUERR 207)</p>	<p>While executing a function, HPMenu encountered a "RUN" command with a syntax error in the program name. The name should be a maximum of 8 characters, optionally followed by a slash ("/") and an 8-character lockword, optionally followed by a period (".") and an 8-character group name, optionally followed by a period and an 8-character account name.</p>	<p>Customize the function in question to correct the syntax.</p>
<p>208 Entry point name does not exist or has a syntax error. (MENUERR 208)</p>	<p>While executing a function, HPMenu encountered a "RUN" command specifying an entry point that could not be found or has a syntax error.</p>	<p>Make sure the correct entry point name was used, and customize the function in question to correct the error.</p>
<p>215 DLsize + Globsize + Stacksize exceeds the maximum Stacksize. (MENUERR 215)</p>	<p>While executing a function, HPMenu encountered a "RUN" command set up to require more stack than the maximum allowed on the system.</p>	<p>If you specified the "DL" or "STACK" parameters in the "RUN" command, make them smaller if possible (by customizing the function). Otherwise, the program itself is using too much stack. If the program cannot be changed, talk to the System Manager. The System Manager should check for ways to run the program with a smaller stack. If there is a need for a larger stack, reconfigure the system to allow for a larger stack size. If this is not possible, the application itself must be modified.</p>

ERROR MESSAGE	MEANING	ACTION
216 Program cannot be run, possibly due to a security violation. (MENUERR 216)	While executing a function, HPMenu encountered a "RUN" command which failed due to a "hard load error". This may be caused by a security violation in attempting to access the program.	Because this error is very general, there is no detailed corrective action. However, a common cause of this error is a security violation: attempting to RUN a program for which you do not have execute access.
217 INTERNAL ERROR: Process not created; priority class is invalid. (MENUERR 217)	One of the programs for the function you asked to perform was not run.	Please try again.
218 "RUN" command failed because given \$STDIN couldn't be opened. (MENUERR 218)	While executing a function, HPMenu encountered a "RUN" command with the "\$STDIN" option. The file specified for this option could not be opened.	Check the file or device and correct the function definition if necessary.
219 "RUN" command failed because given \$STDLIST couldn't be opened. (MENUERR 219)	While executing a function, HPMenu encountered a "RUN" command with the "\$STDLIST" option. The file specified for this option could not be opened.	Check the file or device and correct the function definition if necessary.
220 INTERNAL ERROR: "RUN" command failed; INFO string is too long. (MENUERR 220)	While executing a function, HPMenu encountered a "RUN" command with the "INFO" option. The string specified for this option was too long for the program stack.	If the program is allowed a larger stack (based on system limitations, etc.), then use the STACK option of the "RUN" command to increase the stack size. If this error occurs repeatedly with different functions--and stack size does not appear to be an issue--please report this problem.

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HP MENU Administration Manual

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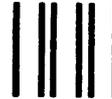
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