

CALL FORWARD CONTROL

Installation & Operations Manual

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Chapter 1 INTRODUCTION

OVERVIEW

Call Forward Control (CFC) is an application suite that enhances the forwarding of incoming calls from both internal and external sources. The CFC programs use the Status Monitor, Switch Control, and Service Set facilities of the NEAX2400 IMS as accessed through the OAI. Telephones may be forwarded directly to an extension using the Hard Forward feature. Incoming calls received by an extension that has been forwarded to a monitored number may be routed to a specified destination using the Call Routing feature. Both Hard Forwarding and Call Routing can be controlled and tailored to suit the needs of the phone user based on time of day and/or day of week/year.

The CFC package consists of the following applications:

- CFC Administration Program
- Call Routing Control Program (CRC)
- Hard Forward Control Program (HFC)

CFC performs its call forwarding functions either within the Medical Center System (MCS) or as an independent application in the Applications Manager (APM) environment. Its communication with the NEAX PBX is based upon the NEC Open Application Interface (OAI). Figure 1-1 below illustrates the relationship of these system components.

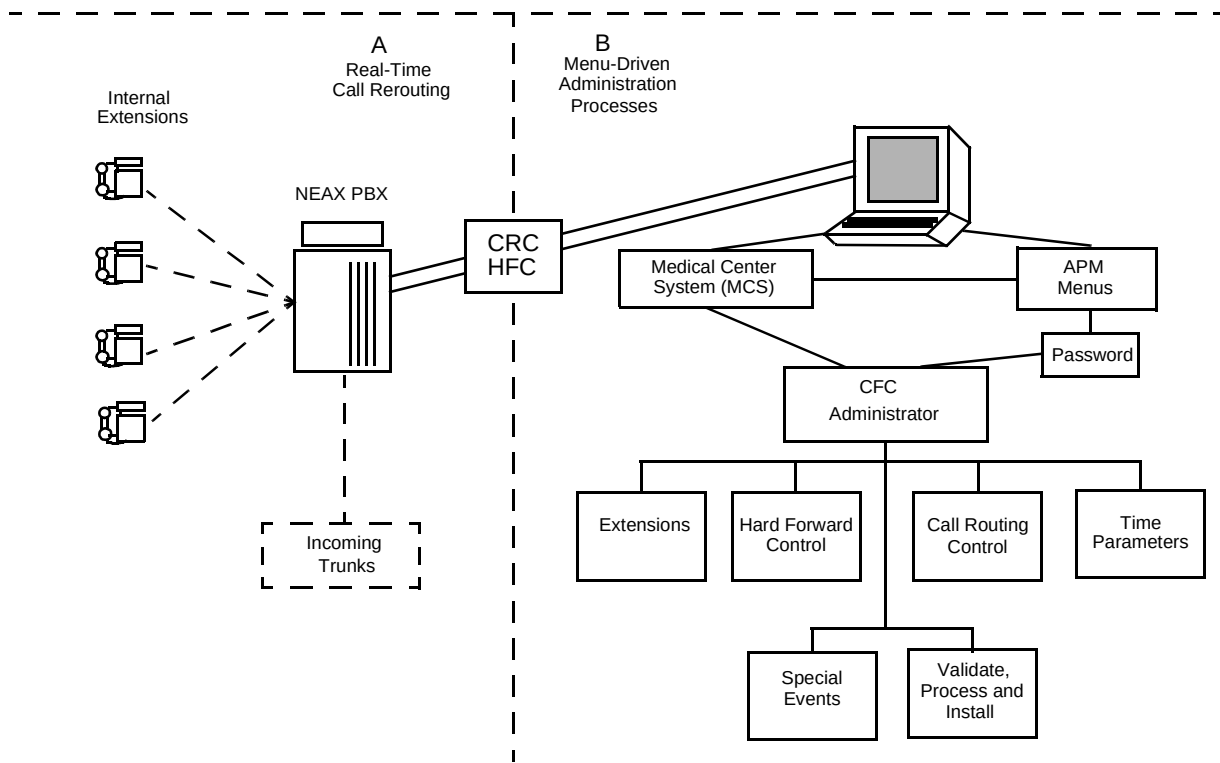


Figure 1-1 Call Forward Control System

OVERVIEW (Cont)

The CFC Administration program is used to create and modify the telephone databases and event schedules used by the HFC and CFC applications. Telephone extensions can be grouped by common forwarding (HFC) and routing (CRC) patterns. This grouping feature makes it possible to forward and/or reroute whole departments at a time or different departments according to different schedules or destination extensions. A Special Events table will allow Hard Forwarding and Call Routing groups to override their normal routing patterns temporarily during a specified time.

The Call Routing Control application runs in the background and performs the routing of monitored extensions using tables created by the CFC Administration application. CRC allows calls that originate internally to be routed differently than calls that originate externally. The CRC application requires the assignment of several monitored numbers, and phone users must forward their calls to these monitored numbers to activate Call Routing for their telephone. The monitored numbers will be associated with the call forwarding options available on the NEAX2400 and the Dterm phone. These forwarding options are:

- Forward all calls.
- Forward calls when line is busy.
- Forward calls on no-answer.

Each forwarding option has a list of possible destinations. The first idle extension in the list is used as the routing destination. If all extensions are busy, then a default destination is used.

The Hard Forward Control application runs in the background and performs the direct forwarding of extensions to specific destinations at scheduled intervals using tables created by the CFC Administration application. Like the CRC application, HFC destinations may be specified for each of the NEAX 2400 forwarding options (all calls, busy, and no-answer). Unlike the CRC, HFC cannot route internal and external calls differently, and it only supports a single destination for each forwarding option. The HFC application may be used to forward phones automatically to a monitored number used by CRC to provide automatic activation of Call Routing.

Briefly then, CFC makes it possible to:

- Assemble extensions into Hard Forward and Call Routing groups whose incoming calls are forwarded and routed to the same destination(s).
- Implement different Hard Forward and Call Routing patterns at different times for the same group.
- Assign different Hard Forward and Call Routing patterns to different NEAX 2400 forwarding options (i.e., all calls, busy, no answer).
- Route calls originating from internal extensions differently than calls originating from telephones that are outside of the organization (Call Routing only).

MANUAL ORGANIZATION

Chapter 2

Chapter 2 of this manual provides detailed information to be used in the software installation and configuration of Call Forwarding Control. The **APM Operations Manual** provides step-by-step instructions for entering the data that is presented in this chapter.

Chapter 3

This chapter describes the system of interrelated assignments that can be made through the CFC Administrator Main Menu. Each Main Menu option is described individually in a separate section in the chapter (e.g., Extensions, Groups, Forwarding Patterns, etc.). And each Main Menu option section contains subsections for the actions that can be taken with that option. For instance, extensions can be added, deleted, modified, viewed, or printed. So, within Section 3.1 Extensions, there is a separate subsection for each of these actions. This arrangement of subsections is true of most Main Menu options.

Each description contains an illustration of the screen(s) involved, information that is important to understand before making the assignment, and a step-by-step procedure for actually manipulating the CFC screens and functions. Because the assignments are very detailed and their relationships are important, an Assignment Worksheet, provided in the Main Menu Overview, makes it possible to plan and prepare the assignments before actually making them in CFC.

SCREEN ILLUSTRATIONS

The CFC screen contains the three basic sections that are shown below on the Main Menu and defined after the figure.

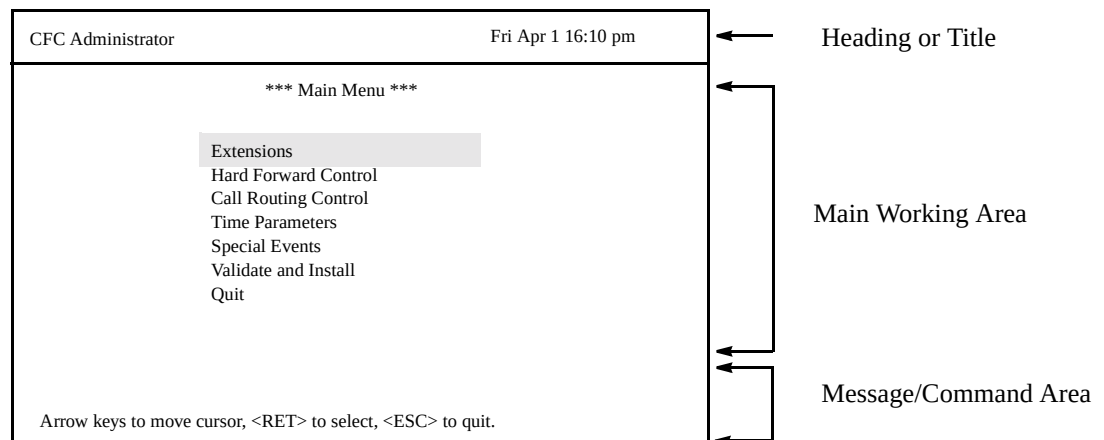


Figure 1-2 Main Menu with Screen Sections

SCREEN
ILLUSTRATIONS
(Cont)

- **Heading or Title**A display of the CFC name and a date and time stamp that is periodically updated.
- **Main Working Area**The area in which CFC menus are displayed, input is made to data entry prompts, and data is displayed for on-screen viewing.
- **Message / Command Area**The bottom of the screen where instructions (e.g., Arrow keys to move cursor), commands (e.g., Add, Delete), and messages (e.g., extension must be unique.) are displayed.

The graphics in this manual illustrate both what is displayed on the terminal screens and the movement from one or more previous screens to the one under discussion.
(See Figure 3)

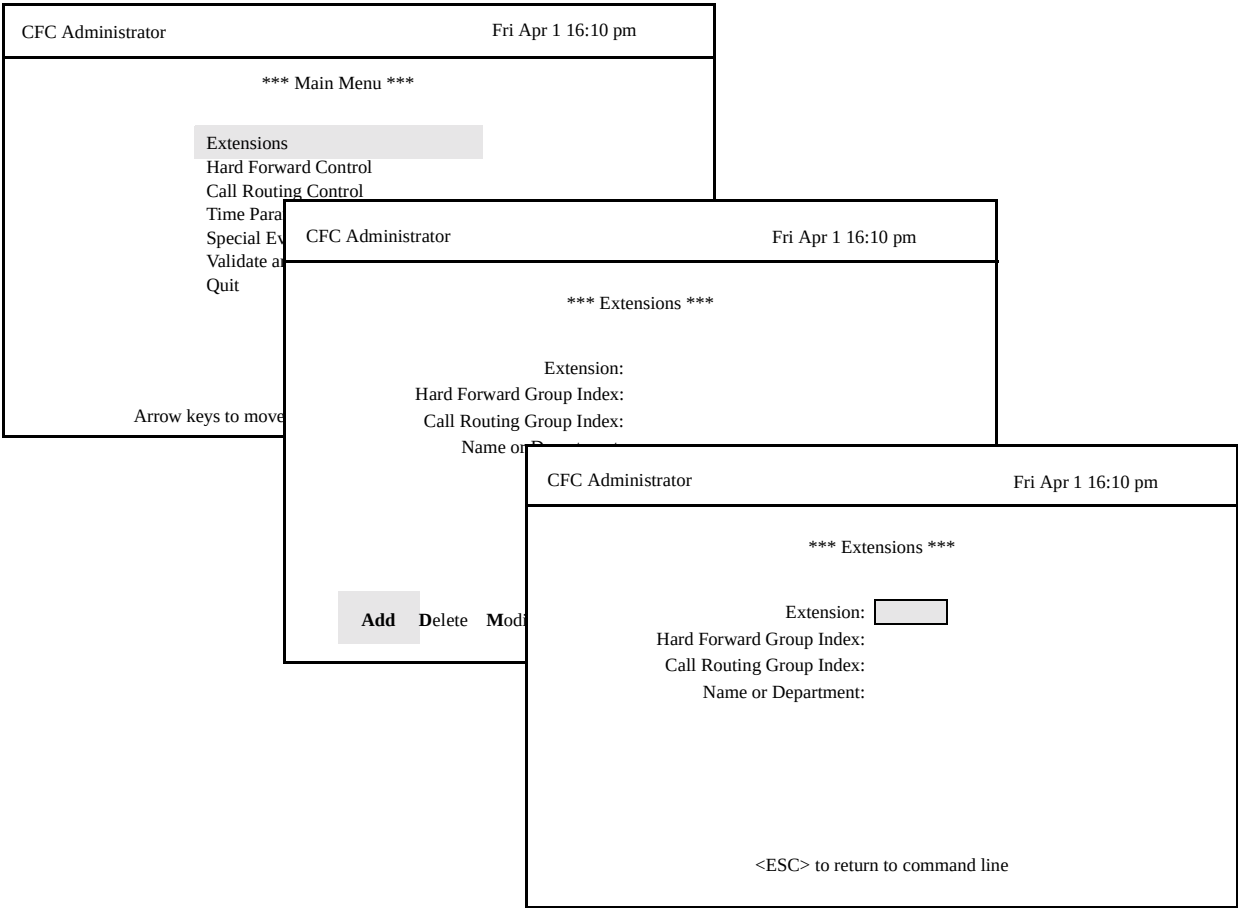


Figure 1-3 Screen Hierarchy and Movement

**SCREEN
ILLUSTRATIONS
(Cont)**

Each Section Overview displays graphically the movement from the Main Menu to the next screen level (i.e., Screen (1) to screen (2)). Thereafter, each subsection displays the movement from the second level screen to any third or fourth (i.e., Screen (2) to screen (3)). This progression of screens and the progression of subsections by Main Menu options makes it easier to stay in touch in the manual with the activity and position in the actual terminal screens.

PROCEDURES

Each description includes a step-by-step set of instructions on how to select and move to the necessary screen and how to perform the possible actions. As shown below, the procedures are presented in a 2-column layout: The left column contains the action to be taken and the right, the results of having taken that action. Where there are field entries to be made on the screen, this manual provides field definitions in the right-hand column corresponding to the field name on the left.

Action	Result
On the Extension menu, Press ENTER to select the Add command.(1)	The first field is highlighted for data entry. (2)
Enter data to the fields according to the definitions below, pressing ENTER after each entry: Extension - The extension number being added to the system; up to 5 digits in length; must be assigned through the PBX MAT . Group Index - The index to the group definition to which this extension is to be assigned; up to 3 digits in length.	After ENTER is pressed on the last field, the cursor returns to the command line.
To exit the data entry screen, enter q to select the Quit command.	The original command line of the Extension Database screen is displayed.

Figure 1-4 Procedure Layout**GENERAL KEY
USAGE**

Throughout CFC, the following keys serve the purposes indicated for each: (**Note:** Clear notation is made wherever other key or key combinations apply or these do not.)

ENTER Accepts an indicated selection or field entry.

ESC Generally exits the current screen or action to the most previous screen or action.

Arrow Keys Move the cursor in the direction indicated. If more than one screen full of items are displayed, press the DOWN arrow to scroll the list upwards and the UP arrow to scroll the list downwards.

Space Bar Selects an option when more than one are available in a field; serves to toggle among scrolled or side-by-side options in a field.

Backspace Erases any data in a field.

**GENERAL KEY
USAGE (Cont)**

Tab Key Pressed while in a field, displays information that corresponds to that field in other options. The following notation is included in the description wherever this key can be used.

Press the **TAB** key while in the Group Index field to display the group Forwarding Pattern Index. Press **ESC** to exit the display.

REQUIREMENTS

Two groups of hardware are required for any OAI application: the User Application Processor (UAP) and the Private Branch Exchange system (PBX). The minimum configuration for each of these groups is specified below.

UAP Basic Configuration

Requires a UAP 1000 or equivalent system

PBX Basic Configuration

- NEAX 2400 IMS with OAI compatible software
 - Release J4.80 or greater
- Interface Processor (IP) Unit (or OAI module). The specific hardware associated with the IP varies with the NEAX configuration -- IMG, MMG, UMG. Detailed lists of the hardware are provided in the OAI Module Installation Manual for the NEAX 2400 IMS.

Chapter 2 INSTALLATION INTRODUCTION

This chapter provides specific field entries that need to be made during the installation and configuration of Call Forward Control. In addition to this chapter, use instructions in the following manuals for this installation:

Applications Manager (APM) Installation Manual – Contains step-by-step instructions for installing the software from the release media.

Applications Manager (APM) Operations Manual – Explains how applications like Call Forward Control are configured in the APM environment and how its databases are created, using the entries and values provided in this chapter.

NEAX2400 System Manuals – Give very detailed explanations about the assignments that need to be made through the Maintenance Administration Terminal (MAT) commands on the NEAX2400.

Briefly, the installation and set up of CFC involves the following sequence of steps, presented in this chapter as sections:

Software Installation

This section describes installation and configuration of the Call Forward Control software onto the User Application Processor from the release media.

Application Configuration

Call Forward Control is internally supported by the APM and must be configured in the APM environment. Call Forward Control is comprised of three internal components, all three of which must be configured. SECTION 2.2 of this chapter provides the information that must be entered into this APM configuration file. Use the instructions provided in the **APM Operations Manual** to make the entries contained in this section.

Tenant Database Configuration

The Call Forward Control applications use the Tenant Database, which is configured using the APM. SECTION 2.3 of this chapter describes the creation and modification of the Tenant Database under the APM. Use the instructions provided in the **APM Operations Manual** to make the entries contained in this section.

MAT Assignments

There are data settings which must be assigned at the NEAX Maintenance Administration Terminal (MAT) before Call Forward Control can function. SECTION 2.4 specifies the necessary commands and the values at which they are to be set. Use the instructions provided in the **NEAX2400 IMS System Manuals** to make the entries contained in this section.

Initialization / Termination

Call Forward Control must be initialized (and terminated) through the APM Operations Menu. Use the instructions provided in the **APM Operations Manual**.

The installation process, including its description in this manual and other manuals that are necessary, is illustrated in Figure 2-1.

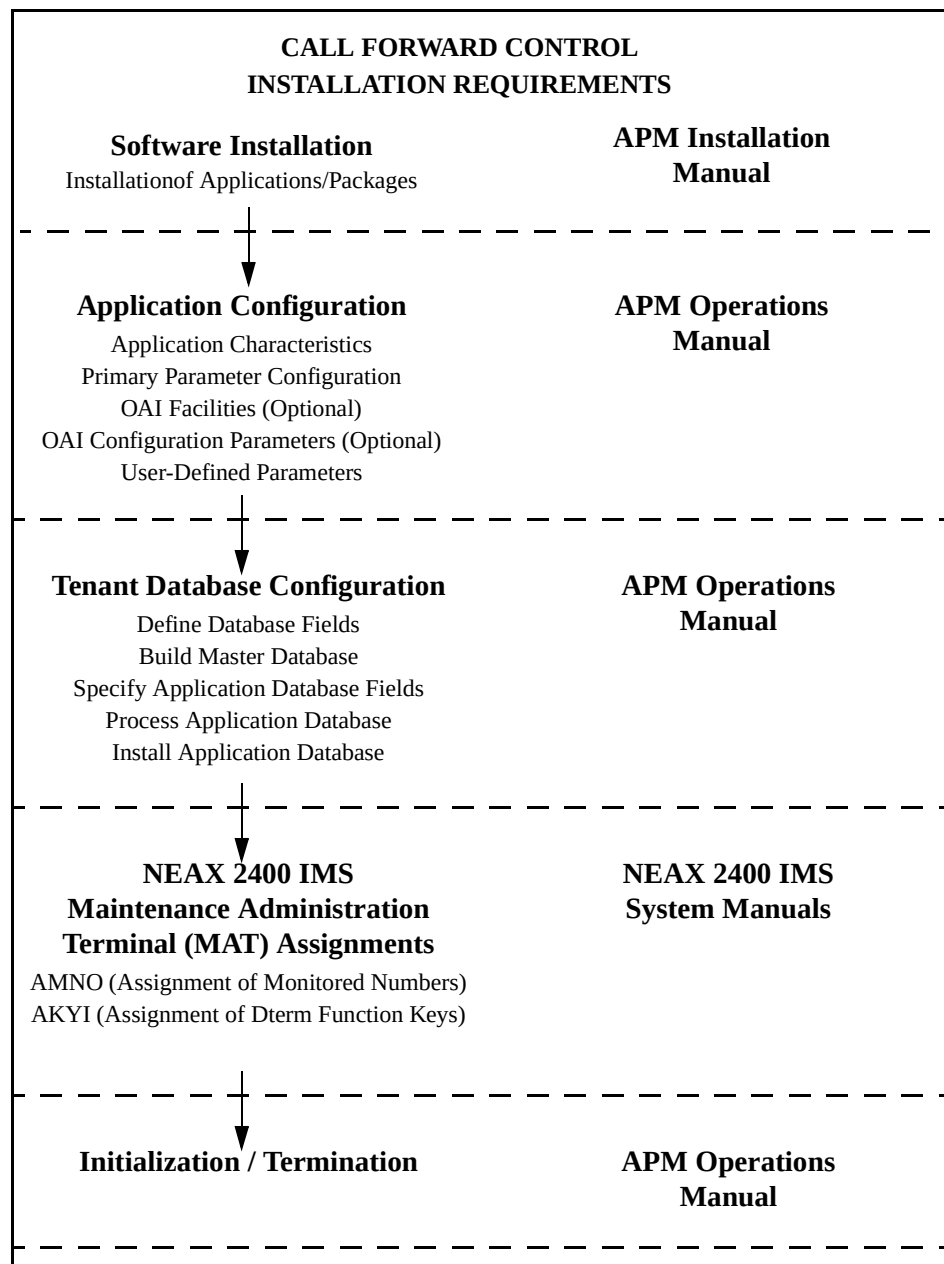


Figure 2-1 Installation Requirements

SOFTWARE INSTALLATION

Installation of CFC software is initiated from the Applications Manager (APM) Platform Administration Main Menu. To display this menu, enter the login **apmadm** at the UNIX prompt and press **ENTER**. Using instructions in the **APM Operations Manual**, select and implement the Installation of Applications/Packages option from this menu to load CFC software from release media. As the installation process executes, follow the steps described below as they correspond to the screen display and make input as directed. (**Note:** Necessary input is shown in **boldface** type.)

STEP 1: Active CFC Application Check

The first step performed during installation is to determine if any CFC applications are currently running on the system. If there are no active CFC programs, then installation continues with STEP 2. If CFC applications are running, then an error screen is displayed and installation is terminated. Use the APM to terminate all active CFC programs before attempting another CFC installation.

```
The Call Forward Control Application is currently active.
Installation cannot continue until Call Forward Control has
been terminated through the Applications Manager.

Press Enter to continue. [ ] <ENTER>
```

STEP 2: Existing CFC Installation Check

The next check performed during installation is to determine if a previous version of CFC is installed on the system. If CFC is not installed, then the Superuser (Root) Password screen is displayed as described in STEP 3. If CFC is installed, then a warning screen is displayed indicating that all CFC files will be saved in a backup directory if the installation is continued. Type **y** <ENTER> to continue or **n** <ENTER> to terminate.

```
WARNING: An existing CFC installation was detected on this system.
If you continue with this installation, all existing CFC files
will be saved in the /oai/app/cfc.s1 directory.

Do you wish to continue? (y/n) [y] <ENTER>
```

SOFTWARE INSTALLATION (Cont)

STEP 3: Superuser (Root) Password

Type the correct password for the root login and press <ENTER> to continue. An invalid password displays the message “**Invalid root password. Do you wish to continue? (Y/N) []**”. Type **y** <ENTER> to try again, or **n** <ENTER> to cancel the installation.

```
Super User (root) privileges are required.  
Please enter the Super User Password: su/root password <ENTER>.
```

STEP 4: MCS Enhancement or Independent APM Application

At this point in the installation, a search is made on the system to find the Medical Center software. If it is found, it is assumed that CFC is being installed to serve as an enhancement to the Medical Center System, and the screen in STEP 5 is displayed. If Medical Center software is not found, a status screen is displayed, indicating that if the installation is continued, CFC will be installed as an independent APM application. Type **y** <ENTER> to continue or **n** <ENTER> to terminate.

```
The CFC application can be installed as an extension  
of the Medical Center System or as an APM application  
  
If you continue with this installation CFC will be  
installed as an APM application.  
  
Do you wish to continue? (y/n) [y] <ENTER>
```

STEP 5: CFC Directories and Database

The next step performed during installation is to create the necessary CFC directories. If a previous version of CFC is installed on the system, then a copy of the current database is saved. If the current database format is compatible with the new installation, the following status screen is displayed. Press the <ENTER> key at the prompt to continue to the next step.

```
Creating CFC directories...  
  
The existing /oai/app/cfc/data directory contains  
configuration information that is compatible with this  
version of the CFC. The /oai/app/cfc/data directory  
was left unchanged.  
  
Press Enter to continue. [ ] <ENTER>
```

SOFTWARE INSTALLATION (Cont)

If the current database format is not compatible with the new installation, it is converted to the new database format and the following status screen is displayed. Press the <ENTER> key at the prompt to continue to the next step.

```
Creating CFC directories...

An existing /oai/app/cfc/data directory was found, and
the contents will be saved in /oai/app/cfc.s1/data.
A new /oai/app/cfc/data directory has been created, and
the original database has been successfully converted.
to the new data format and placed in the new directory.

Press Enter to continue. [ ] <ENTER>
```

If the database conversion fails, the following status screen is displayed. Press the <ENTER> key at the prompt to continue to the next step.

```
Creating CFC directories...

An existing /oai/app/cfc/data directory was found, and
the contents will be saved in /oai/app/cfc.s1/data.
A new /oai/app/cfc/data directory has been created, but
the original database could not be converted to the new
data format.

Press Enter to continue. [ ] <ENTER>
```

If a previous version of CFC is not installed on the system, then the following screen is displayed. Press the <ENTER> key at the prompt to continue to the next step

```
Creating CFC directories...

Press Enter to continue. [ ] <ENTER>
```

STEP 6: CFC Login Names

The *cfc* and *cfcadm* login names are installed with the same user ID (default is 4010). Any change in the user ID value must be made for both login names since they both use the same user ID value. The following screen is displayed while installing the *cfc* user. Just press **ENTER** at the user id prompt to accept the default value.

```
Installing cfc user on SCO UNIX

Enter (cfc) user id [4010]: <ENTER>

User (cfc) installed.

Press Enter to continue. [ ] <ENTER>
```

SOFTWARE INSTALLATION (Cont)

The following screen is displayed while installing the *cfcadm* user. Just press **ENTER** at the user id prompt to accept the default value. Note that a warning message is given when installing the *cfcadm* user, since it has the same user id as the *cfc* user. Enter **y** <ENTER> at the warning prompt and continue.

```
Installing cfcadm user on SCO UNIX
Enter (cfcadm) user id [4010]: <ENTER>
Warning: The user id [4010] is already assigned on this system.
Install (cfcadm) with user id [4010]? (y/n) y <ENTER>
User (cfcadm) installed.
Press Enter to continue. [ ] <ENTER>
```

STEP 7: CFC Auto-Config

The installation script can load default HFC, CRC, and MCI_Server application configurations (see the Application Configuration section for additional details) if desired. The script will display the following screen:

```
Would you like this script to 'auto-config'
the CFC applications into the APM Platform?

You can skip applications within
'auto-config' if already configured.

Enter Yes [y] to 'auto-config'. (y/n) [y] <ENTER>
```

Type **n** <ENTER> to skip the “auto-config” step, or **y** <ENTER> to load the default configurations. During the CRC configuration load the following screen is displayed:

```
/oai/utils/autocfg: running...
/oai/utils/autocfg: CRC
/oai/utils/autocfg: terminated normally

Press any key to continue. <ENTER>
```

At the prompt, type <ENTER> to continue.

SOFTWARE INSTALLATION (Cont)

During the HFC configuration load the following screen is displayed:

```
/oai/utils/autocfg: running...  
/oai/utils/autocfg: HFC  
/oai/utils/autocfg: terminated normally  
Press any key to continue. <ENTER>
```

At the prompt, type <ENTER> to continue.

During the MCI_Server configuration load the following screen is displayed:

```
/oai/utils/autocfg: running...  
/oai/utils/autocfg: MCI_Server  
/oai/utils/autocfg: terminated normally  
Press any key to continue. <ENTER>
```

At the prompt, type <ENTER> to continue.

STEP 8: CFC Installation Processing (No input required.)

The installation script performs several tasks following the auto configuration and displays the results. Note that none of these actions require input. This process may include one or more of the following actions:

- Installing the Tenant Database files.
- Enter boot-up commands into UNIX boot-up sequence.
- Install all remaining CFC files and directories as well as CFC host directories and executables.
- Enter CFC crontab information.
- Saving old CFC files from previous installations.

After these tasks have been completed, installation continues to the next step.

SOFTWARE INSTALLATION (Cont)

STEP 9: CFC Installation Complete

When the installation script has completed the following screen is displayed.

```
CFC Installation Complete
Press Enter to continue. [ ] <ENTER>
```

Press <ENTER> to return the APM Administration Main Menu, then either exit the APM Administration program or use an **Alt F(#)** key combination to switch to another screen to perform Step 10.

STEP 10: SCO UNIX Subsystem Database

In this step, the SCO UNIX Subsystem Databases are updated to accept the new CFC information. Following this update, the passwords for the *cfc* and *cfcadm* login names are deleted, as follows:

At the SCO UNIX prompt, enter the superuser (root) and execute the SCO UNIX Subsystem Database authorization checking program (*/tcb/bin/authck -s*) and password deletion program (*passwd -d*) as shown below.

Answer **yes** when asked to fix the subsystem databases. This ensures that the SCO UNIX Subsystem Databases are left in a proper state. Deleting passwords for the *cfc* and *cfcadm* login names causes the system to ask for new passwords when first logging on using these names.

```
Sysname
Welcome to SCO System V/386
sysname!login: root
Password: <root password>
# /tcb/bin/authck -s
The following users have Protected Password Database entries
that do not match their Subsystem Database entries:
    cfc cfcadm
There are errors in the databases.
Fix them (y/n)? y <ENTER>
# passwd -d cfc
Deleting password for user: cfc
Last Unsuccessful password change for cfc: Mon Mar 31 11:36:48 1997
# passwd -d cfcadm
Last successful password change for cfcadm: xxxxxxxxxxxx
Last Unsuccessful password change for cfcadm: NEVER
#
```

SOFTWARE INSTALLATION (Cont)

If the MCI_Server component is used, two tty devices must be created in the SCO Subsystem database. This can be done by entering the SCO UNIX administration shell (sysadmsh), selecting Account →Terminal →Create and then creating each tty device (ttyn1a, ttyn1b, etc.). Refer to the SCO UNIX Administration Manual.

STEP 11: Reboot

When finished, the entire system should be rebooted. At the “#” prompt, enter the following command:

```
shutdown -g0 -i0 -y
```

When the message **Safe to Power Off** or **Press Any Key to Reboot** is displayed, reset the UAP by pressing a key and allowing it to reboot. Then continue with the installation.

This completes the loading of CFC software in the APM. Now go to **Application Configuration** to configure the CFC applications.

APPLICATION CONFIGURATION

If the “auto-config” utility was used during installation then default APM configuration data was loaded for the CRC, HFC, and MCI_Server applications. These default settings may require modification using the Select function of the Application Configuration option on the APM System Administration menu. If the “auto-config” utility was skipped, then the CRC, HFC, and MCI_Server applications must be configured into the APM system using the Add function of the Application Configuration option on the APM System Administration menu.

- Enter the APM option from the APM Platform Management Menu.
- Enter the System Administrator password at the APM password screen.
- Enter the Application Configuration option from the System Administration menu.
- To add a new application type “A” and press <ENTER>. Fill out the configuration forms as described in the following steps.
- To modify an application installed by “auto-config” type “S” and press <ENTER>. Use the arrow keys to select the desired application (HFC or CRC) and then press <ENTER>. Fill out the configuration forms as described in the following steps.

This section contains the information that should be entered to the configuration file for CRC and HFC. For specific instructions on what these parameters mean and how to make these entries, use the **APM Operations Manual**.

Note: Entries for parameters that are marked with an asterisk (*) should be made exactly as they are shown; all other entries in this section are the default values installed the “auto-config” utility and may be modified if necessary.

STEP 1: APPLICATION CHARACTERISTICS

When adding HFC and CRC configurations to the APM Application Configuration file, characterize, use the following values (if “auto-config” was used, these values are already set and cannot be changed):

Parameter	Entry	Parameter Definition
OAI Application*	Y	Indicates whether or not (Yes or No) the application communicates with the NEAX2400 using OAI processes.
CRT Application*	N	Indicates whether or not (Yes or No) the application displays on the same screen as the APM, rendering the APM temporarily inaccessible.
Communication Queue*	N	Indicates whether or not (Yes or No) the application needs an IPC queue to communicate with other processes.

APPLICATION CONFIGURATION (CONT)

STEP 2: PRIMARY CONFIGURATION PARAMETERS

On the APM Configuration Entry screen, make the entries shown below for CRC:

Parameter	Entry	Parameter Definition
Application Name	CRC	Specifies the name to be displayed in the APM menus. This name is displayed however it is entered here; lower case letters and punctuation are acceptable; spaces are not.
Executable Filename*	/oai/app/cfc/bin/CRC	Defines the path name of the executable file.
Group*	CFC	Names the group to which CRC is associated.
Response Mode*	N(otify)	Indicates the action that the APM is to take with CRC should a member of the group terminate.
Initialization Batch	N(o)	Indicates whether or not (Yes or No) CRC is to be initialized automatically when the OAI system is initialized.
Termination Mode*	M(essage)	Indicates how the APM is to notify CRC to terminate.
Standard Output	/dev/null	Designates the file into which CRC output is redirected.
Number of Restarts	0	Indicates how many times the APM may restart CRC after it terminates erroneously.

Make the entries shown below for HFC:

Parameter	Entry	Parameter Definition
Application Name	HFC	Specifies the name to be displayed in the APM menus. This name is displayed however it is entered here; lower case letters and punctuation are acceptable; spaces are not.
Executable Filename*	/oai/app/cfc/bin/HFC	Defines the path name of the executable file.
Group*	CFC	Names the group to which HFC is associated.
Response Mode*	N(otify)	Indicates the action that the APM is to take with HFC should a member of the group terminate.
Initialization Batch	N(o)	Indicates whether or not (Yes or No) HFC is to be initialized automatically when the OAI system is initialized.
Termination Mode*	M(essage)	Indicates how the APM is to notify HFC to terminate.
Standard Output	/dev/null	Designates the file into which HFC output is redirected.
Number of Restarts	0	Indicates how many times the APM may restart HFC after it terminates erroneously.

APPLICATION CONFIGURATION (CONT)

STEP 3: FACILITIES

According to instructions in the **APM Operations Manual**, designate the following NEAX2400 facilities for CRC using the Facilities command on the APM Configuration Entry screen:

SCF– Switch Control Facility

SMFN– Status Notification Facility

SMFR– Status Request Facility

Designate the following NEAX2400 facilities for HFC using the Facilities command on the APM Configuration Entry screen:

SSFm– Service Set Facility Monitor

SSFR– Service Set Facility Request

STEP 4: OAI CONFIGURATION

Using the **OAI-Conf** command on the APM Configuration Entry screen, make the entry shown for each of the following parameters for CRC and HFC: (**Note:** Make no entries to parameters that are not shown.)

Parameter	Entry	Parameter Definition
Tenant Number	1	Specifies the number of the tenant that the application serves.
Source Link Name	OAI1TCP	Identifies the port on the source side of the communication link; entry should correspond to a link name in the APM system configuration file.
Destination Link Name	PBX1TCP	Identifies the port on the destination side of the communication link; entry should correspond to a link name in the APM system configuration file.
Association Recovery	30	Designates the number of seconds the application waits before trying to re-establish an association with the NEAX that has been released.

APPLICATION CONFIGURATION (CONT)

STEP 5: USER-DEFINED PARAMETERS

Make the entries below through the **UserDefined** command on the OAI Configuration screen for CRC:.

U-D #	Entry	Parameter Definition
#1*	/oai/app/cfc/ data/Names- File	Identifies the full path and filename of the file that contains the names of the databases used by CRC and listed on the CFC Administration Main Menu.
#2*	MCI_Server	If CRC is to forward calls to an existing on-site voice mail system, indicates the name of the message center interface used to ensure correct delivery of calls to the voice mail box. If an on-site voice mail system exists and the MCI_Server name is entered here, enter the MCI_Server configuration information provided below to the APM Application Configuration file.
#3	3	Indicates the maximum number of times a call is forwarded before it is sent to the default extension that is designated for the group through the Main Menu.
#4	5	Indicates the number of seconds CRC waits before trying to deliver a call to voice mail after a previous attempt has failed.
#5	0#	Serves as a system default; that is, if all call forwarding assignments in CRC were to fail, all calls are forwarded to this entry; must be the actual digits dialed, even to indicate the operator (0#).

Make the following OAI Configuration entries for HFC:.

U-D #	Entry	Parameter Definition
#1*	/oai/app/cfc/ data/Names- File	Identifies the full path and filename of the file that contains the names of the databases used by HFC and listed on the CFC Administration Main Menu.
#2*	/oai/db/cur/ tenants	Identifies the full path and filename of the Tenant Database file.

APPLICATION CONFIGURATION (CONT)

MCI_SERVER

If there is an existing on-site voice mail system with which CRC is to communicate, the MCI_Server application must be configured through the Application Configuration option on the APM Administration Menu. The name **MCI_Server** must be entered as User-Defined Parameter #2 in the CRC configuration (see Step 5 above). The information that should be entered to the configuration file for MCI_Server is shown below.

STEP 1: APPLICATION CHARACTERISTICS

Set the MCI_Server application characteristics as follows (if “auto-config” was used, these values are already set and cannot be changed):

Parameter	Entry	Parameter Definition
OAI Application*	N	Indicates whether or not (Yes or No) the application communicates with the NEAX2400 using OAI processes.
CRT Application*	N	Indicates whether or not (Yes or No) the application displays on the same screen as the APM, rendering the APM temporarily inaccessible.
Communication Queue*	Y	Indicates whether or not (Yes or No) the application needs an IPC queue to communicate with other processes.

STEP 2: PRIMARY CONFIGURATION PARAMETERS

Set the MCI_Server primary configuration parameters as follows:

Parameter	Entry	Parameter Definition
Application Name	MCI_Server	Specifies the name to be displayed in the APM menus. This name is displayed however it is entered here; lower case letters and punctuation are acceptable; spaces are not.
Executable Filename*	/oai/app/cfc/ bin/ MCI_Server	Defines the path name of the executable file.
Group*	CFC	Names the group to which MCI_Server is associated.
Response Mode*	I(gnore)	Indicates the action that the APM is to take with MCI_Server should a member of the group terminate.
Initialization Batch	N(o)	Indicates whether or not (Yes or No) MCI_Server is to be initialized automatically when the OAI system is initialized.
Termination Mode*	M(essage)	Indicates how the APM is to notify MCI_Server to terminate.
Standard Output	/dev/null	Designates the file into which MCI_Server output is redirected.
Number of Restarts	0	Indicates how many times the APM may restart MCI_Server after it terminates erroneously.
Communication Queue	500	UNIX Message Queue key used by MCI_Server to receive queue messages.

APPLICATION CONFIGURATION (CONT)

STEP 3: USER-DEFINED PARAMETERS

Make the entries below through the **UserDefined** command on the Configuration Entry screen:

U-D #	Entry	Parameter Definition
#1	/dev/tty1a	Identifies the UAP port used in the communication with the NEAX2400 IMS.
#2	/dev/tty2a	Identifies the UAP port used in communication with the voice mail system.

This completes the configuration of Call Forward Control in the APM. Now go to the **Tenant Database Section** to set up the Tenant Database.

TENANT DATABASE

The Tenant Database is an APM database that is used by the HFC application and other OAI applications. It provides a mechanism for retrieving the tenant number of an extension. Since the Tenant Database may be used by other OAI Applications installed under the APM, it is configured using the APM and can not be modified by the Call Forward Control Administrator program.

TENANT DATABASE RECORDS

During CFC installation, the files **tenant_m.mdf** and **tenants.adf** are copied to the **/oai/db/cur** directory. The **tenant_m.mdf** file specifies the master database fields and contains the following definitions:

Field Description	Type	Size	Minimum Value	Maximum Value
First Extension	ASCII	10		
Last Extension	ASCII	10		
Tenant Number	Numeric	3	1	255

The **tenants.adf** file specifies the application database fields and contains the following definitions:

Field Description	Data Type
First Extension	ASCII
Last Extension	ASCII
Tenant Number	Short Integer

The Tenant Number field contains the Tenant Number that is used by one or more extensions. Tenant Numbers are associated with extensions using the following methods:

- A Tenant Number may be associated with a set of extensions defined by the First and Last Extension fields. The First Extension field contains the smallest extension number in the set, and the Last Extension field contains the largest extension number in the set.
- A Tenant Number may be associated with a single extension by setting the First and Last Extension fields to the same extension value.
- A Tenant Number may be associated with a single extension that contains a non-numeric character such as '*' or '#'. The First Extension field contains the extension value, and the Last Extension field is left blank.

TENANT DATABASE EXAMPLES

The following examples display how the Tenant Database may be configured:

Example 1

All extensions use Tenant Number 1.

First Extension	Last Extension	Tenant Number
0	99999	1

Example 2

Extensions 2000-2500 use Tenant Number 1.

Extensions 1000-1500 use Tenant Number 2.

Extensions 1900, 2900, and 3900 use Tenant Number 3.

Extensions “#68” and “*69” use Tenant Number 4.

All other Extensions use Tenant Number 5.

First Extension	Last Extension	Tenant Number
#68		4
*69		4
0	999	5
1000	1500	2
1501	1899	5
1900	1900	3
2000	2500	1
2501	2899	5
2900	2900	3
2901	3899	5
3900	3900	3
3901	99999	5

TENANT DATABASE CONFIGURATION

The Tenant Database is configured using the **Database Administration** utilities provided by the APM. The following steps are required:

STEP 1: BUILD THE MASTER DATABASE

- From the APM **System Administration** menu, use the arrow keys to select the **Database Administration** command and press <ENTER>. The **Database Administration** menu is displayed.
- From the **Database Administration** menu, use the arrow keys to select the **Build Master Database** command and press <ENTER>. The **Master File Selection** menu is displayed.
- From the **Master File Selection** menu use the arrow keys to select the **tenant_m** database and press <ENTER>. The **Database Entry** menu is displayed.

- Use the **Add**, **Delete**, and **Modify** commands to change the database. Use the **Quit** command when all changes have been made, answering '**Y**' when prompted "**Do you want to save changes? (Y,N)**". The **Master File Selection** menu is displayed. At the **Master File Selection** menu press <ESC> to return to the **Database Administration Menu**.

STEP 2: PROCESS THE APPLICATION DATABASE

- At the **Database Administration Menu** use the arrow keys to select the **Process Application Database** command and press <ENTER>. The **Process Application Database** menu is displayed.
- From the **Process Application Database** menu use the arrow keys to select the **tenant_m** database and press <ENTER>. The APM will process the database, and the message "**Database process operation complete**" will be displayed. Press <ESC> to return to the **Database Administration Menu**.

STEP 3: INSTALL THE APPLICATION DATABASE

- At the **Database Administration Menu** use the arrow keys to select the **Install Application Database** command and press <ENTER>. The **Install Application Database** menu is displayed.
- From the **Install Application Database** menu use the arrow keys to select the **tenant_m** database and press <ENTER>. The APM will install the database, and the message "**Installing application database 'tenants'**" will be displayed. After the database is installed, the **Database Administration Menu** is displayed.
- At the **Database Administration Menu** use the arrow keys to select the **Quit** command and press <ENTER>. The **APM System Administration** menu is displayed.

This completes the configuration of the Tenant Database in the APM. Now go to the **MAT Assignments Section** to make the necessary assignments at the NEAX Maintenance Administration Terminal.

MAT ASSIGNMENTS

This guide assumes that data settings that affect the operation of all OAI software on a system-wide basis have already been assigned on the NEAX Maintenance Administration Terminal (MAT). Such settings include, for instance, system index values and assignment of Interface I/O Port Data in the Interface Processor (IP).

For more information about these system data settings and for instructions in making the following Call Forward Control settings, consult the **OAI Module Installation Manual** for the NEAX2400 IMS.

AMNO Command (Assignment of Monitored Numbers): Whenever a call comes into a monitored number, CRC is informed and implements forwarding activity. Use this command to assign each number (forward busy, forward no answer, and forward all) to be monitored.

TN: Tenant to which the monitored number is assigned.

MNO: The actual extension number that is to be monitored.

NMI: An unique and arbitrary number from 1 to 4000 assigned to the monitored number for internal use by the PBX. (Use LNMI to list indexes to determine which are available.)

UCD: A flag specifying the course of action to be taken with any call that is dialed into the monitored number when CRC is not operative, using the following values:

0 =(No) Call is not redirected to a UCD group, and caller hears re-order tone.

1 =(Yes) Call is redirected to a UCD group, which must then be specified.

AKYD Command (Assignment of Function Keys): Use this command to assign function keys on each D^{term} that has previously been assigned through the ASDT command and is to be supported by CRC.

(**Note:** In making these assignments, the D^{term} type must be indicated as D^{term}.)

Station Number: Corresponds to one assigned through the ASDT Command.

D^{term} Type: Must be entered as D^{term}.

Function Keys: Forward – all calls, Forward – busy, Forward – no answer

This completes the MAT assignments for Call Forward Control. Now go to the **Initialization/Termination Section** to initialize the CRC and HFC applications.

INITIALIZATION/TERMINATION

INITIALIZATION

The CRC and HFC applications must be initialized through the Non-CRT Application option on the APM Operations Menu according to instructions provided in the **APM Operations Manual**.

If an on-site voice mail system exists and the MCI_Server has been configured and named in the CRC configuration under User-Defined Parameter #2, MCI_Server must also be initialized from the Non-CRT Application option. CRC can perform its functions with or without MCI_Server, but CRC cannot communicate with a voice mail system without it.

Once the CRC, HFC, and optional MCI_Server applications are initialized, use an **Alt F(#)** key combination to switch to an unused screen, then enter the *cfcadm* at the system login prompt and press **ENTER**. The CFC Administrator Main Menu is displayed (refer to Chapter 3).

TERMINATION

Exit the CFC Administrator Main Menu either by selecting the **Quit** option or by pressing the ESC key. The cursor is positioned at the UNIX prompt. Then enter the Non-CRT Application option on the APM Operations Menu and terminate CRC and HFC. (**Note:** If MCI_Server has been initialized to enable CRC communication with a voice mail system, terminate it in the same manner.)

Chapter 3 ADMINISTRATOR MAIN MENU INTRODUCTION

A brief discussion of how the CRC and HFC applications process calls will show how the Administrator Main Menu assignments fit together to equip CRC and HFC for the variety of rerouting tasks that it is capable of performing. Here are some examples:

Example 1: Call Routing

At 9:00 Monday morning, Susan, who works in the Engineering Department, forwards her extension (3465) to the CRC monitored number 3995 so that she can attend a meeting. At 9:25 her phone receives a call from another internal extension. CRC detects the incoming call that has been forwarded from Susan's extension. In response CRC checks its database for information about how to reroute calls to the Engineering Department and finds the following information:

Extension 3465 is assigned to Call Routing Group 1 (Engineering Department). Call Routing Group 1 uses Call Routing Pattern 3, which specifies the following routing schedule:

Date and Time	Internal Destinations	External Destinations
Mon–Fri, 6:00 p.m. to 8 a.m.	2308, 2307, 2303, 2305	3300, 3301
Daily, 12:00 noon to 1:00 p.m.	2304, 2305, 2301, 2302	3400, 3401
Mon–Fri, 8:00a.m. to 5:00 p.m.	2300, 2301, 2302, 2303	3500, 3501
Sat & Sun, all day long	2300, 2301, 2302, 2303	3600, 3601

CRC examines the pattern and determines that extensions 2300, 2301, 2302, and 2303 should be used at 9:25 a.m., Monday for internal calls. CRC first checks 2300 to see if it is busy or idle. If it is idle, CRC reroutes the incoming call the extension. If 2300 is busy, CRC checks the remaining extensions until the call is successfully connected to a destination. If a call from an external source is received by Susan's phone, CRC will route the call to extensions 3500 or 3501.

Example 2: Hard Forward

The Engineering Department has a lunch hour from 12:00 noon to 1:00 p.m. Monday through Friday. During this time all calls received by members of this department will be handled by Pat the receptionist at extension 3470. HFC can automatically forward all engineering department telephones to Pat's extension using the following settings:

All Engineering Department extensions are assigned to Hard Forward Group 1 (Engineering Department). Hard Forward Group 1 uses to Hard Forward Pattern 3, which specifies the following forwarding schedule:

Date and Time	Destination	Action
Mon-Fri, 12:00 noon	3470	Set
Mon–Fri, 1:00p.m.	3470	Cancel

At 12:00 noon Monday through Friday HFC will forward all extensions in Hard Forward Group 1 (Engineering Department) to extension 3470. At 1:00 p.m. Monday through Friday HFC will cancel the forwarding on all extensions in Hard Forward Group 1 (Engineering Department).

ADMINISTRATOR MAIN MENU INTRODUCTION (CONT)

Example 3: Call Routing and Hard Forward

The Engineering Department has a lunch hour from 12:00 noon to 1:00 p.m. Monday through Friday. During this time all internal calls received by members of this department will be handled by receptionists at extensions 2304, 2305, 2301, and 2302. External calls will be handled by receptionists at extensions 3400 and 3401. CRC and HFC together can accomplish these tasks using the following settings:

All Engineering Department extensions are assigned to Call Routing Group 1 (Engineering Department). Call Routing Group 1 uses Call Routing Pattern 3, which specifies the following routing schedule:

Date and Time	Internal Destinations	External Destinations
Mon–Fri, 6:00 p.m. to 8 a.m.	2308, 2307, 2303, 2305	3300, 3301
Daily, 12:00 noon to 1:00 p.m.	2304, 2305, 2301, 2302	3400, 3401
Mon–Fri, 8:00a.m. to 5:00 p.m.	2300, 2301, 2302, 2303	3500, 3501
Sat & Sun, all day long	2300, 2301, 2302, 2303	3600, 3601

All Engineering Department extensions are also assigned to Hard Forward Group 1 (Engineering Department). Hard Forward Group 1 uses to Hard Forward Pattern 3, which specifies the following forwarding schedule:

Date and Time	Destination	Action
Mon–Fri, 12:00 noon	3995	Set
Mon–Fri, 1:00p.m.	3995	Cancel

At 12:00 noon Monday through Friday HFC will forward all extensions in Hard Forward Group 1 (Engineering Department) to extension 3995, which is a CRC monitored number. When CRC detects an incoming call on the monitored number, it checks its database for information about how to reroute the call. CRC will examine the Call Routing pattern, determine that from 12:00 noon to 1:00 p.m. extensions 2304, 2305, 2301, and 2302 should be used for internal calls and extensions 3400 and 3401 should be used for external calls, and route the call to the appropriate destination. At 1:00 p.m. Monday through Friday HFC will cancel the forwarding on all extensions in Hard Forward Group 1 (Engineering Department).

The information which CRC and HFC use to manage the call forwarding processes described in previous examples is constructed through the CFC Administrator Main Menu options. Although it is not necessary to enter information through these Main Menu options in any particular sequence, the information must correspond from one option to another.

STARTING THE CFC ADMINISTRATOR PROGRAM

The CFC Administrator program is started as described below:

Action	Result
At the UAP system console, press the Alt key and a function key (F1...F12) at the same time to select a login screen	The UNIX login prompt is displayed
Type cfcadm at the UNIX prompt and press ENTER . If prompted for a password, then type the <password> and press ENTER .	The CFC Administrator Main Menu is displayed as shown in Figure 3-1 .
Once inside the CFC menus, selection of an option or a command line function is made simply by typing the <u>highlighted key letter</u> . It is not necessary to press ENTER after making the selection. Also notice that the key letter is not always the first letter of the menu option or command.	Refer to the following pages for information and instructions in the use of each option and command line function.
To exit the CFC Administrator Main Menu, type q to select the Quit menu option.	The CFC Administrator Main Menu is cleared, and the cursor is positioned on the UNIX prompt.

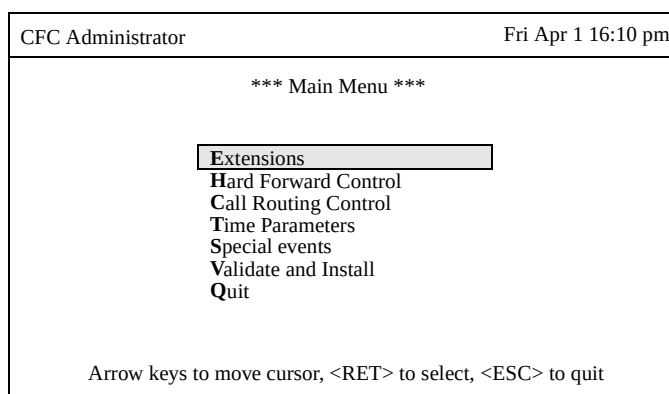


Figure 3-1 CFC Administrator Main Menu

MAIN MENU OPTIONS

The CFC Administrator Main Menu contains the following options:

Extensions -

Phone extensions supported by CRC and HFC are assembled into Call Routing and Hard Forward groups according to common needs. That is, if the phones in the Human Resources department are to be routed to the Operator at 5:00 p.m., all of these phones can be assembled into a Call Routing group which will route calls received by any phone in the group to the Operator after 5:00 p.m. Extensions can also be added to and deleted from the extensions database, they can be viewed on the display, or a hard copy can be printed. Each extension has a Call Routing and Hard Forward group index number which specifies the groups to which the extension belongs. One or both index values may be left blank to disable Call Routing and/or Hard Forwarding for an extension.

Hard Forward Control -

The Hard Forward Control option is used manipulate Hard Forward Control data. This option displays a sub-menu that contains Groups and Patterns options. Hard Forward groups and patterns may be created, deleted, modified, displayed, and printed using selections from this sub-menu.

Call Routing Control -

The Call Routing Control option is used manipulate Call Routing Control data. This option displays a sub-menu that contains Monitored Numbers, Groups, Patterns, and Destinations options. Call Routing groups, patterns, and destinations may be created, deleted, modified, displayed, and printed using selections from this sub-menu. Call Routing monitored numbers may also be set from this sub-menu.

Time Parameters -

Each Start Time Index identifies a schedule, or time frame, that is defined in hour, minute, month, and day detail. A time frame can be illustrated as “Daily at midnight”, “The first Monday of every month at 8:00 a.m., or “Monday through Friday, from 8:00 a.m. to 5:00 p.m.”. It is by these schedules that different Call Routing and Hard Forward patterns can be instituted for the same group at difference times. For instance, all of the phones in Accounting can be forwarded to the operator at noon every day, Monday through Friday, and to the Accounting receptionist console on Monday morning from 9:00 to 10:00 a.m.

Special Events -

There will occasionally be times during which the scheduled Call Routing and Hard Forward settings will need to be altered to accommodate holidays, organizational events, etc. The Special Events option is used to instruct CRC and HFC in the pattern changes that are to be implemented for holidays or scheduled events.

MAIN MENU OPTIONS (CONT)

Validate and Install -

CRC and HFC depend upon accurate correspondence among all of the assignments made through the CFC Administrator program. Thus, anytime a change is made to the information contained in one or more options, the Validate and Install option should be used to check compatibility of the new information with the existing information in other options and to process the changes so that CRC and HFC can implement them. Messages are displayed as necessary to notify the CFC administrator of any errors or inconsistencies that are found during this checking and processing activity.

Quit -

The Quit option terminates the CFC Administrator program.

ASSIGNMENT WORKSHEETS

To save time and assure accuracy, use the CRC and HRC Assignment Worksheets on the next two pages to lay out the assignments that need to be made and to work out the necessary correspondence among the options before actually getting involved with the menu system.

CALL ROUTING CONTROL ASSIGNMENT WORKSHEET

Group Name: _____ Group Index: _____

Extension No.	Name:	Extension No.	Name:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Default Destination: _____ Routing Pattern Index: _____

Internal Routing Patterns

Monitored No.	Index	Destination Extensions	Start Time Index	Schedule
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

External Routing Patterns

Monitored No.	Index	Destination Extensions	Start Time Index	Schedule
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Figure 3-2 Call Routing Control Assignment Worksheet

HARD FORWARD CONTROL ASSIGNMENT WORKSHEET

Group Name: _____ Group Index: _____

Extension No.	Name:	Extension No.	Name:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Default Destination: _____

Forward Pattern Index: _____

Forward Busy Patterns

Index	Destination Extension	Start Time Index	Action	Index	Destination Extension	Start Time Index	Action
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Forward No Answer Patterns

Index	Destination Extension	Start Time Index	Action	Index	Destination Extension	Start Time Index	Action
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Forward All Calls Patterns

Index	Destination Extension	Start Time Index	Action	Index	Destination Extension	Start Time Index	Action
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Figure 3-3 Hard Forward Control Assignment Worksheet

EXTENSIONS

OVERVIEW The **Extensions** option on the Administrator Main Menu is used to add, remove, or make changes to the extensions that are assembled into groups.

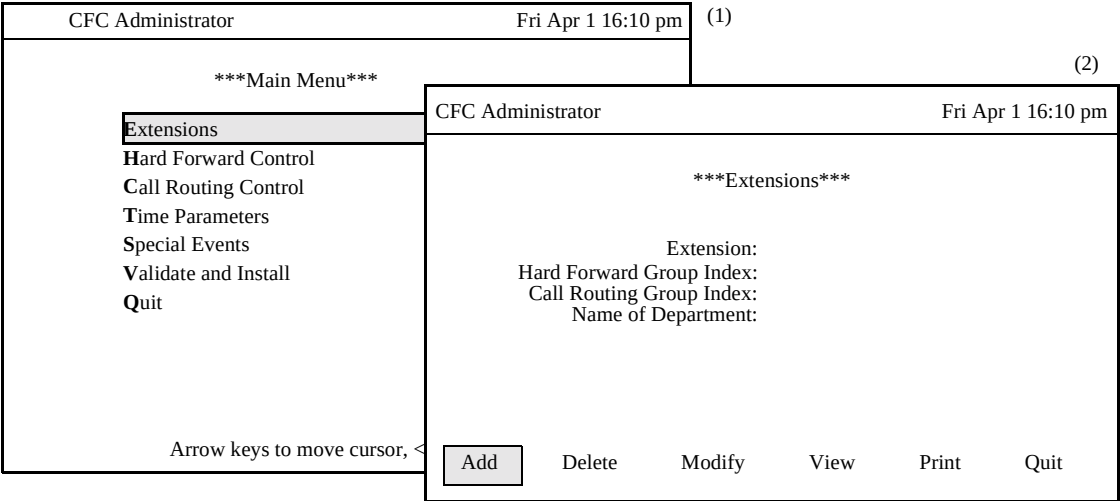


Figure 3-4 Extensions Option

Procedure

Action	Result
On the Main Menu, type e to select the Extension option.(1)	The Extensions screen is displayed. (2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Extension option, type q to select the Quit command.	The Main Menu is redisplayed.

Commands

The Extensions command line provides options to add extensions to a Hard Forward or Call Routing group, delete an extension from a Hard Forward or Call Routing group, modify the Hard Forward and Call Routing group selections for an extension, view a selected range of extensions, or print a hardcopy of a selected range of extensions.

Number of Extensions

The number of extensions in a group are dynamically allocated as the administrator adds entries to a record through the **Add** or **Modify** commands. The number of entries is constrained only by the memory available on the computer system running CFC. Duplicate extension numbers within and between records is not allowed.

OVERVIEW (Cont)**Expanded Display**

Press the **TAB** key or the **Ctrl-V** key combination while in the Hard Forward or Call Routing Group Index field to display the Group Name and Pattern Index used by the group. Press **ESC** to return to the Extensions screen.

ADD AN EXTENSION

The **Add** command on the Extensions screen is used to add an extension to the database and to assign it Hard Forward and Call Routing Group Index values.

CFC Administrator Fri Apr 1 16:10 pm (1)

Extensions

Extension:
Hard Forward Group Index:
Call Routing Group Index:
Name or Department:

Add Delete Modify View Print

(2)

*** Extensions ***

Extension:
Hard Forward Group Index:
Call Routing Group Index:
Name or Department:

<ESC> to return to command line

Figure 3-5 Add An Extension**Procedure**

Action	Result
On the Extension menu, type a to select the Add command. (1)	The first field is highlighted for data entry. (2)
Type data to the fields according to the definitions below, pressing ENTER after each entry:	
<u>Field</u> Extension Hard Forward Group Index Call Routing Group Index Name or Department	<u>Definition</u> – The extension number being added to the system; up to 5 digits in length; must also be assigned through the PBX MAT. – The index to the Hard Forward group definition to which this extension is to be assigned; up to 3 digits in length. – The index to the Call Routing group definition to which this extension is to be assigned; up to 3 digits in length. – A name identifying the user of the extension; can be an individual, a department, etc.; entry to this field is optional.
	When ENTER is pressed from the last field, the message “ Do you want to add this? (Y/N) ” is displayed.
Type Y and press ENTER to add the extension record or N and press ENTER to cancel it.	The Extensions data entry screen is cleared, and the cursor is positioned on the original command line.

ADD AN EXTENSION (CONT)

Field Entries

A new extension record can be added to the database with no entries in the Hard Forward Group Index, the Call Routing Group Index, or the Name or Department field.

DELETE AN EXTENSION

The **Delete** command on the Extensions screen is used to remove an extension record from the database.

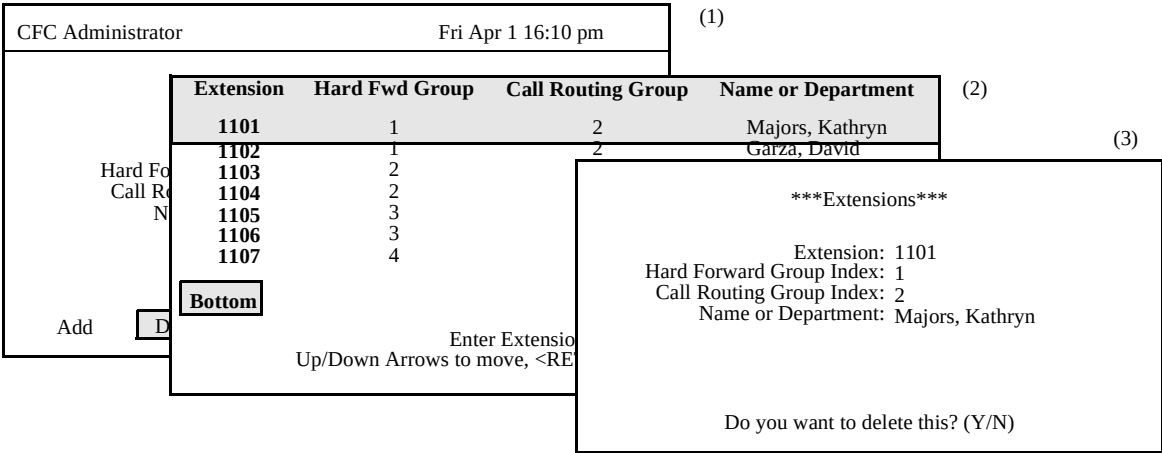


Figure 3-6 Delete An Extension

Procedure

Action	Result
On the Extensions screen, type d to select the Delete command. (1)	An Extension entry field is displayed below and, at the top of the screen, a highlighted extension heading is displayed.
Type the extension number at the prompt and press ENTER . To display all extensions, leave the extension field blank and press ENTER . The “*” may be included in the extension field as a wild card (“10*” will display all extensions where the first two digits are “10”).	All of the matching extensions in the database are displayed. (2)
Use the Up and Down Arrow keys to select the extension to delete, then press ENTER to delete the extension.	The Extensions screen displays field data for the selected extension, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY AN EXTENSION

The **Modify** command on the Extensions screen is used to make changes to an extension record.

CFC AdministratorFri Apr 1 16:10 pm

Extension

Hard Fwd Group

Call Routing Group

Name or Department

1101

1

2

Majors, Kathryn

1102

1

2

Garza, David

1103

2

1104

2

1105

3

1106

3

1107

4

Bottom

Hard Forward

Call Routing

Name or Department

Add

Delete

Enter Extension

Up/Down Arrows to move, <RE

Extensions

Extension: 1101

Hard Forward Group Index: 1

Call Routing Group Index: 2

Name or Department: Majors, Kathryn

<ESC> to return to command line

Figure 3-7 Modify An Extension

Procedure

Action	Result
On the Extensions screen, type m to select the Modify command. (1)	An Extension entry field is displayed at the bottom of the screen, and a highlighted extension heading is displayed at the top of the screen.
Type the extension number at the prompt and press ENTER . To display all extensions, leave the extension field blank and press ENTER . The “*” may be included in the extension field as a wild card (“10*” will display all extensions where the first two digits are “10”).	All the matching extensions in the database are displayed. (2)
Use the Up and Down Arrow keys to select the extension to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Extension record fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message “ Do you want to save changes? (Y/N) ” is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the

MODIFY EXTENSION RECORD (CONT)

Database Search

The extension cannot be changed since it is the key to the record. A change in the extension number means either another existing record or a new record is being entered. After the extension is entered, CFC searches the database for the corresponding record and displays it. If it does not exist in the database, CFC displays a prompt requesting the entry of a different extension.

VIEW EXTENSIONS

The **View** command on the Extensions screen is used to display extension records on screen for viewing or printing.

CFC Administrator Fri Apr 1 16:10 pm (1) (2) (3)

Search Key: **Extension**

Start value: 1100
End value: 1200

<ESC> to

Add Delete Modify **View**

Top Of File

*** Extensions ***

Extension	Hard Fwd Group	Call Routing Group	Name or Department
1101	1	2	Majors, Kathryn
1102	1	2	Garza, David
1103	2	1	Thompson, Sharon
1104	2	1	Werner, Pam
1105	3	4	Ryan, Mary Beth
1106	3	3	Robbins, Fred
1107	4	3	Billings, Sarah

End Of File

DownPage UpPage Search Top Bottom Print Quit

Figure 3-8 View Extensions

Procedure

Action	Result
On the Extensions screen, type v to select the View command.(1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Extensions screen, type q to select the Quit command.	The Extensions screen is displayed, and the cursor is positioned on the command line.

PRINT EXTENSIONS

The **Print** command on the Extensions screen is used to print a hardcopy of the extension records lying within a specified range.

CFC Administrator

Fri Apr 1 16:10 pm

(1)

Extensions

(2)

Extensi

Hard Forward Group Ind

Call Routing Group Ind

Name or Departme

Search Key: Extension

Hard Forward Group

Call Routing Group

Name

Start value: 1100

End value: 1200

<ESC> to return to command line

Add

Delete

Modify

View

Print

Figure 3-9 Print Extensions

Procedure

Action	Result
On the Extensions screen, type p to select the Print command. (1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

HARD FORWARD CONTROL

OVERVIEW The **Hard Forward Control** option on the Administrator Main Menu is used to add, remove, or make changes to the to Hard Forward Control Groups and Patterns.

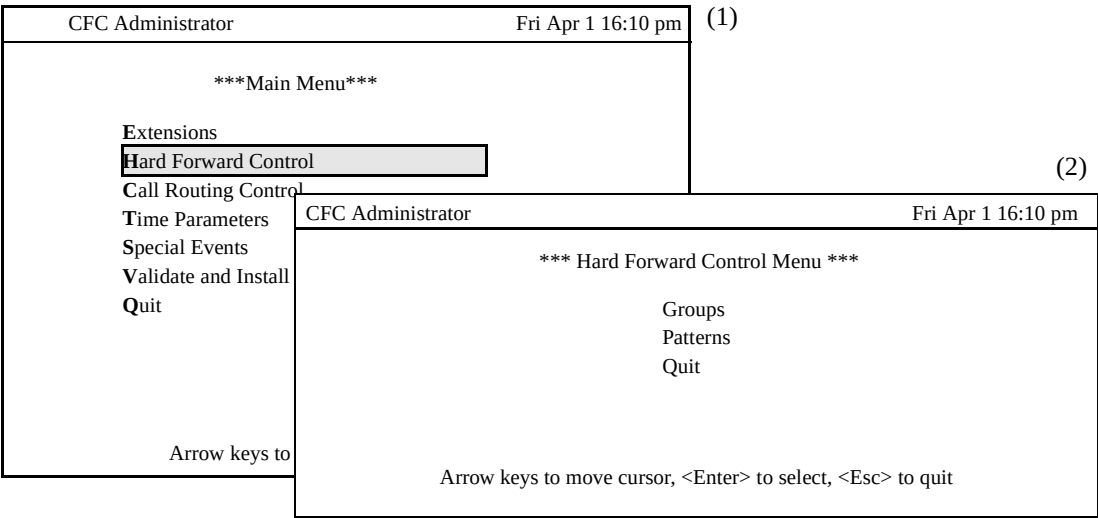


Figure 3-10 Hard Forward Control Option

Procedure

Action	Result
On the Main Menu, type h to select the Hard Forward Control option.(1)	The Hard Forward Control screen is displayed. (2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Hard Forward Control option, type q to select the Quit command.	The Main Menu is redisplayed.

The Hard Forward Control Menu contains the following options:

Groups -

Each Hard Forward Group has a unique group index which is referenced by the Extensions record, a group name, and a pattern index that specifies the Hard Forward Pattern used by the group. The **Groups** option is used to create, delete, modify, view and print Hard Forward Groups.

Patterns -

Each Hard Forward Pattern has a unique pattern index which is referenced by the Hard Forward Group record, and a list of destination extensions and time index values. The **Patterns** option is used to create, delete, modify, view and print Hard Forward Patterns.

Quit -

The Quit option exits the Hard Forward Control Menu and returns to the Main Menu.

HARD FORWARD GROUPS

OVERVIEW

The **Groups** option on the Hard Forward Control Menu is used to add, remove, or make changes to the Hard Forward Groups.

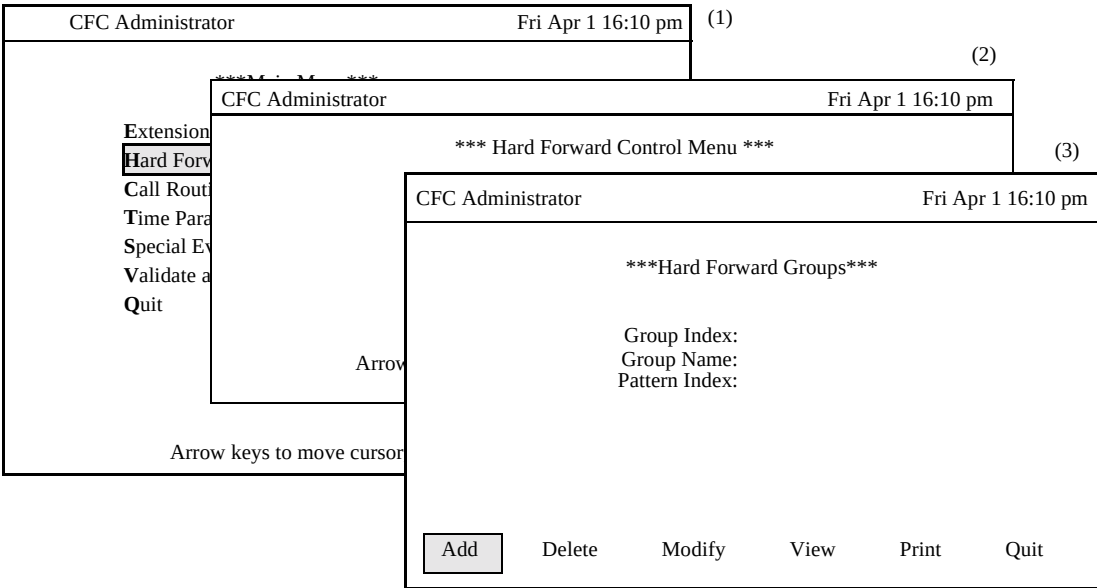


Figure 3-11 Hard Forward Groups Option

Procedure

Action	Result
On the Main Menu, type h to select the Hard Forward Control option.(1)	The Hard Forward Control screen is displayed. (2)
On the Hard Forward Control screen, type g to select the Groups option. (2)	The Hard Forward Groups screen is displayed. (3)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Hard Forward Groups option, type q to select the Quit command.	The Hard Forward Control screen is re-displayed.

Hard Forward Group Information

Each Hard Forward Group record contains a unique index which identifies the group, a group name, and a pattern index which specifies the Hard Forward Pattern that is used by the group.

OVERVIEW (Cont.)

Commands

The Hard Forward Groups command line provides options to add or remove Hard Forward Group definitions, change an existing group definition, display group data for on screen viewing, or print a hardcopy of either the displayed group definition, a selected range of group definitions, or the entire file of group definitions.

Expanded Display

Press the **TAB** key or the **Ctrl-V** key combination while in the Hard Forward Pattern Index field to display the Hard Forward Pattern description used by the group. Press **ESC** to return to the Hard Forward Groups screen.

ADD A HARD FORWARD GROUP

The **Add** command on the Hard Forward Group screen is used to add a Hard Forward Group definition to the database. Note that a Hard Forward Pattern must be added before a Hard Forward Group may be added.

CFC AdministratorFri Apr 1 16:10 pm

Hard Forward Groups

Group Index:
Group Name:
Pattern Index:

Add

DeleteModify

CFC AdministratorFri Apr 1 16:10 pm

Hard Forward Groups

Group Index:
Group Name:
Pattern Index:

<ESC> to return to command line

Figure 3-12 Add A Hard Forward Group

Procedure

Action	Result
On the Hard Forward Groups menu, type a to select the Add command. (1)	The first field is highlighted for data entry. (2)
Type data to the fields according to the definitions below, pressing ENTER after each entry: Field Group Index Group Name Pattern Index	Definition – The group identifying number, up to 3 digits in length and referenced by the Extensions option under the Main Menu. – The group name; up to 30 characters. – The index to the Hard Forward Pattern used by this group.
	When ENTER is pressed from the last field, the message “ Do you want to add this? (Y/N) ” is displayed.
Type Y and press ENTER to add the Hard Forward Group or N and press ENTER to cancel it .	The Hard Forward Groups data entry screen is cleared, and the cursor is positioned on the original command line.

DELETE A HARD FORWARD GROUP

The **Delete** command on the Hard Forward Groups screen is used to remove a Hard Forward Group from the database.

CFC AdministratorFri Apr 1 16:10 pm(1)

Group IndexGroup NamePattern Index(2)(3)

1Hum2Mark3Accd6Traff

Bottom

Up/Down Arrows t

AddDeleteModifyView

CFC AdministratorFri Apr 1 16:10 pm

Hard Forward Groups

Group Index: 1
Group Name: Human Resources
Pattern Index: 3

Do you want to delete this> (Y/N)

Figure 3-13 Delete A Hard Forward Group

Procedure

Action	Result
On the Hard Forward Groups screen, type d to select the Delete command. (1)	A Hard Forward Group Index entry field is displayed below and, at the top of the screen, a highlighted Hard Forward Group heading is displayed.
Type the Hard Forward Group Index at the prompt and press ENTER . To display all groups, leave the group index field blank and press ENTER . The “*” may be included in the group index field as a wild card (“1*” will display all groups that start with “1”).	All of the matching Hard Forward Group descriptions in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Hard Forward Group to delete, then press ENTER to delete the group.	The Hard Forward Groups screen displays field data for the selected group, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY A HARD FORWARD GROUP

The **Modify** command on the Hard Forward Groups screen is used to make changes to a Hard Forward Group.

CFC AdministratorFri Apr 1 16:10 pm(1)

Group IndexGroup NamePattern Index(2)(3)

1Hum

2Mark

3Acco

6Traff

Bottom

Up/Down Arrows to

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Hard Forward Groups

Group Index: 1

Group Name: Human Resources

Pattern Index: 3

<ESC> to return to command line

AddDeleteModifyView

Figure 3-14 Modify A Hard Forward Group

Procedure

Action	Result
On the Hard Forward Groups screen, type m to select the Modify command. (1)	A Hard Forward Group entry field is displayed at the bottom of the screen, and a highlighted Hard Forward Group heading is displayed at the top of the screen.
Type the Hard Forward Group Index at the prompt and press ENTER . To display all groups, leave the group index field blank and press ENTER . The “*” may be included in the group index field as a wild card (“1*” will display all groups that start with “1”).	All the matching Hard Forward Groups in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Hard Forward Group to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Hard Forward Group fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message “ Do you want to save changes? (Y/N) ” is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the command line.

MODIFY A HARD FORWARD GROUP (CONT)

Database Search

The Hard Forward Group Index cannot be changed since it is the key to the record. A change in this field means either another existing record or a new record is being entered. After the Hard Forward Group Index is entered, CFC searches the database for the corresponding record and displays it. If it does not exist in the database, CFC displays a prompt requesting the entry of a different group index.

VIEW HARD FORWARD GROUPS

The **View** command on the Hard Forward Groups screen is used to display a selected range of Hard Forward Group definitions for on-screen viewing or printing.

CFC Administrator Fri Apr 1 16:10 pm (1)

Hard Forward Groups

Search Key: Pattern Name (2)

Group Index Start End (3)

Group Index Start End

Pattern Index

*** Hard Forward Groups ***

Group Index	Group Name	Pattern Index
1	Human Resources	3
2	Marketing	4
3	Accounting	2
6	Traffic	1

Top Of File

End Of File

Add Delete Modify

DownPage UpPage Search Top Bottom Print Quit

Figure 3-15 View Hard Forward Groups

Procedure

Action	Result
On the Hard Forward Groups screen, type v to select the View command.(1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Hard Forward Groups screen, type q to select the Quit command.	The Hard Forward Groups screen is displayed, and the cursor is positioned on the command line.

PRINT HARD FORWARD GROUPS

The **Print** command on the Hard Forward Groups screen is used to print a hardcopy of the Hard Forward Group records lying within a specified range.

CFC AdministratorFri Apr 1 16:10 pm

Hard Forward Groups

Group Index:
Group Name:
Pattern Index:

Search Key:GroupPatternName

Start value: 1
End value: 20

<ESC> to return to command line

AddDeleteModifyViewPrintQuit

Figure 3-16 Print Hard Forward Groups

Procedure

Action	Result
On the Hard Forward Groups screen, type p to select the Print command. (1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

HARD FORWARD PATTERNS

OVERVIEW The **Patterns** option on the Hard Forward Control Menu is used to add, remove, or make changes to the Hard Forward Patterns.

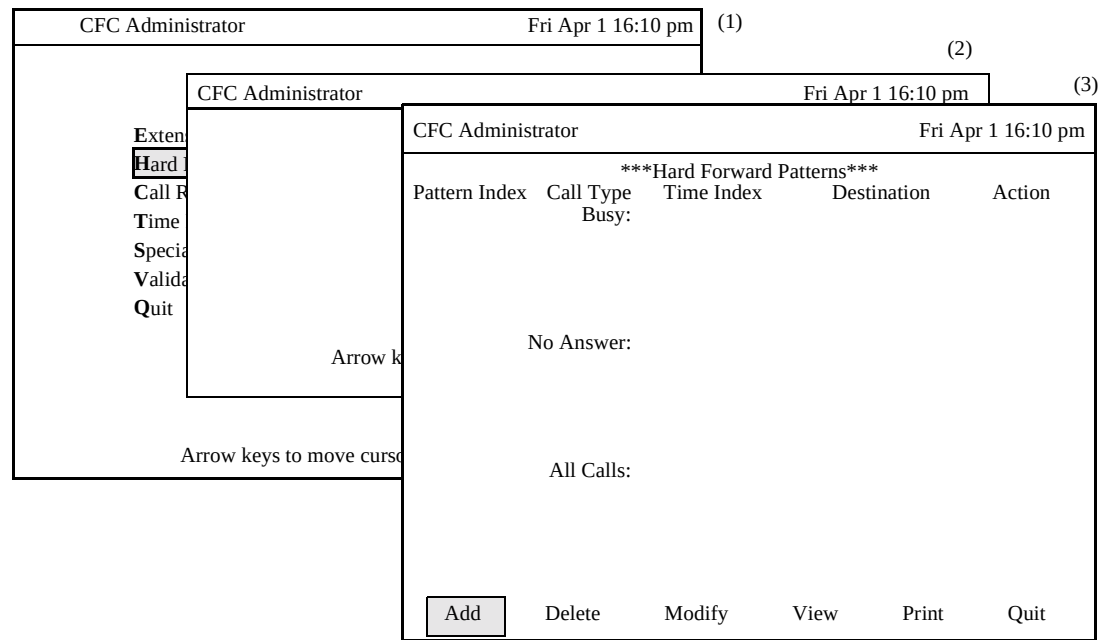


Figure 3-17 Hard Forward Patterns Option

Procedure

Action	Result
On the Main Menu, type h to select the Hard Forward Control option.(1)	The Hard Forward Control screen is displayed. (2)
On the Hard Forward Control screen, type p to select the Patterns option. (2)	The Hard Forward Patterns screen is displayed. (3)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Hard Forward Patterns option, type q to select the Quit command.	The Hard Forward Control screen is re-displayed.

Hard Forward Patterns Information

Each Hard Forward Pattern record contains a unique index which identifies the group, an event list used when the extension is busy, an event list used when the extension does not answer, and an event list used for all calls. Each event list can have up to six events. Each event has a time index value that references an entry in the Time Parameters table, a destination extension, and an event action that is selected from one of the following:

Set: forward the extension to the destination unless it is already forwarded by a user directly from the telephone.

OVERVIEW (Cont)

- Override: forward the extension to the destination, overriding any existing forwarding.
- Cancel: if the extension is currently forwarded to the extension, cancel the forwarding.
- None: this value is used by default when the time index value is zero, and indicates that no forwarding action is scheduled.

Commands

The Hard Forward Patterns command line provides options to add or remove Hard Forward Pattern definitions, change an existing pattern definition, display pattern data for on screen viewing, or print a hardcopy of either the displayed pattern definition, a selected range of pattern definitions, or the entire file of pattern definitions.

Expanded Display

Press the **TAB** key or the **Ctrl-V** key combination while in a Time Index field to display the time description used by the event. Press **ESC** to return to the Hard Forward Patterns screen.

ADD A HARD FORWARD PATTERN

The **Add** command on the Hard Forward Pattern screen is used to add a Hard Forward Pattern definition to the database. Note that Time Index entries referenced by the pattern must be added before a Hard Forward Pattern may be added.

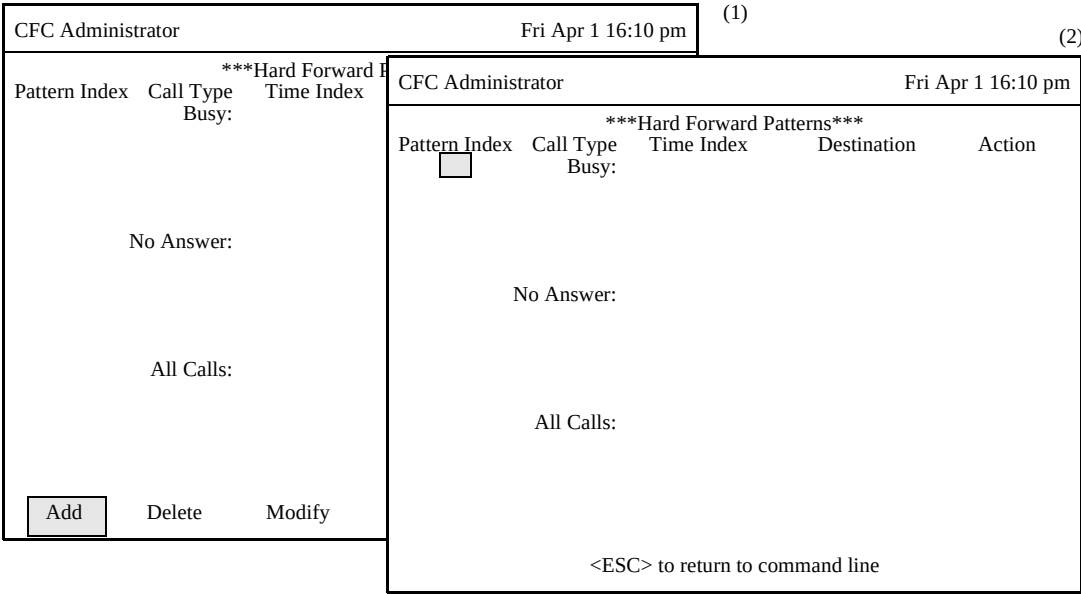


Figure 3-18 Add A Hard Forward Pattern

Procedure

Action	Result
On the Hard Forward Patterns menu, type a to select the Add command. (1)	The first field is highlighted for data entry. (2)
Type a unique Pattern Index value and press ENTER .	The Pattern Index identifies this Hard Forward Pattern and is referenced by the Hard Forward Group records. It can have up to 3 digits.
Type data into the Busy, No Answer, and All Calls event fields, pressing ENTER after each field is completed. Each Category can have up to six events using the fields described below: <u>Field</u> Time Index Destination Action	<u>Definition</u> – The Time Parameter table index that specifies the time the event will occur. It can have up to 3 digits. A value of 0 indicates that the entry is unused. – The destination extension used by the event. It can have up to 16 digits. – Select from Set , Override , or Cancel . If 0 is specified in the Time Index field, the action defaults to None .
	When ENTER is pressed from the last event field, the message “ Do you want to add this? (Y/N) ” is displayed.
Type Y and press ENTER to add the Hard Forward Pattern or N and press ENTER to cancel it.	The Hard Forward Patterns data entry screen is cleared, and the cursor is positioned on the original command line.

DELETE A HARD FORWARD PATTERN

The **Delete** command on the Hard Forward Patterns screen is used to remove a Hard Forward Pattern from the database.

CFC AdministratorFri Apr 1 16:10 pm

Pattern Index

Hard Forward Patterns

Pattern Index	Call Type	Time Index	Destination	Action
1	Busy			
2	Busy			
3	Busy			
4	Busy			
Bottom				
Up/Down Arrows to move				
All Calls:				
Add	Delete	Modify	View	

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Hard Forward Patterns

Pattern Index	Call Type	Time Index	Destination	Action
1	Busy:	2	3400	Set
		4	3410	Override
		6	3410	Cancel
		0	0	None
		0	0	None
		0	0	None
No Answer:		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
All Calls:		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
Do you want to delete this? (Y/N)				

Figure 3-19 Delete A Hard Forward Pattern

Procedure

Action	Result
On the Hard Forward Patterns screen, type d to select the Delete command. (1)	A Hard Forward Pattern Index entry field is displayed below and, at the top of the screen, a highlighted Hard Forward Pattern heading is displayed.
Type the Hard Forward Pattern Index at the prompt and press ENTER . To display all patterns, leave the pattern index field blank and press ENTER . The “*” may be included in the pattern index field as a wild card (“1*” will display all patterns that start with “1”).	All of the matching Hard Forward Pattern descriptions in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Hard Forward Pattern to delete, then press ENTER to delete the pattern.	The Hard Forward Patterns screen displays field data for the selected pattern, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY A HARD FORWARD PATTERN

The **Modify** command on the Hard Forward Patterns screen is used to make changes to a Hard Forward Pattern.

CFC Administrator Fri Apr 1 16:10 pm (1)

Pattern Index: *****Hard Forward Patterns***** (2) (3)

Pattern Index	Call Type	Time Index	Destination	Action
1	Busy			
2	Busy			
3	Busy			
4	Busy			
Bottom				
Up/Down Arrows to				
All Calls:				
Add	Delete	Modify	View	

CFC Administrator Fri Apr 1 16:10 pm

*****Hard Forward Patterns*****

Pattern Index	Call Type	Time Index	Destination	Action
1	Busy:	2	3400	Set
		4	3410	Override
		6	3410	Cancel
		0	0	None
		0	0	None
		0	0	None
	No Answer:	0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
	All Calls:	0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None

<ESC> to return to command line

Figure 3-20 Modify A Hard Forward Pattern

Procedure

Action	Result
On the Hard Forward Patterns screen, type m to select the Modify command. (1)	A Hard Forward Pattern entry field is displayed at the bottom of the screen, and a highlighted Hard Forward Pattern heading is displayed at the top of the screen.
Type the Hard Forward Pattern Index at the prompt and press ENTER . To display all patterns, leave the pattern index field blank and press ENTER . The "*" may be included in the pattern index field as a wild card ("1*" will display all patterns that start with "1").	All the matching Hard Forward Patterns in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Hard Forward Pattern to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Hard Forward Pattern fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message " Do you want to save changes? (Y/N) " is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the command line.

MODIFY A HARD FORWARD PATTERN (CONT)

Database Search

The Hard Forward Pattern Index cannot be changed since it is the key to the record. A change in this field means either another existing record or a new record is being entered. After the Hard Forward Pattern Index is entered, CFC searches the database for the corresponding record and displays it. If it does not exist in the database, CFC displays a prompt requesting the entry of a different pattern index.

VIEW HARD FORWARD PATTERNS

The **View** command on the Hard Forward Patterns screen is used to display a selected range of Hard Forward Pattern definitions for on-screen viewing or printing.

CFC Administrator Fri Apr 1 16:10 pm (1)

Pattern Index Call Type Busy: Search Key: **Pattern** Call Type Time Destination Action (2) (3)

Start value: **Top Of File**

End value:

*** Hard Forward Patterns ***

Pattern Index	Call Type	Time Index	Destination	Action
1	Busy:	2	3400	Set
		4	3410	Override
		6	3410	Cancel
		0	0	None
		0	0	None
	No Answer:	0	0	None
		0	0	None
		0	0	None
		0	0	None
		0	0	None

More

Add Delete Modify DownPage UpPage Search Top Bottom Print Quit

Figure 3-21 View Hard Forward Patterns

Procedure

Action	Result
On the Hard Forward Patterns screen, type v to select the View command.(1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Hard Forward Patterns screen, type q to select the Quit command.	The Hard Forward Patterns screen is displayed, and the cursor is positioned on the command line.

PRINT HARD FORWARD PATTERNS

The **Print** command on the Hard Forward Patterns screen is used to print a hardcopy of the Hard Forward Pattern records lying within a specified range.

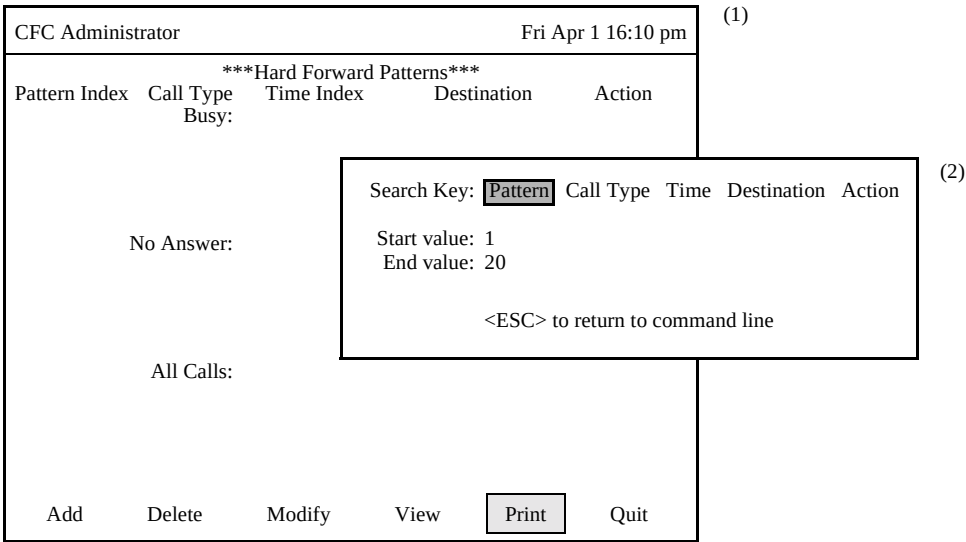


Figure 3-22 Print Hard Forward Patterns

Procedure

Action	Result
On the Hard Forward Patterns screen, type p to select the Print command. (1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

CALL ROUTING CONTROL

OVERVIEW The **Call Routing Control** option on the Administrator Main Menu is used to add, remove, or make changes to the to Call Routing Control Monitored Numbers, Groups, Patterns, and Destinations.

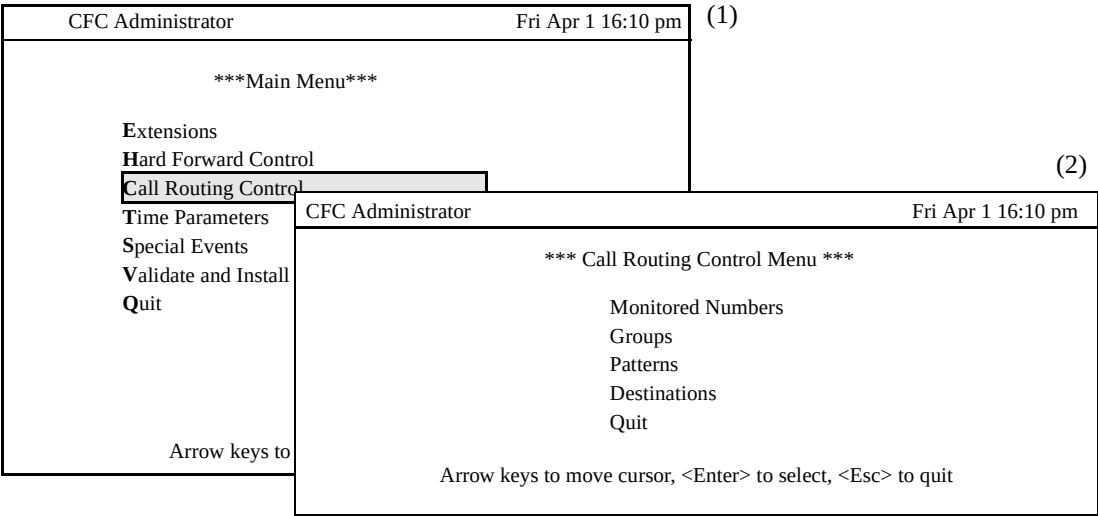


Figure 3-23 Call Routing Control Option

Procedure

Action	Result
On the Main Menu, type c to select the Call Routing Control option.(1)	The Call Routing Control screen is displayed. (2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Call Routing Control option, type q to select the Quit command.	The Main Menu is redisplayed.

The Call Routing Control Menu contains the following options:

Monitored Numbers -

The CRC application waits for incoming calls on three monitored numbers, then routes the calls to the appropriate destinations. Each user must forward their telephone to a monitored number to activate Call Routing. The Monitored Numbers menu option is used to make, alter, delete, and otherwise manage the monitored number assignments.

Groups -

Each Call Routing Group has a unique group index which is referenced by the Extensions record, a group name, a default destination, and a pattern index that specifies the Call Routing Pattern used by the group. The **Groups** option is used to create, delete, modify, view and print Call Routing Groups.

OVERVIEW (Cont.)

Patterns -

Each Call Routing Pattern has a unique pattern index which is referenced by the Call Routing Group record, and a list of destination index values that specify Call Routing Destinations. The **Patterns** option is used to create, delete, modify, view and print Call Routing Patterns.

Destinations -

Each Call Routing Destination has a unique destination index which is referenced by the Call Routing Pattern record, a list of destination extensions, and a start time index value. The **Destinations** option is used to create, delete, modify, view and print Call Routing Destinations.

Quit -

The Quit option exits the Call Routing Control Menu and returns to the Main Menu.

CALL ROUTING MONITORED NUMBERS

OVERVIEW The **Monitored Numbers** option on the Call Routing Control Menu is used to maintain the CRC monitored number and voice mail number assignments.

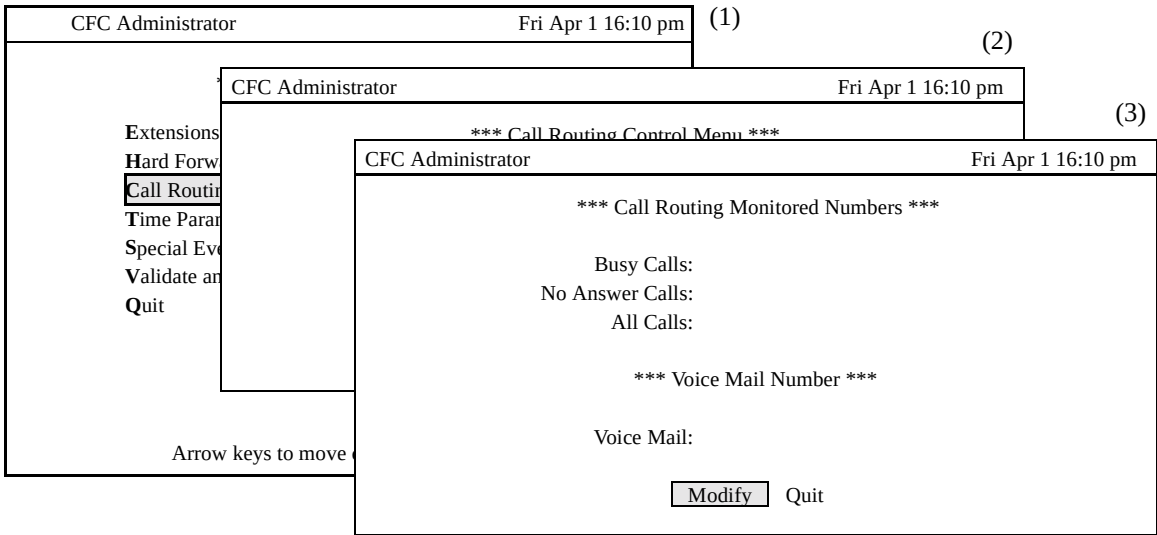


Figure 3-24 Call Routing Monitored Numbers Option

Procedure

Action	Result
On the Main Menu, type c to select the Call Routing Control option.(1)	The Call Routing Control screen is displayed. (2)
On the Call Routing Control screen, type m to select the Monitored Numbers option. (2)	The Call Routing Monitored Numbers screen is displayed. (3)
To change a monitored number, type m to select the Modify command.	The cursor is positioned on the first extension field.
Use the Backspace key to delete existing monitored numbers and the Up and Down Arrow keys to move among the fields. Make the necessary changes to the monitored numbers, pressing ENTER after each entry.	When ENTER is pressed on the last entry, the cursor is returned to the command line.
To exit the Monitored Numbers option, type q to select the Quit command.	The message “ Do you want to save changes? (Y/N) ” is displayed.
Answer ‘ Y ’ and press ENTER to save the changes, or answer ‘ N ’ and press ENTER to cancel the changes.	The Call Routing Control Menu is displayed.

CALL ROUTING GROUPS

OVERVIEW The **Groups** option on the Call Routing Control Menu is used to add, remove, or make changes to the Call Routing Groups.

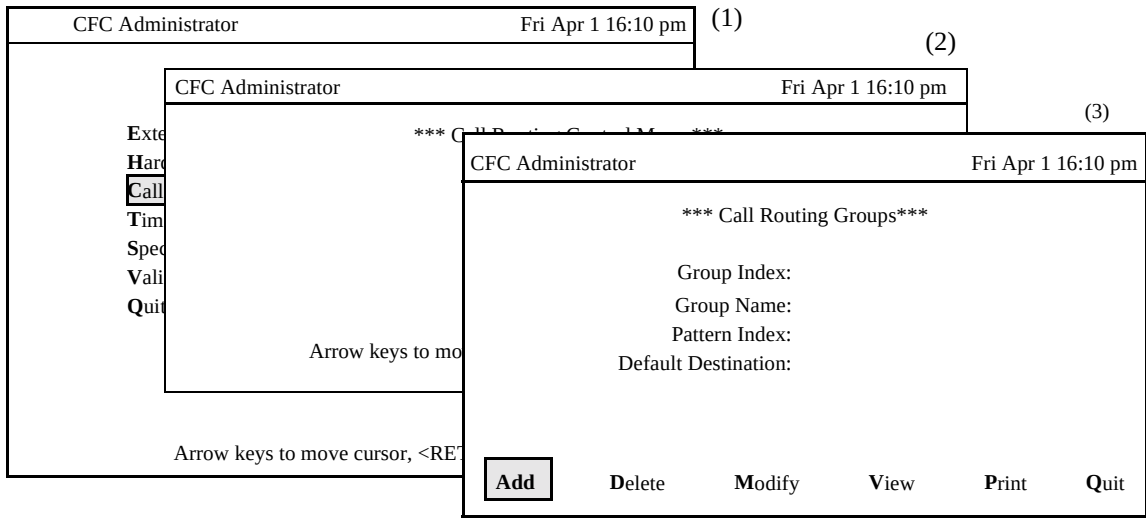


Figure 3-25 Call Routing Groups Option

Procedure

Action	Result
On the Main Menu, type c to select the Call Routing Control option.(1)	The Call Routing Control screen is displayed. (2)
On the Call Routing Control screen, type g to select the Groups option. (2)	The Call Routing Groups screen is displayed. (3)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Call Routing Groups option, type q to select the Quit command.	The Call Routing Control screen is redis-

Call Routing Group Information

Each Call Routing Group is given a Group Index, a Group Name, a Pattern Index, and a Default Destination. The Pattern Index specifies the Call Routing pattern used by the extensions in the Group. The Default Destination is used if all destinations in the Call Routing Pattern are unavailable.

Expanded Displays

Press the **TAB** key or the **Ctrl-V** key combination while in the Call Routing Pattern Index field to display the Call Routing Pattern description used by the group. Press **ESC** to return to the Call Routing Groups screen.

OVERVIEW (Cont.)

Commands

The Call Routing Groups command line provides options to add or remove a group definition, change an existing group definition, display group data for on-screen viewing, or print a hardcopy of either the displayed group definition or the entire file of group definitions.

ADD A CALL ROUTING GROUP

The **Add** command on the Call Routing Groups screen is used to add a Call Routing Group. Note that a Call Routing Pattern must be added before a Call Routing Group may be added.

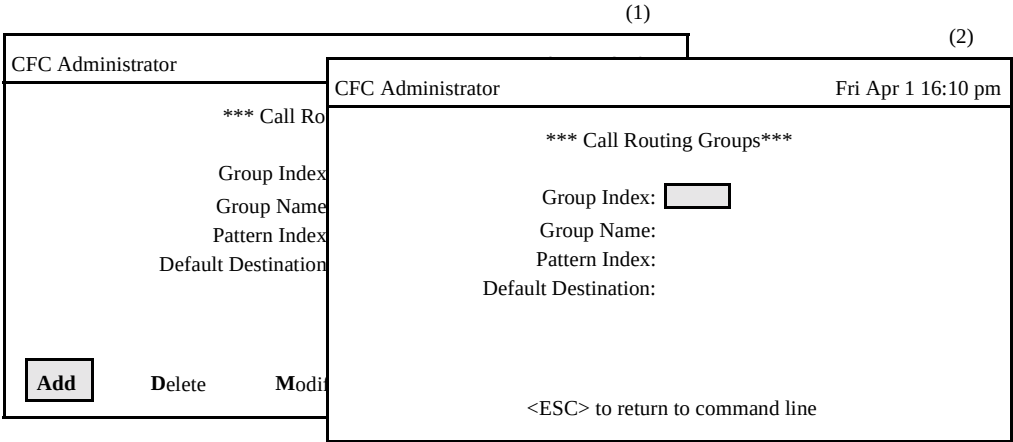


Figure 3-26 Add A Call Routing Group

Procedure

Action	Result
On the Call Routing Groups menu, type a to select the Add command. (1)	The first field is highlighted for data entry. (2)
Type data to the fields according to the definitions below, pressing ENTER after each entry: <u>Field</u> Group Index Group Name Pattern Index Default Destination	<u>Definition</u> – The group identifying number, up to 3 digits in length and referenced by the Extensions option under the Main Menu. – The group name; up to 30 characters. – The index to the Call Routing Pattern used by this group. – The destination used if all destinations specified in the Call Routing Pattern are busy.
	When ENTER is pressed from the last field, the message “ Do you want to add this? (Y/N) ” is displayed.
Type Y and press ENTER to add the Call Routing Group or N and press ENTER to cancel it .	The Call Routing Groups data entry screen is cleared, and the cursor is positioned on the original command line.

DELETE A CALL ROUTING GROUP

The **Delete** command on the Call Routing Groups screen is used to remove a Call Routing Group index from the database.

CFC Administrator

Group Index

Group Name

Pattern Index

Default Ext

1

2

3

6

Bottom

Up/Dow

Add

Delete

CFC Administrator

Fri Apr 1 16:10 pm

*** Call Routing Groups***

Group Index: 1

Group Name: Human Resources

Pattern Index: 1

Default Destination: 3800

Do you want to delete this? (Y/N)

Figure 3-27 Delete A Call Routing Group

Procedure

Action	Result
On the Call Routing Groups screen, type d to select the Delete command. (1)	A Call Routing Group Index entry field is displayed below and, at the top of the screen, a highlighted Call Routing Group heading is displayed.
Type the Call Routing Group Index at the prompt and press ENTER . To display all groups, leave the group index field blank and press ENTER . The “*” may be included in the group index field as a wild card (“1*” will display all groups that start with “1”).	All of the matching Call Routing Group descriptions in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Call Routing Group to delete, then press ENTER to delete the group.	The Call Routing Groups screen displays field data for the selected group, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY A CALL ROUTING GROUP

The **Modify** command on the Call Routing Groups screen is used to make changes to a Call Routing Group record.

The screenshot shows the CFC Administrator interface. At the top, there are three numbered callouts: (1) points to the 'Modify' command at the bottom left; (2) points to the 'Group Index' field; and (3) points to the 'Group Name' field. The main screen displays a list of Call Routing Groups with columns for Group Index, Group Name, Pattern Index, and Default Ext. The first group is highlighted with a gray background. Below the list, there are buttons for 'Add', 'Delete', and 'Modify'. The 'Modify' button is highlighted. The 'Group Index' field is set to '1'. The 'Group Name' field is set to 'Human Resources'. The 'Pattern Index' field is set to '1'. The 'Default Ext' field is set to '3800'. The screen also displays the date and time 'Fri Apr 1 16:10 pm' and the message '<ESC> to return to command line'.

Figure 3-28 Modify A Call Routing Group

Procedure

Action	Result
On the Call Routing Groups screen, type m to select the Modify command. (1)	A Call Routing Group entry field is displayed at the bottom of the screen, and a highlighted Call Routing Group heading is displayed at the top of the screen.
Type the Call Routing Group Index at the prompt and press ENTER . To display all groups, leave the group index field blank and press ENTER . The “*” may be included in the group index field as a wild card (“1*” will display all groups that start with “1”).	All the matching Call Routing Groups in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Call Routing Group to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Call Routing Group fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message “ Do you want to save changes? (Y/N) ” is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the command line.

MODIFY A CALL ROUTING GROUP (Cont.)

Database Search

The Call Routing Group Index cannot be changed since it is the key to the record. A change in this number means either another existing record or a new record is being entered. After the Call Routing Group Index is entered, CFC displays it. If it does not exist, CFC displays a prompt requesting the entry of a new record for the Group Index.

VIEW CALL ROUTING GROUPS

The **View** command on the Call Routing Groups screen is used to display a selected range of Call Routing Group definitions for on-screen viewing or printing.

(1)

CFC Administrator		Fri Apr 1 16:10 pm																					
* Search Key: Group Pattern Name Default Destination G Start value: 1 G End value: 10 Pa Default		(2)																					
Add Delete Modify		(3) Top Of File *** Call Routing Groups *** <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Group Index</th> <th style="text-align: left;">Group Name</th> <th style="text-align: left;">Pattern Index</th> <th style="text-align: left;">Default Ext</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Human Resources</td> <td>3</td> <td>3800</td> </tr> <tr> <td>2</td> <td>Marketing</td> <td>4</td> <td>4000</td> </tr> <tr> <td>3</td> <td>Accounting</td> <td>2</td> <td>2500</td> </tr> <tr> <td>6</td> <td>Traffic</td> <td>1</td> <td>1034</td> </tr> </tbody> </table> End Of File		Group Index	Group Name	Pattern Index	Default Ext	1	Human Resources	3	3800	2	Marketing	4	4000	3	Accounting	2	2500	6	Traffic	1	1034
Group Index	Group Name	Pattern Index	Default Ext																				
1	Human Resources	3	3800																				
2	Marketing	4	4000																				
3	Accounting	2	2500																				
6	Traffic	1	1034																				
		DownPage UpPage Search Top Bottom Print Quit																					

Figure 3-29 View Call Routing Groups

Procedure

Action	Result
On the Call Routing Groups screen, type v to select the View command.(1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Call Routing Groups screen, type q to select the Quit command.	The Call Routing Groups screen is displayed, and the cursor is positioned on the command line.

PRINT CALL ROUTING GROUPS

The **Print** command on the Call Routing Groups screen is used to print a hardcopy of the Call Routing Group records lying within a specified range.

(1)

CFC Administrator

Fri Apr 1 16:10 pm

*** Call Routing Groups***

Group Index:
Group Name:
Pattern Index:
Default Destination:

(2)

Search Key: Group Pattern Name Default Destination
Start value: 1
End value: 10

<ESC> to return to command line

Add Delete Modify View **Print** Quit

Figure 3-30 Print Call Routing Groups

Procedure

Action	Result
On the Call Routing Groups screen, type p to select the Print command. (1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

CALL ROUTING PATTERNS

OVERVIEW The **Patterns** option on the Call Routing Control Menu is used to add, delete, modify, view, and print Call Routing Patterns.

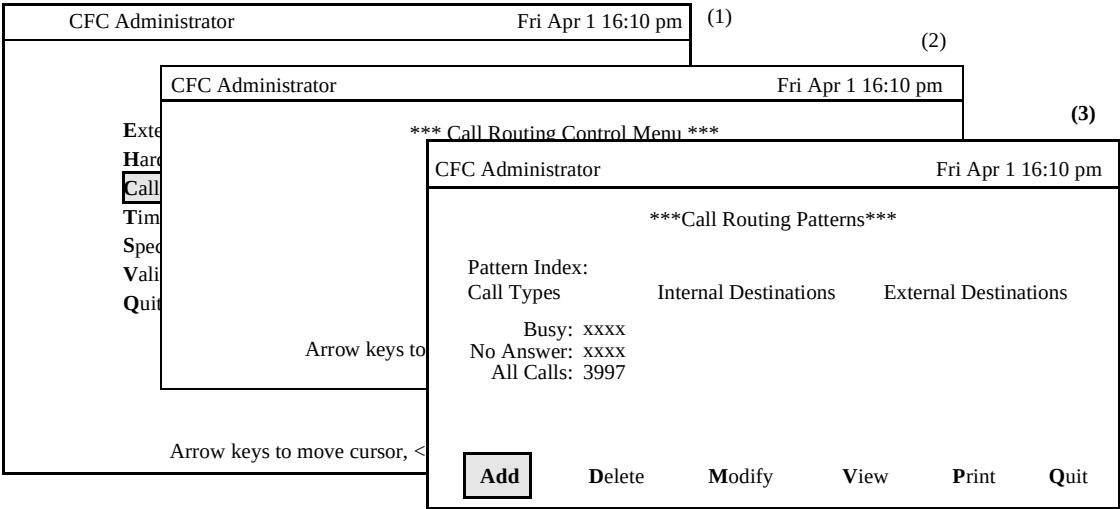


Figure 3-31 Call Routing Patterns Option

Procedure

Action	Result
On the Main Menu, type c to select the Call Routing Control option.(1)	The Call Routing Control screen is displayed. (2)
On the Call Routing Control screen, type p to select the Patterns option. (2)	The Call Routing Patterns screen is displayed. (3)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Call Routing Patterns option, type q to select the Quit command.	The Call Routing Control screen is redisplayed.

Call Routing Pattern Information

Each Call Routing Pattern is given a Pattern Index and two lists of Destination Index values. One list is used for Internal Calls, the other for External Calls. Each list provides up to six entries in each of the following categories: busy calls, caller does not answer, and all calls. The Destination Index values reference entries in the Call Routing Destinations database, which contain a start time and a list of destination extensions calls will be routed to after the start time. The monitored numbers associated with the busy, no answer, and all calls categories are displayed on the Call Routing Patterns screen if they have been set, but they cannot be modified; use the Call Routing Monitored Number screen to set them.

Expanded Display

Press the **TAB** key or the **Ctrl-V** key combination while in a Call Routing Destination Index field to display the Call Routing Destination description. Press **ESC** to return to the Call Routing Patterns screen.

OVERVIEW (Cont.)

Movement Among Fields

When modifying or viewing existing Call Routing Patterns, move quickly from one field (Internal Destinations) to the other field (External Destinations) or vice versa by pressing the **Cntl n** combination while in either field. Also, the **Cntl e** combination moves the cursor quickly to the end of the display.

ADD A CALL ROUTING PATTERN

The **Add** command on the Call Routing Patterns screen is used to add a Call Routing Pattern to the database

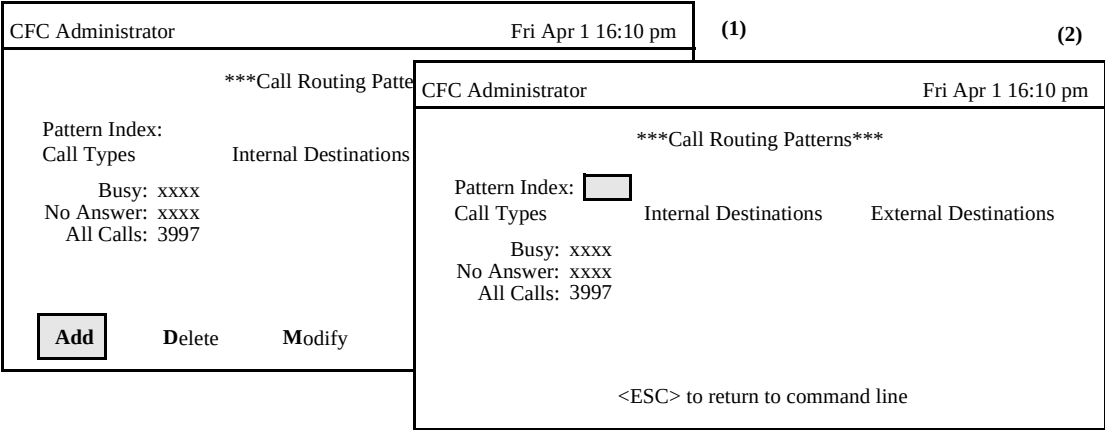


Figure 3-32 Add A Call Routing Pattern

Procedure

Action	Result
On the Call Routing Patterns screen, press a to select the Add command. (1)	The Call Routing Pattern Index field is highlighted for data entry. (2)
Type data in the fields according to the definitions below, pressing ENTER after each entry: <u>Field</u> Pattern Index	Definition –The index by which this pattern is identified; up to 3 digits in length.
<u>Field</u> Internal Destination Index Fields: Busy No Answer All Calls External Destination Index Fields: Busy No Answer All Calls	Definition –Six destination indexes, from 1 to 255, for each Call Routing feature (Busy, No Answer, All Calls); each destination index corresponds to a specified starting time and series of destination extensions (See Call Routing Destinations option); arranged here in the sequence in which they are to be assessed for use by CRC. When ENTER is pressed from the last field, the message “ Do you want to add this? (Y/N) ” is displayed.
Type Y and press ENTER to add the Call Routing Pattern or N and press ENTER to cancel it .	The Call Routing Patterns screen is cleared, and the cursor is positioned on the command line.

DELETE A CALL ROUTING PATTERN

The **Delete** command on the Call Routing Patterns screen is used to remove a Call Routing Pattern from the database.

CFC AdministratorFri Apr 1 16:10 pm

(1)

(2)

(3)

Pattern Index	Call Type	Internal Destination	External Destination
1	Busy		
3	Busy	CFC Administrator	Fri Apr 1 16:10 pm
5	Busy		
7	Busy		

Pattern Index: 3

Call Types

Busy: xxxx

No Answer: xxxx

All Calls: 3997

Bottom

<RET> to S

AddDeleteModifyV

Call Routing Patterns

Pattern Index: 1

Call Types

Internal Destinations

External Destinations

Busy: xxxx

No Answer: xxxx

All Calls: 3997

1 3 2 0 0 0

3 2 1 0 0 0

1 0 0 0 0 0

2 0 0 0 0 0

1 0 0 0 0 0

2 0 0 0 0 0

Do you want to delete this? (Y/N)

Figure 3-33 Delete A Call Routing Pattern

Procedure

Action	Result
On the Call Routing Patterns screen, type d to select the Delete command. (1)	A Call Routing Pattern Index entry field is displayed below and, at the top of the screen, a highlighted Call Routing Pattern heading is displayed.
Type the Call Routing Pattern Index at the prompt and press ENTER . To display all patterns, leave the pattern index field blank and press ENTER . The “*” may be included in the pattern index field as a wild card (“1*” will display all patterns that start with “1”).	All of the matching Call Routing Pattern descriptions in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Call Routing Pattern to delete, then press ENTER to delete the pattern.	The Call Routing Patterns screen displays field data for the selected pattern, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY A CALL ROUTING PATTERN

The **Modify** command on the Call Routing Patterns screen is used to make changes to the currently displayed Call Routing Pattern.

CFC AdministratorFri Apr 1 16:10 pm

(1)

(2)

Pattern Index	Call Type	Internal Destination	External Destination
1	Bu		
3	Bu	CFC Administrator	Fri Apr 1 16:10 pm
5	Bu		
7	Bu		
Bottom			

<RET> to

AddDeleteModify

Call Routing Patterns

Pattern Index: 1

Call Types

Busy: xxxx

No Answer: xxxx

All Calls: 3997

	Internal Destinations	External Destinations
1	3 2 0 0 0	3 2 1 0 0 0
1	0 0 0 0 0	2 0 0 0 0 0
1	0 0 0 0 0	2 0 0 0 0 0

<ESC> to return to command line

Figure 3-34 Modify A Call Routing Pattern

Procedure

Action	Result
On the Call Routing Patterns screen, type m to select the Modify command. (1)	A Call Routing Pattern entry field is displayed at the bottom of the screen, and a highlighted Call Routing Pattern heading is displayed at the top of the screen.
Type the Call Routing Pattern Index at the prompt and press ENTER . To display all patterns, leave the pattern index field blank and press ENTER . The “*” may be included in the pattern index field as a wild card (“1*” will display all patterns that start with “1”).	All the matching Call Routing Patterns in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Call Routing Pattern to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Call Routing Pattern fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message “ Do you want to save changes? (Y/N) ” is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the command line.

MODIFY A CALL ROUTING PATTERN (Cont.)

Database Search

The Call Routing Pattern Index cannot be changed since it is the key to the record. A change in this number means either another existing record or a new record is being entered. After the Call Routing Pattern Index is entered, CFC searches the database for the corresponding record and, when it finds it, displays it.

VIEW CALL ROUTING PATTERNS

The **View** command on the Call Routing Patterns screen is used to display Call Routing Patterns on-screen for viewing or printing.

CFC Administrator		Fri Apr 1 16:10 pm		(1)	(2)																								
Pattern Index: Call Types Busy: xxxx No Answer: xxxx All Calls: 3997		Search Key: Pattern Call Type Internal External Start value End value		(3)																									
Add Delete Modify		Top Of File *** Call Routing Patterns *** <table border="1"> <thead> <tr> <th>Index</th> <th>Call Type</th> <th>Internal Destination Index</th> <th>External Destination Index</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1</td> <td>Busy:</td> <td>1 3 2 0 0 0</td> <td>3 2 1 0 0 0</td> </tr> <tr> <td>No Answer:</td> <td>1 0 0 0 0 0</td> <td>2 0 0 0 0 0</td> </tr> <tr> <td>All Calls:</td> <td>1 0 0 0 0 0</td> <td>2 0 0 0 0 0</td> </tr> <tr> <td rowspan="3">3</td> <td>Busy:</td> <td>4 2 0 0 0 0</td> <td>0 0 0 0 0 0</td> </tr> <tr> <td>No Answer:</td> <td>4 2 0 0 0 0</td> <td>0 0 0 0 0 0</td> </tr> <tr> <td>All Calls:</td> <td>0 0 0 0 0 0</td> <td>0 0 0 0 0 0</td> </tr> </tbody> </table> More DownPage UpPage Search Top Bottom Print Quit				Index	Call Type	Internal Destination Index	External Destination Index	1	Busy:	1 3 2 0 0 0	3 2 1 0 0 0	No Answer:	1 0 0 0 0 0	2 0 0 0 0 0	All Calls:	1 0 0 0 0 0	2 0 0 0 0 0	3	Busy:	4 2 0 0 0 0	0 0 0 0 0 0	No Answer:	4 2 0 0 0 0	0 0 0 0 0 0	All Calls:	0 0 0 0 0 0	0 0 0 0 0 0
Index	Call Type	Internal Destination Index	External Destination Index																										
1	Busy:	1 3 2 0 0 0	3 2 1 0 0 0																										
	No Answer:	1 0 0 0 0 0	2 0 0 0 0 0																										
	All Calls:	1 0 0 0 0 0	2 0 0 0 0 0																										
3	Busy:	4 2 0 0 0 0	0 0 0 0 0 0																										
	No Answer:	4 2 0 0 0 0	0 0 0 0 0 0																										
	All Calls:	0 0 0 0 0 0	0 0 0 0 0 0																										

Figure 3-35 View Call Routing Patterns

Procedure

Action	Result
On the Call Routing Patterns screen, type v to select the View command.(1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Call Routing Patterns screen, type q to select the Quit command.	The Call Routing Patterns screen is displayed, and the cursor is positioned on the command line.

PRINT CALL ROUTING PATTERNS

The **Print** command on the Call Routing Patterns screen is used to print a hardcopy of the Call Routing Patterns lying within a specified range.

CFC AdministratorFri Apr 1 16:10 pm

Call Routing Patterns

Pattern Index:
Call TypesInternal DestinationsExternal

Busy: xxxx
No Answer: xxxx
All Calls: 3997

Search Key: PatternCall TypeInternalExternal

Start value: 1
End value: 10

<ESC> to return to command line

AddDeleteModifyView

PrintQuit

Figure 3-36 Print Call Routing Patterns

Procedure

Action	Result
On the Call Routing Patterns screen, type p to select the Print command. (1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

CALL ROUTING DESTINATIONS

OVERVIEW The **Destinations** option on the Call Routing Control Menu is used to add, delete, or change the destination lists and start times used by Call Routing Patterns.

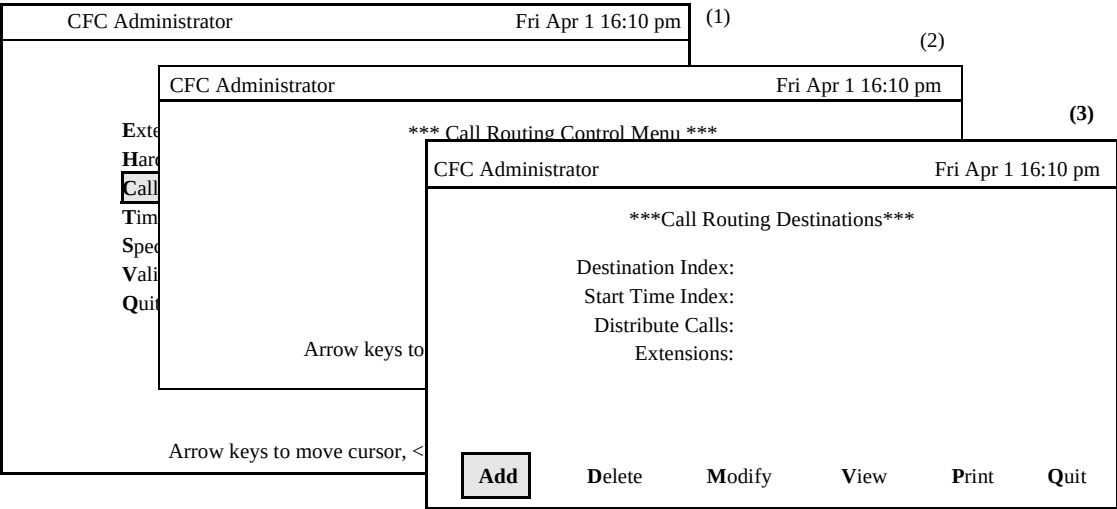


Figure 3-37 Call Routing Destinations Option

Procedure

Action	Result
On the Main Menu, type c to select the Call Routing Control option.(1)	The Call Routing Control screen is displayed. (2)
On the Call Routing Control screen, type d to select the Destinations option. (2)	The Call Routing Destinations screen is displayed. (3)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Call Routing Destinations option, type q to select the Quit command.	The Call Routing Control screen is redisplayed.

Call Routing Destinations Information

Each Destination record has a unique Destination Index which identifies the record, a list of extensions that are the actual destinations to which calls are rerouted., and a Start Time Index which corresponds to an actual time frame under the Time Parameters option on the Main Menu. If an incoming call arrives during the time frame indicated by the Start Time Index, the destination extensions will be searched for an available connection. If the time frame indicated by the Start Time Index does not correspond to the time of the incoming call, another Destination record is evaluated for possible use, and so on, until the appropriate time frame is located and its corresponding destination extensions are checked for a connection.

Expanded Display

Press the **TAB** key or the **Ctrl-V** key combination while in the Start Time Index field to display the Start Time record. Press **ESC** to return to the Call Routing Destinations screen.

ADD A CALL ROUTING DESTINATION

The **Add** command on the Call Routing Destinations screen is used to add a Call Routing Destination to the database.

The figure consists of two screenshots of the CFC Administrator interface. Screenshot (1) shows the main menu with the title 'CFC Administrator' and the date/time 'Fri Apr 1 16:10 pm'. Below the title, there are three options: 'Add', 'Delete', and 'Modify'. Screenshot (2) shows the 'Call Routing Destinations' screen with the title 'CFC Administrator' and the date/time 'Fri Apr 1 16:10 pm'. Below the title, there are four input fields: 'Destination Index:', 'Start Time Index:', 'Distribute Calls:', and 'Extensions:'. Below these fields is an 'Add' button. At the bottom of the screen, there is a prompt '<ESC> to return to command line'.

Figure 3-38 Add A Call Routing Destination

Procedure

Action	Result
On the Call Routing Destinations screen, press a to select the Add command. (1)	The first field is highlighted for data entry. (2)
Type data to the fields according to the definitions below, pressing ENTER after each entry: <u>Field</u> Destination Index	<u>Definition</u> – The destination identifier; up to 3 digits in length, from 1 to 255.
<u>Field</u> Start Time Index Distribute Calls Extensions	<u>Definition</u> – The index to the Time Parameter used by this destination list; up to 3 digits in length. – Distribution of calls to the extensions in this routing pattern to equalize the load (Yes) rather than in sequence by priority (No). Use the Space Bar to toggle between the two options. – The list of up to 5 extensions to which forwarded calls can be rerouted according to the distribution indicated. When ENTER is pressed from the last field, the message “ Do you want to add this? (Y/N) ” is displayed.
Type Y and press ENTER to add the destination record or N and press ENTER to cancel it .	The fields are cleared, and the cursor is positioned on the original command line.

ADD A CALL ROUTING DESTINATION (Cont.)

Non-Existent Data

During data input to the Call Routing Destinations screen, if the entered time index does not exist in the time parameters database, the administrator is notified that the index does not exist. If the associated record is not added, the error will be caught in the validation process. (See Validate and Install option on Main Menu).

DELETE A CALL ROUTING DESTINATION

The **Delete** command on the Call Routing Destinations screen is used to remove a Call Routing Destination entry from the database.

CFC AdministratorFri Apr 1 16:10 pm

Call Routing Destinations

Index	Time Index	Distribute	Destination Numbers
1	2	YES	3600 3601 0
2	4		
3	5		
4	6		

Bottom

AddDeleteMo<RE

CFC AdministratorFri Apr 1 16:10 pm

Call Routing Destinations

Destination Index: 1
Start Time Index: 2
Distribute Calls: YES
Extensions: 3601
3602
0
0
0

Do you want to delete this? (Y/N)

Figure 3-39 Delete A Call Routing Destination

Procedure

Action	Result
On the Call Routing Destinations screen, type d to select the Delete command. (1)	A Call Routing Destination Index entry field is displayed below and, at the top of the screen, a highlighted Call Routing Destination heading is displayed.
Type the Call Routing Destination Index at the prompt and press ENTER . To display all destinations, leave the destination index field blank and press ENTER . The “*” may be included in the destination index field as a wild card (“1*” will display all destinations that start with “1”).	All of the matching Call Routing Destination descriptions in the database are displayed.(2)
Use the Up and Down Arrow keys to select the Call Routing Destination to delete, then press ENTER to delete the destination.	The Call Routing Destinations screen displays field data for the selected destination, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY A CALL ROUTING DESTINATION

The **Modify** command on the Call Routing Destinations screen is used to make changes to a Call Routing Destination.

CFC AdministratorFri Apr 1 16:10 pm

Call Routing Destinations

	Index	Time Index	Distribute	Destination Numbers		
	1	2	YES	3600	3601	0
Destination Index	2	4	NO	4500	4501	4502
Start Time Index	3	5				
Distribute Calls	4	6				
Extensions						

Bottom

AddDeleteModify<RETURN>

CFC AdministratorFri Apr 1 16:10 pm

Call Routing Destinations

Destination Index: 1

Start Time Index: 2

Distribute Calls: YES

Extensions: 3601

3602

0

0

0

<ESC> to return to command line

Figure 3-40 Modify A Call Routing Destination

Procedure

Action	Result
On the Call Routing Destinations screen, type m to select the Modify command. (1)	A Call Routing Destination entry field is displayed at the bottom of the screen, and a highlighted Call Routing Destination heading is displayed at the top of the screen.
Type the Call Routing Destination Index at the prompt and press ENTER . To display all destinations, leave the destination index field blank and press ENTER . The “*” may be included in the destination index field as a wild card (“1*” will display all destinations that start with “1”).	All the matching Call Routing Destinations in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Call Routing Destination to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Call Routing Destination fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message “ Do you want to save changes? (Y/N) ” is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the command line.

MODIFY A CALL ROUTING DESTINATION (Cont)

Database Search

The value in the Destination Index field cannot be changed since it is the key to the record. A change in this number means either another existing record or a new record is being entered. After the Destination Index is entered, CFC searches the database for the corresponding record and, when it finds it, displays it. If the record does not exist in the database, CFC displays a prompt requesting the entry of a new record for the Destination Index.

VIEW CALL ROUTING DESTINATIONS

The **View** command on the Call Routing Destinations screen is used to display Call Routing Destination records.

CFC Administrator		Fri Apr 1 16:10 pm		(1)	(2)																														
***Call Rou		Search Key: Destination Time Distribution Extension		(3)																															
Destination Index:		Start		End																															
Start Time Index:		Top Of File																																	
Distribute Calls:		*** Call Routing Destinations ***																																	
Extensions:		<table border="1"> <thead> <tr> <th>Index</th> <th>Time Index</th> <th>Distribute</th> <th colspan="3">Destination Numbers</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>YES</td> <td>3600</td> <td>3601</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>2</td> <td>4</td> <td>NO</td> <td>4500</td> <td>4501</td> <td>4502</td> </tr> <tr> <td></td> <td></td> <td></td> <td>4503</td> <td>0</td> <td>0</td> </tr> </tbody> </table>				Index	Time Index	Distribute	Destination Numbers			1	2	YES	3600	3601	0				0	0	0	2	4	NO	4500	4501	4502				4503	0	0
Index	Time Index	Distribute	Destination Numbers																																
1	2	YES	3600	3601	0																														
			0	0	0																														
2	4	NO	4500	4501	4502																														
			4503	0	0																														
Add Delete Modify		More DownPage UpPage Search Top Bottom Print Quit																																	

Figure 3-41 View Call Routing Destinations

Procedure

Action	Result
On the Call Routing Destinations screen, type v to select the View command.(1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Call Routing Destinations screen, type q to select the Quit command.	The Call Routing Destinations screen is displayed, and the cursor is positioned on the command line.

PRINT CALL ROUTING DESTINATIONS

The **Print** command on the Call Routing Destinations screen is used to print a hardcopy of the entire Call Routing Destination database, or simply the currently displayed record.

CFC Administrator

Fri Apr 1 16:10 pm

(1)

Call Routing Destinations

(2)

Destination Index:
Start Time Index:
Distribute Calls:
Extensions:

Search Key: Destination Time Distribution Extension

Start value: 1

End value: 10

<ESC> to return to command line

Add Delete Modify View

Print

Quit

Figure 3-42 Print Call Routing Destinations

Procedure

Action	Result
On the Call Routing Destinations screen, type p to select the Print command. (1)	A window requests the search key and the starting and ending values for the range. (2)
Use the Spacebar or Left and Right Arrow keys to select a search key, then press ENTER . Type the start value, press ENTER , type the end value, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

TIME PARAMETERS

OVERVIEW The **Time Parameters** option on the Administrator Main Menu is used to add, remove, or make changes to the start time descriptions.

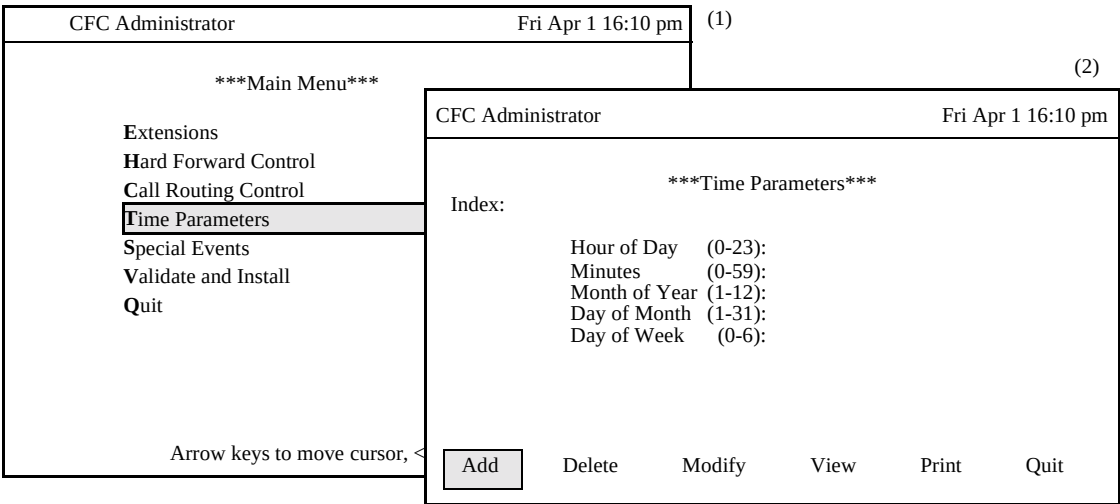


Figure 3-43 Time Parameters Option

Procedure

Action	Result
On the Main Menu, type t to select the Time Parameters option.(1)	The Time Parameters screen is displayed. (2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Time Parameters option, type q to select the Quit command.	The Main Menu is redisplayed.

Time Parameters Information

Each Start Time Index identifies a schedule, or time frame, that is defined in hour, minute, month, and day detail. A time frame can be illustrated as “Daily at midnight”, “The first Monday of every month at 8:00 a.m.”, or “Monday through Friday, from 8:00 a.m.”. It is by the schedules that different rerouting patterns can be instituted for the same group at the different times.

Time Formula

The desired start time is specified using five fields. These fields combine to form a pattern that is interpreted by the CRC and HFC applications. If any field is left blank, the entire record is rejected. The fields are listed below and each is followed in parentheses by the range within valid responses must lie:

- Hour of Day (0-23) (Midnight = 0)
- Minutes (0-59)
- Month of Year (1-12)

OVERVIEW (Cont)

- Day of Month (1-31)
- Day of Week (0-6) (Sunday = 0)

It is important to keep the following guidelines in mind when constructing the values for these fields:

- Use a single number within the allowable range.
- Use an asterisk (*) to indicate all values within the given range.
- Use a hyphen to indicate a range (1-3).
- Separate numbers in a list using commas.
- Comma-separated lists of numbers and ranges are not allowed.
- A range (e.g., 1-3) is only allowed in the Day of Week field.
- A single number must be entered for the Minutes and Hours fields. All data following a command, asterisk, or hyphen is ignored.

Examples

Perhaps the following examples might be helpful:

Hours	Minutes	Month	Day of Month	Day of Week	Events Occur
0	0	*	*	*	Daily at 12:00 midnight
1	0	*	1	*	The first of every month at 1:00 a.m.
1	0	*	*	1-5	Monday through Friday at 1:00 a.m.
12	0	12	25	*	December 25 at 12:00 noon.

ADD A TIME PARAMETER

The **Add** command on the Time Parameter screen is used to add a start time, identified by an index.

CFC AdministratorFri Apr 1 16:10 pm

Index:

Hour of Day (0-23):
Minutes (0-59):
Month of Year (1-12):
Day of Month (1-31):
Day of Week (0-6):

AddDeleteModify

Time Parameters

CFC AdministratorFri Apr 1 16:10 pm

Index:

Hour of Day (0-23):
Minutes (0-59):
Month of Year (1-12):
Day of Month (1-31):
Day of Week (0-6):

<ESC> to return to command line

Figure 3-44 Add A Time Parameter

Procedure

Action	Result
On the Time Parameters screen, type a to select the Add command. (1)	The first field is highlighted for data entry. (2)
Enter data to the fields according to the definitions below, pressing ENTER after each entry: Field Index Hour of Day Minutes Month of Year Day of Month Day of Week	Definition – The number by which this start time is identified; up to 3 digits in length. – The hour of the day at which the corresponding extensions are appropriate destinations for forwarded calls. – The minute in the hour of the day at which the corresponding extensions are appropriate destinations for forwarded calls. – The month of the year at which this start time begins; * can be used to indicate “every” month. – The day of the month at which this start time begins; * can be used to indicate “daily”. – The day of the week at which this start time begins; * can be used to indicate “any day”.
	When ENTER is pressed from the last field, the message “ Do you want to add this? (Y/N) ” is displayed.
Enter Y and press ENTER to add the time parameter or N and press ENTER to cancel it .	The Time Parameter screen is cleared, and the cursor is positioned on the command line.

DELETE A TIME PARAMETER

The **Delete** command on the Time Parameter screen is used to remove a Time Parameter record.

CFC Administrator Fri Apr 1 16:10 pm (1) (2) (3)

Index	Hours	Minutes	Month	Day of Month	Day of Week
1	8	30			
2	16	0			
3	1	0			
4	0	0			
5	10	0			

Index: 1

Time Parameters

Hour of Day (0-23): 8
 Minutes (0-59): 30
 Month of Year (1-12): *
 Day of Month (1-31): *
 Day of Week (0-6): *

Do you want to delete this? (Y/N)

Add Delete Modify View

Figure 3-45 Delete A Time Parameter

Procedure

Action	Result
On the Time Parameters screen, type d to select the Delete command. (1)	A Time Parameter Index entry field is displayed below and, at the top of the screen, a highlighted Time Parameters heading is displayed.
Type the Time Parameter Index at the prompt and press ENTER . To display all Time Parameters, leave the index field blank and press ENTER . The "*" may be included in the index field as a wild card ("1*" will display all Time Parameters that start with "1").	All of the matching Time Parameter descriptions in the database are displayed.(2)
Use the Up and Down Arrow keys to select the Time Parameter to delete, then press ENTER to delete the destination.	The Time Parameters screen displays field data for the selected destination, and the confirmation " Do you want to delete this? (Y/N) " is displayed. (3)
Type Y and press ENTER to confirm the deletion or N and press ENTER to cancel it.	The fields are cleared, and the cursor is positioned on the original command line.

MODIFY A TIME PARAMETER

The **Modify** command on the Time Parameter screen is used to make changes to a time parameter.

CFC AdministratorFri Apr 1 16:10 pm

(1)

(2)

(3)

Index:12345Bottom

Hours8100010

Minutes3000000

Month

Day of Month

Day of Week

CFC AdministratorFri Apr 1 16:10 pm

Time Parameters

Index: 1

Hour of Day (0-23): 8

Minutes (0-59): 30

Month of Year (1-12): *

Day of Month (1-31): *

Day of Week (0-6): *

<RET> to search,

AddDeleteModifyView

<ESC> to return to command line

Figure 3-46 Modify A Time Parameter

Procedure

Action	Result
On the Time Parameters screen, type m to select the Modify command. (1)	A Time Parameter Index field is displayed at the bottom of the screen, and a highlighted Time Parameters heading is displayed at the top of the screen.
Type the Time Parameter Index at the prompt and press ENTER . To display all Time Parameters, leave the index field blank and press ENTER . The “*” may be included in the index field as a wild card (“1*” will display all Time Parameters that start with “1”).	All the matching Time Parameters in the database are displayed. (2)
Use the Up and Down Arrow keys to select the Time Parameter to be modified, then press ENTER to modify the record.	The contents of the selected record are displayed. (3)
Use the Up and Down Arrow keys to move between the Time Parameter fields. The Backspace key may be used to erase existing data. Type new data where necessary and press ENTER after each entry.	After the last entry, the message “ Do you want to save changes? (Y/N) ” is displayed.
Type Y and press ENTER to save the changes, or type N and press ENTER to cancel them.	The fields are cleared, and the cursor is positioned on the command line.

MODIFY A TIME PARAMETER (Cont.)

Database Search

The Index cannot be changed since it is the key to the record. A change in this number means either another existing record or a new record is being entered. After the time parameter is entered, CFC searches the database for the corresponding record and, when it finds it, displays it. If it does not exist in the database, CFC displays a prompt requesting the entry of a different time parameter.

VIEW TIME PARAMETERS

The **View** command on the Time Parameters screen is used to display a selected range of time parameters on-screen for viewing or printing.

The screenshot shows the CFC Administrator interface. At the top, it says 'CFC Administrator' and 'Fri Apr 1 16:10 pm'. Below this, there's a section for 'Index:' with a list of time parameters: Hour of Day (0-23), Minutes (0-59), Month of Year (1-12), Day of Month (1-31), and Day of Week (0-6). To the right, there's a 'Search Key: Time Index' field. Below that, a window titled '***Time Parameters***' is open, showing a table of time parameters. The table has columns: Index, Hours, Minutes, Month, Day of Month, and Day of Week. The data rows are: 1 (8, 30, *, *, *), 2 (16, 0, *, *, *), 3 (1, 0, *, *, 1-5), 4 (0, 0, 12, 25, *), and 5 (10, 0, *, *, 0). The window also has 'Top of File' and 'End of File' buttons. At the bottom of the window, there are buttons for 'DownPage', 'UpPage', 'Search', 'Top', 'Bottom', 'Print', and 'Quit'.

Figure 3-47 View Time Parameters

Procedure

Action	Result
On the Time Parameters screen, type v to select the View command.(1)	A window requests the starting and ending Time Index values for the range. (2)
Type the Start Time Index, press ENTER , type the End Time Index, and press ENTER to indicate the range of records to be viewed. If both record values are blank then all records will be displayed. If the last record value is blank then the record matching the first record value is displayed.	All records lying within the indicated range are displayed for on-screen viewing. (3)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Time Parameters screen, type q to select the Quit command.	The Time Parameters screen is displayed, and the cursor is positioned on the command line.

PRINT TIME PARAMETERS

The **Print** command on the Time Parameters screen is used to print a hardcopy of the time parameters lying within a specified range.

CFC Administrator Fri Apr 1 16:10 pm (1)

Time Parameters

Index:

Hour of Day (0-23):
Minutes (0-59):
Month of Year (1-12):
Day of Month (1-31):
Day of Week (0-6):

Search Key: Time Index
Start value: 1
End value: 10 (2)

Add Delete Modify View **Print** Quit

Figure 3-48 Print Time Parameters

Procedure

Action	Result
On the Time Parameters screen, enter p to select the Print command (1).	A window requests the starting and ending values for the range. (2)
Type the Start Time Index, press ENTER , type the End Time Index, and press ENTER to indicate the range of records to be printed. If both record values are blank then all records will be printed. If the last record value is blank then the record matching the first record value is printed.	The records lying within the indicated range are sent to the printer, and the cursor is positioned on the command line.

SPECIAL EVENTS

OVERVIEW

The **Special Events** option on the Administrator Main Menu is used to set up and manage Hard Forward and Call Routing on holidays or during special events when regularly scheduled patterns do not apply. These “special” arrangements override the usual daily patterns that are established through the other options on the Main Menu.

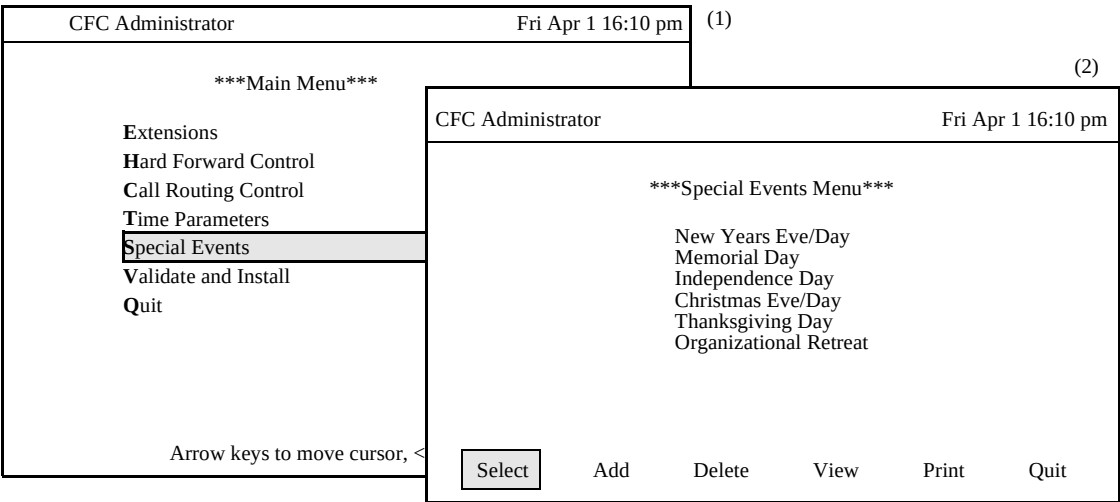


Figure 3-49 Special Events Option

Procedure

Action	Result
On the Main Menu, type s to select the Special Events option.(1)	The Special Events screen is shown. (2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Special Events option, type q to select the Quit command.	The Main Menu is redisplayed.

Special Events Information

Under this option, each special event is set up with the following information:

Time Parameters: The time at which the special event begins and ends.

Hard Forward Data: The Hard Forward Groups affected by the special event change and the new destination for each group.

Call Routing Data: The Call Routing Groups affected by the special event change and the new Call Routing Destination index for each group.

ADD A SPECIAL EVENT

The **Add** command on the Special Events screen is used to add an event to the database.

CFC Administrator		Fri Apr 1 16:10 pm	(1)	(2)
Special Events Menu New Years Eve/Day Memorial Day Independence Day Christmas Eve/Day Thanksgiving Day Organizational Retreat Select Add Delete View Print		*** Special Events Time Parameters*** Event Name: Begin: End: Hour (0-23): Minutes (0-59): Month of Year (1-12): Day of Month (1-31): Day of Week (0-6): <ESC> to return to command line		

Figure 3-50 Add A Special Event

Procedure

Action	Result
On the Special Events screen, enter a to select the Add command. (1)	The Special Events Time Parameters screen is displayed with the Event Name field highlighted. (2)
Type the event name and press ENTER	The Event name identifies this event. A name may be up to 30 characters in length. Duplicate names are not allowed.
Type the hour the event starts and press ENTER	A value from 0 to 23 must be entered (0 = 12:00 midnight).
Type the minutes the event starts and press ENTER	A value from 0 to 59 must be entered.
Type the month the event starts and press ENTER	A value from 1 to 12 may be entered, or * can be used to indicate every month.
Type the day the event starts and press ENTER	A value from 1 to 31 may be entered, or * can be used to indicate daily.
Type the weekday the event starts and press ENTER	A value from 0 to 6 may be entered (0 = Sunday), * can be used to indicate any weekday, or two values separated by a hyphen can be used to indicate a range.
Type the hour, minutes, month, day, and weekday the event ends, pressing ENTER after each entry.	When ENTER is pressed from the last field, the message " Do you want to save changes? (Y/N) " is displayed.
Type Y and press ENTER to add the event or N and press ENTER to cancel it.	If the event is <u>not added</u> (N), the Special Events screen is cleared, and the cursor is returned to the original command line. Otherwise, the Special Events Time Parameters screen is displayed, and Hard Forward and Call Routing Groups may be added as described in the following sections.

Time Parameters

Each Start Time Index identifies a schedule, or time frame, that is defined by the hour, minute, month, and day. A time frame can be illustrated as “Daily at midnight”, “The first Monday of every month at 8:00 a.m.”, or “Monday through Friday, from 8:00 a.m.” It is by these schedules that different rerouting patterns can be instituted for the same group at different times.

Time Formula

Once the event is named, the times during which indicated rerouting take place are specified using five fields. These five fields combine to form a pattern that is interpreted by CRC and HFC. If any field is left blank, the entire record is rejected. The fields are listed below and each is followed in parentheses by the range within which valid responses must lie:

- Hour of Day (0-23) (Midnight=0)
- Minutes (0-59)
- Month of Year (1-12)
- Day of Month (1-31)
- Day of Week (0-6) (Sunday=0)

It is important to keep the following guidelines in mind when constructing the values for these fields:

- Use a single number within the allowable range.
- Use an asterisk (*) to indicate all values within the given range.
- Use a hyphen to indicate a range (1–3).
- Separate numbers in a list using commas.
- Comma-separated lists of numbers and ranges are not allowed.
- A range (e.g., 1–3) is only allowed in the Day of Week field.
- A single number must be entered for the Minutes and Hour fields. All data following a comma, asterisk, or hyphen is ignored.

Examples

Perhaps the following examples might be helpful:

Hours	Minutes	Month	Day of Month	Day of Week	Events Occur
0	0	*	*	*	Daily at 12:00 midnight
1	0	*	1	*	The first of every month at 1:00 a.m.
1	0	*	*	1-5	Monday through Friday at 1:00 a.m.
12	0	12	25	*	December 25 at 12:00 noon.

MODIFY A SPECIAL EVENT

The **Select** command on the Special Events screen is used to select an existing event for the purpose of making changes to definition

CFC Administrator

Fri Apr 1 16:10 pm

(1)

Special Events Menu

New Years Eve/Day
Memorial Day
Independence Day
Christmas Eve/Day
Thanksgiving Day
Organizational Retreat

SelectAddDeleteViewPrint

*** Special Events Time Parameters***

Event Name: Independence Day

Begin:End:
Hour(0-23):11000
Minutes(0-59):059
Month of Year(1-12):0707
Day of Month(1-31):0404
Day of Week(0-6):**

ModifyHard Forward GroupsCall Routing GroupsQuit

(2)

Figure 3-51 Modify A Special Event

Procedure

Action	Result
On the Special Events screen, type s to choose the Select command. (1)	The cursor is positioned on the first listed event.
Use the Up and Down Arrow keys to position the cursor on the desired event and press ENTER .	The Special Events Time Parameters screen is displayed. (2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Special Events Time Parameters screen, type q to select the Quit command.	The Special Events screen is redisplayed.

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MODIFY A SPECIAL EVENT’S TIME PARAMETERS

The **Select** command on the Special Events screen is used to select an existing event for the purpose of making changes to a definition

*** Special Events Time Parameters***

Event Name: Independence Day

Begin:

End:

Hour

(0-23):

1

1000

Minutes

(0-59):

0

59

Month of Year

(1-12):

07

07

Day of Month

(1-31):

04

04

Day of Week

(0-6):

*

*

Modify

Hard Forward Groups

Call Routing Groups

(1)

(2)

*** Special Events Time Parameters***

Event Name: Independence Day

Begin:

End:

Hour

(0-23):

1

1000

Minutes

(0-59):

0

59

Month of Year

(1-12):

07

07

Day of Month

(1-31):

04

04

Day of Week

(0-6):

*

*

<ESC> to return to command line

Figure 3-52 Modify A Special Event’s Time Parameters

Procedure

Action	Result
On the Special Events Time Parameters Screen, type m to select the Modify command. (1)	The Begin Hour field is highlighted. (2)
Use the Backspace key to erase existing field entries and the Arrow keys to move among fields. Make the necessary changes to the Begin and End time periods, pressing ENTER after each entry. (Refer to Add a Special Event Section for instructions in completing the time period definition.)	After the last field, the cursor is returned to the command line.

MODIFY A SPECIAL EVENT'S HARD FORWARD GROUPS

The **Hard Forward Groups** command on the Special Events Time Parameters screen is used add, delete, and modify the Hard Forward Groups affected by the event.

(1)

*** Special Events Time Parameters***

Event Name: Independence Day

	Begin:	End:
Hour (0-23):	1	1000
Minutes (0-59):	0	59
Month of Year (1-12):	07	07
Day of Month (1-31):	04	04
Day of Week (0-6):	*	*

Modify Hard Forward Groups Call Routing Groups Qu

(2)

*** Hard Forward Special Event***

Event Name: Christmas Day

Group Index:	Destination Extension:
2	3200
1	3210
3	3220

Add Delete Modify Quit

Figure 3-53 Modify Special Event Hard Forward Groups

Procedure

Action	Result
On the Special Events Time Parameters screen, type h to select the Hard Forward Groups command. (1)	The Hard Forward Special Event screen is displayed for the named event. (2)
<u>To Add Hard Forward Groups:</u> Type a to select the Add command, then enter Hard Forward Group Index and a Destination Extension, pressing ENTER after each. Continue until all Group Indexes and Destination Extensions have been added, then press ESC to return to the command line.	The new indexes and extensions are added to the end of the list, and the cursor returns to the Group Index field. After all additions have been made, pressing ESC returns control to the command line.
<u>To Modify Hard Forward Groups:</u> Type m to select the Modify command. Use the Arrow keys to position the cursor on the index to be modified and press ENTER . As the Hard Forward Group Indexes and Destination Extensions are moved up to the prompts, use the Backspace key to erase the previous values, make the new entry, and press ENTER . Continue until all values have been modified, then press ESC .	The cursor is returned to the command line.
<u>To Delete Hard Forward Groups:</u> Type d to select the Delete command. Use the Arrow keys to select a group to delete and press ENTER .	The confirmation “ Do you want to delete this? (Y/N) ” is displayed below.
Type Y and press ENTER to delete the selected group, or N and press ENTER to cancel.	The selected group is removed from the list, and the cursor is returned to the command line.
Type q to select the Quit command.	The confirmation “ Do you want to save changes? (Y/N) ” is displayed.
Enter Y and press ENTER to save all changes or N and press ENTER to cancel them.	The Special Events Time Parameters screen is displayed.

General Information

The Hard Forward groups referred to in this option correspond directly to those defined through the Hard Forward Control option on the Main Menu. Therefore, a group specified by a Special Event must first be defined through the Main Menu., and the maximum number of groups addressed by Special Events cannot exceed the number of groups defined through the Main Menu. Duplicate group entries are not allowed.

MODIFY A SPECIAL EVENT’S CALL ROUTING GROUPS

The **Call Routing Groups** command on the Special Events Time Parameters screen is used add, delete, and modify the Call Routing Groups affected by the event.

*** Special Events Time Parameters***

Event Name: Independence Day

Begin:

End:

Hour

(0-23):

1

1000

Minutes

(0-59):

0

59

Month of Year

(1-12):

07

07

Day of Month

(1-31):

04

04

Day of Week

(0-6):

*

*

Modify

Hard Forward Groups

Call Routing Groups

Quit

(1)

*** Call Routing Special Event***

Event Name: Christmas Day

Group Index:

Destination Index:

2

5

1

1

3

1

Add

Delete

Modify

Quit

(2)

Figure 3-54 Modify Special Event Call Routing Groups

Procedure

Action	Result
On the Special Events Time Parameters screen, type c to select the Call Routing Groups command. (1)	The Call Routing Special Event screen is displayed for the named event. (2)
<u>To Add Call Routing Groups:</u> Type a to select the Add command, then enter a Call Routing Group Index and a Call Routing Destination Index, pressing ENTER after each. Continue until all Call Routing Group and Destination Indexes have been added, then press ESC to return to the command line.	The new indexes are added to the end of the list, and the cursor returns to the Group Index field. After all additions have been made, pressing ESC returns control to the command line.
<u>To Modify Call Routing Groups:</u> Type m to select the Modify command. Use the Arrow keys to position the cursor on the index to be modified and press ENTER . As the Call Routing Group and Destination Indexes are moved up to the prompts, use the Backspace key to erase the previous values, make the new entry, and press ENTER . Continue until all values have been modified, then press ESC .	The cursor is returned to the command line.
<u>To Delete Call Routing Groups:</u> Type d to select the Delete command. Use the Arrow keys to select a group to delete and press ENTER .	The confirmation “ Do you want to delete this? (Y/N) ” is displayed below.
Type Y and press ENTER to delete the selected group, or N and press ENTER to cancel.	The selected group is removed from the list, and the cursor is returned to the command line.
Type q to select the Quit command.	The confirmation “ Do you want to save changes? (Y/N) ” is displayed.
Enter Y and press ENTER to save all changes or N and press ENTER to cancel them.	The Special Events Time Parameters screen is displayed.

General Information

The Call Routing groups referred to in this option correspond directly to those defined through the Call Routing Control option on the Main Menu. Therefore, a group specified by a Special Event must first be defined through the Main Menu., and the maximum number of groups addressed by Special Events cannot exceed the number of groups defined through the Main Menu. Duplicate group entries are not allowed.

DELETE A SPECIAL EVENT

The **Delete** command on the Special Events screen is used to remove an event.

CFC AdministratorFri Apr 1 16:10 pm

Special Events Menu

New Years Eve/Day
Memorial Day
Independence Day
Christmas Eve/Day
Thanksgiving Day
Organizational Retreat

SelectAddDeleteViewPrint

*** Special Events Time Parameters***

Event Name: Independence Day

Begin:End:
Hour(0-23):11000
Minutes(0-59):059
Month of Year(1-12):0707
Day of Month(1-31):0404
Day of Week(0-6):**

Do you want to delete this? (Y/N)

Figure 3-55 Delete A Special Event

Procedure

Action	Result
On the Special Events screen, enter d to select the Delete command.(1)	A cursor is positioned on the first listed event.
Use the Arrow keys to move the cursor to the desired event. If more than one screenful of events exist, press the Down Arrow to scroll the list upwards and the Up Arrow to scroll the list downwards. Press ENTER to select the event.	The field data of the selected event is displayed, and the confirmation “ Do you want to delete this? (Y/N) ” is displayed. (2)
Type Y and press ENTER to delete the event, or type N and press ENTER to cancel the deletion.	The cursor is positioned on the original command line.

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VIEW SPECIAL EVENTS

The **View** command on the Special Events screen is used to display the special events, including their time periods, group indexes, and forwarding indexes.

CFC Administrator		Fri Apr 1 16:10 pm		(1)	(2)																																										
Special Events Menu New Years Eve/Day Memorial Day Independence Day Christmas Eve/Day Thanksgiving Day Organizational R		Top of File																																													
		*** Special Events Menu *** Event Name: New Years Eve/Day <table border="1"> <thead> <tr> <th></th> <th>Hour</th> <th>Minutes</th> <th>Month</th> <th>Day of Month</th> <th>Day of Week</th> </tr> </thead> <tbody> <tr> <td>Start:</td> <td>17</td> <td>0</td> <td>12</td> <td>30</td> <td>*</td> </tr> <tr> <td>End:</td> <td>8</td> <td>0</td> <td>1</td> <td>2</td> <td>*</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Hard Forward Group Data:</th> <th>Group Index</th> <th>Destination Extension</th> </tr> </thead> <tbody> <tr> <td></td> <td>2</td> <td>3200</td> </tr> <tr> <td></td> <td>1</td> <td>3210</td> </tr> <tr> <td></td> <td>3</td> <td>3220</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Call Routing Group Data:</th> <th>Group Index</th> <th>Destination Index</th> </tr> </thead> <tbody> <tr> <td></td> <td>2</td> <td>5</td> </tr> <tr> <td></td> <td>1</td> <td>1</td> </tr> <tr> <td></td> <td>3</td> <td>1</td> </tr> </tbody> </table>					Hour	Minutes	Month	Day of Month	Day of Week	Start:	17	0	12	30	*	End:	8	0	1	2	*	Hard Forward Group Data:	Group Index	Destination Extension		2	3200		1	3210		3	3220	Call Routing Group Data:	Group Index	Destination Index		2	5		1	1		3	1
	Hour	Minutes	Month	Day of Month	Day of Week																																										
Start:	17	0	12	30	*																																										
End:	8	0	1	2	*																																										
Hard Forward Group Data:	Group Index	Destination Extension																																													
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	1	3210																																													
	3	3220																																													
Call Routing Group Data:	Group Index	Destination Index																																													
	2	5																																													
	1	1																																													
	3	1																																													
Select Add Delete V		More																																													
		DownPage UpPage Search Top Bottom Print Quit																																													

Figure 3-56 View Special Events

Procedure

Action	Result
Type v to select the View command.(1)	The Special Events data is displayed. (2)
Type d to select the DownPage command.	The next page of data is displayed.
Type u to select the UpPage command.	The previous page of data is displayed.
Type t to select the Top command.	The first page of data is displayed.
Type b to select the Bottom command.	The last page of data is displayed
Type s to select the Search command. At the prompt type the desired pattern and press ENTER .	All of the occurrences of the pattern on that page are highlighted.
Type p to select the Print command. At the prompt, type f to indicate the whole file or s to indicate just the screen and press ENTER .	There is a pause while the material is sent to the printer.
To return to the Call Routing Destinations screen, type q to select the Quit command.	The Call Routing Destinations screen is displayed, and the cursor is positioned on the command line.

PRINT SPECIAL EVENTS

The **Print** command on the Special Events screen is used to print a hardcopy of selected special events.

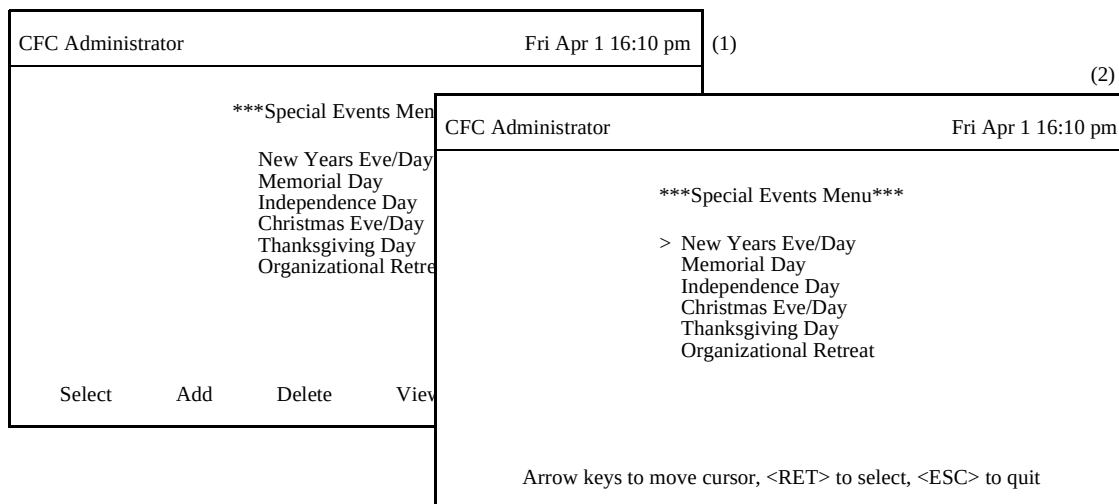


Figure 3-57 Print Special Events

Procedure

Action	Result
Enter p to select the Print command and press ENTER . (1)	The ">" cursor is positioned to the left of the first entry in the list. (2)
Use the Arrow keys to move the ">" cursor next to an event, then press ENTER to select the event.	Each time an event is selected it is highlighted.
When all events to be printed are selected, press ESC .	The selected events are sent to the printer, and the cursor is positioned on the command line.

VALIDATE AND INSTALL

OVERVIEW

The **Validate and Install** option on the Administrator Main Menu is used to check any changes made to any of the CFC databases for compatibility with data in all of the other databases and to install the changes into the actual databases with which CFC works.

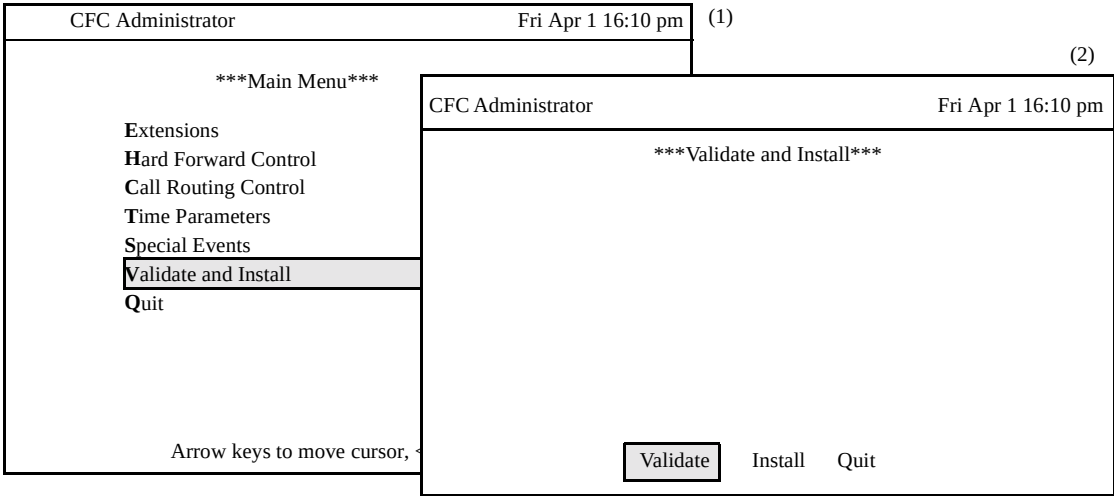


Figure 3-58 Validate and Install

Procedure

Action	Result
On the Main Menu, enter v to select the Validate and Install option. (1)	The Validate and Install screen is displayed.(2)
Refer to the following pages for information and instructions in the use of each command.	
To exit the Validate and Install option, enter q to select the Quit command.	The Main Menu is redisplayed.

When to Use

Since the CRC and HFC programs depend upon the accurate correspondence of the information assigned through different Main Menu options, this last menu option is provided to assure this accuracy. After a series of changes have been made through the other Main Menu options, use this option to check for the necessary compatibility and to install all the changes for use by CRC and HFC.

VALIDATE DATABASE

Anytime a change is made to the information contained in one or more options, the **Validate** command should be used to check compatibility of the new information with the existing information in other options.

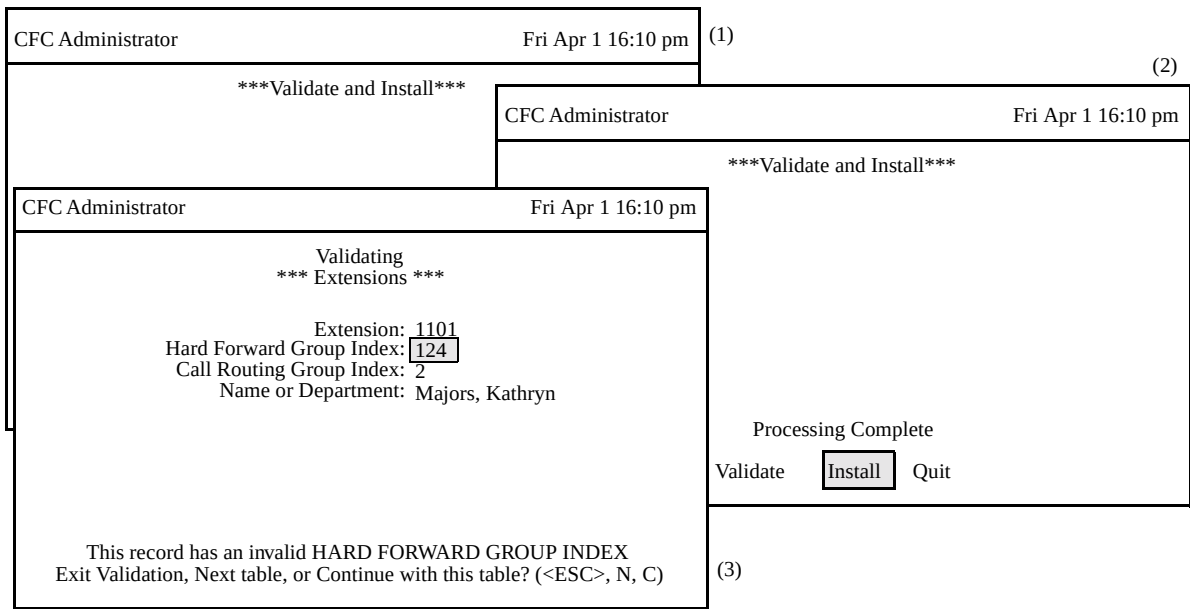


Figure 3-59 Validate Database

Procedure

Action	Result
Type v to select the Validate option. (1)	The text “ Validating ” is displayed at the top of the screen. If the database is valid, the message “ No errors found during validation, press any key to continue ” is displayed.
Press any key.	The message “ Processing Database ” is displayed briefly, followed by “ Processing Complete ”. The Validate and Install screen is displayed with the Install command highlighted. (2)
Validation Errors:	If an error is detected during validation, the invalid record is displayed, and the invalid field is highlighted. (3)
To Skip to the Next Table, type N .	CFC skips the current table and continues the validation process with the remaining database tables.
To Continue with this Table, type C .	CFC skips over the displayed entry and continues validating the current database table.
To Exit Validation, press ESC .	The message “ Errors found during validation ” is displayed, and the Validate and Install screen is displayed with the Validate command highlighted

VALIDATE DATABASE (Cont)

Treatment of Discrepancies

As the validation is performed, any discrepancies are displayed one by one on the data entry screens on which they were originally entered. In the figure above, the Hard Forward Group Index entered originally for Extension 1101 is incorrect because there is no Hard Forward Group assigned to that Index. It is therefore necessary to either return to Extensions screen and change the Hard Forward Group, or to create a Hard Forward Group that is indexed by the value entered to this field.

Possible Actions

Notice that the command line makes it possible to take any one of the following three actions:

- **_ <Esc>–** Exit the validation process and return to the Main Menu. From there it is possible to select the option through which to correct the invalid value found on validation.
- **_ N –** Move to the next table, disregarding this invalid entry and skipping over the remainder of this database.
- **_ C –** Disregard this invalid entry and continue with this database validation.

Note that every time an invalid entry is displayed, this same series of actions is available. It is possible, then, to skip through a database, making note of all the invalid entries during one validation process, before exiting to the corresponding data entry screens to make all of the necessary corrections.

INSTALL DATABASE

Once the new information is validated, it can be installed so that CFC can use it. Installation of the database can be performed now or it can be scheduled.

Figure 3-60 illustrates the steps to install the database. It shows three sequential screenshots of the CFC Administrator interface. The first screenshot (1) shows the 'CFC Administrator' window with the title 'CFC Administrator' and the date/time 'Fri Apr 1 16:10 pm'. The main area displays '***Validate and Install***'. The second screenshot (2) shows a dialog box titled 'Choose when the Database will be installed.' with three buttons: 'Delay', 'Now', and 'Quit'. The third screenshot (3) shows the 'CFC Administrator' window with the title 'CFC Administrator' and the date/time 'Fri Apr 1 16:10 pm'. The main area displays '***Validate and Install***' and four input fields: 'Hour of Day (0-23):', 'Minutes (0-59):', 'Month of Year (1-12):', and 'Day of Month (1-31):'. Below these fields are three buttons: 'Validate', 'Install', and 'Quit'. At the bottom of the window, it says '<ESC> to return to command line'.

Figure 3-60 Install Database

Procedure

Action	Result
Type i to select the Install command. (1)	A message asks when the database is to be installed. (2)
To Install the Database Now Type N to install Now Enter Y and press ENTER to confirm that the installation is to be done now or N and press ENTER to cancel the installation.	The message “ Confirm – – Install Database Now. (Y/N) ” is displayed. The Validate and Install screen is redisplayed with a message indicating whether or not the database was installed.
To Install the Database Later Type D to select the Delay command Type an entry to every field according to the instructions. Press ENTER after each entry. Enter Y and press ENTER to confirm that the installation is to be done at the stated time and date or N and press ENTER to cancel the installation.	The Validate and Install screen is displayed with data entry fields for designating the time at which the installation is to be performed. (3) After entries have been made, a message states the time and date and asks for confirmation. The Validate and Install screen is redisplayed, and the cursor is positioned on the command line.

INSTALL DATABASE (CONT)

Validated Data

The data must be validated before it can be installed. If any invalid entries have not been corrected, the message “The data has not been validated.” is displayed and the installation is stopped.

Schedule Instructions

In scheduling the installation, it is important to note that the scheduled installation takes place at one particular time. This time is defined through the use of four fields that are displayed when the **Delay** command is selected. These four fields combine to form a pattern that is interpreted by CFC. If any field is left blank, the entire record is rejected. The fields are listed below and each is followed in parentheses by the range within which a valid response of a single number must lie: (Note the sample entry that is interpreted by CFC as April 25 at 5:00 a.m.)

<u>Field</u>	<u>Sample Entry</u>
Hour of Day (0-23) (Midnight=0)	5
Minutes (0-59)	0
Month of Year (1-12)	4
Day of Month (1-31)	25