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Meridian 1

# Set-Based Administration

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# Introduction to Set-Based Administration

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Previously, Set-Based Administration was a feature available on Meridian 1 Option 11 systems that simplified system installation and administration by enabling a set to be used to perform several administrative and maintenance procedures. With X11 release 21 and later software versions and the Set-Based Administration Enhancements feature (ADMINSET, package 256), Set-Based Administration is now available for options 21E through 81C. In addition, enhancements are provided to the existing capabilities on the Option 11.

With X11 release 21 and later, the following system administration capabilities are available through main menu options on a telephone set:

1 SET FEATURES	Change set feature data.
2 SET NAME DISPLAY	Add or change Calling Party Name Display (CPND) data.
3 TIME AND DATA	Change system time and date.
4 TOLL RESTRICTIONS	Change toll restrictions (Class of Service).
5 EXTENSION - TN	Determine DN-TN correspondence (administrator only).
6 TRUNK INSTALLATION	Add or remove trunks or change trunk route access codes (Option 11E only).
7 INSTALLATION OPTIONS	Specify default sets and a numbering plan (Option 11E only).

These functions are available to users depending on the access level and system type. Three access levels are available:

- administrator access to menu items 1-5
- installer access to menu items 1-4
- user access to menu item 2

Menu items 6 and 7, available prior to release 21 on Option 11 systems, are available only on Option 11E systems in release 21:

## Set-Based Administration overview

Administrator and installer access to Set-Based Administration (SBA) menus is accomplished by dialing the SBA Administrator or Installer Flexible Feature Code (FFC) followed by an administrator or installer password, respectively. Administrator and installer passwords are defined on a system basis using the Limited Access Passwords (LAPW) feature. User access is gained by dialing the SBA User FFC followed (optionally) by the station control password for the set being logged into.

Once logged into SBA, the user is presented with a tree structure of menus, with the first available menu option shown on the set's display. To scroll through the options, the "\*" key is used, and to choose an option, or move backwards in the tree, the "#" key is used. The "\*" and "#" keys are always reserved for these functions.

Audible tones are also available for users who are logged into SBA sets, with or without displays. Four seconds of overflow tone indicates the user made an error, while four seconds of special dial tone indicates a data change was successfully completed.

## Access levels

Three levels of set-based data administration access are available: administrator, installer, and user. Refer to “Performing Set-Based Administration” on page 39 for more information.

### Administrator access

Administrator access gives a system administrator the ability to perform any or all of the following tasks through an administration set.

- Change the data associated with specific set-related features:
  - Hunt and External Hunt numbers
  - Call Forward No Answer (CFNA) and External CFNA numbers
  - Call Forward (CFW) number
  - Busy Forward Status (BFS)
  - Voice Call
  - Dial Intercom Group (DIG)
  - Group Call
  - Ringing Number Pickup Group
  - Speed Call/System Speed Call
  - Hot Line
- Add/change the CPND names associated with existing DNs
- Change system time and date
- Change toll restrictions of any set
- Determine DN-TN correspondence
- Add or remove a trunk or change a trunk route access code (Option 11E only)
- Select certain system installation options (Option 11E only)

## Installer access

Installer access gives an installer the ability to perform any or all of the following tasks using the telephone that is being modified. Changes to feature data pertain only to the telephone from which the login was made.

- Change the data associated with set-related features:
  - Hunt and External Hunt numbers
  - CFNA and External CFNA numbers
  - CFW number
  - Busy Forward Status (BFS)
  - Voice Call
  - Dial Intercom Group (DIG)
  - Group Call
  - Ringing Number Pickup Group
  - Speed Call/System Speed Call
  - Hot Line
- Add/change the CPND names associated with DNs on the set
- Change system time and date
- Change toll restrictions of the set

## User access

User access gives a set operator the ability to perform the following:

- Add/change their own CPND name when logged in through their own telephone set

## Applicable Systems

Main menu options 1-5 are available for the following systems:

Meridian 1 RT
Meridian 1 XT
Meridian 1 NT
Option STE
Option 11E
Option 21E
Option 51
Option 51C
Option 61
Option 61C
Option 71
Option 81
Option 81C

Option 11E also has main menu options 6 and 7.

## Supported Telephones

Operation of Set-Based Administration is recommended only from Meridian digital telephones with the display option equipped. Although other set types are supported for administration of set feature data, the usefulness of this function is greatly reduced due to the lack of visual prompting on the display. [Table 1](#) summarizes the telephones which are supported to perform Set-Based Administration.

**Table 1**  
**Supported telephones (Part 1 of 2)**

Telephone Set Type	Administrator	Installer	User <sup>2</sup>
500	NS	NS	NS
2500	NS	S <sup>3</sup>	NS <sup>4</sup>
SL-1 <sup>1</sup>	NS	NS	NS
M2006	NS	S <sup>3</sup>	S <sup>4</sup>
M2008	NS	S <sup>3</sup>	S <sup>4</sup>
M2008 with Display	S	S	S
M2009	NS	S <sup>3</sup>	S <sup>4</sup>
M2016	NS	S <sup>3</sup>	S <sup>4</sup>
M2016 with Display	S	S	S
M2018	NS	S <sup>3</sup>	S <sup>4</sup>
M2112	NS	S <sup>3</sup>	S <sup>4</sup>
M2216	NS	S <sup>3</sup>	S <sup>4</sup>
M2216 with Display	S	S	S
M2312	NS	S <sup>3</sup>	S <sup>4</sup>
M2317 <sup>5</sup>	NS	S <sup>3</sup>	S <sup>4</sup>
M2616	NS	S <sup>3</sup>	S <sup>4</sup>
M2616 with Display	S	S	S

**Table 1**  
**Supported telephones (Part 2 of 2)**

Telephone Set Type	Administrator	Installer	User <sup>2</sup>
M3000	NS	S <sup>3</sup>	S <sup>4</sup>
M5317	NS	NS	NS

— S = supported.  
 — NS = not supported.

**Note 1:** SL-1 sets are not supported for installer logins, but data changes to SL-1 sets can be performed from an administration set.

**Note 2:** User access supports only CPND changes.

**Note 3:** Not supported for CPND or Time and Date functions. Supported for Change Set Features data function.

**Note 4:** User CPND change is not supported from these sets since they do not have displays.

**Note 5:** The M2317 display is not supported by Set-Based Administration.

## Supported languages

This feature supports all languages currently supported by the Option 11 Set-Based Installation feature. Currently the following languages are supported:

- English
- German
- Spanish
- Swedish
- Quebecois French
- Dutch
- Italian
- Danish
- French
- Portuguese
- Norwegian

## Login limits

Maximum concurrent login limits are divided into two categories:

- a combined administrator and installer login limit
- a user login limit.

The login limits are given in [Table 2](#). These limits specify the maximum number of concurrent logins of each type. Note that the number of concurrent logins is also limited by the number of call registers on the system. Each login uses one call register. If there are no free call registers, no additional logins are possible. The maximum login limits are configurable in LD 17.

**Table 2**  
**Login Limits**

Login type	Option 11E		Options 21E–71 STE/NT/RT/XT		Option 51C–81C	
	Default	Max	Default	Max	Default	Max
Administrator/installer	1	2	2	64	2	64
User	10	20	50	250	100	500

**Note:** Set-Based Administration login limits are in addition to the multi-user login limit for TTYs.

## Feature interactions

Set-Based Administration has interactions with the following features.

### Multi-User Login

The Multi-User Login feature allows up to three users to log in to a Meridian 1 terminal (TTY) and load and execute overlays simultaneously. It also uses conflict resolution software to prevent more than one logged in user simultaneously attempting to change the same data.

Set-Based Administration provides additional multi-user login sessions, restricted to Set-Based Administration logins only, over and above the Multi-User Login feature. This allows Set-Based Administration to use the conflict resolution software.

### History File

Set-Based Administration logins and logouts can be recorded in the system History File if configured to do so in LD 17.

An audit trail of data changes made through Set-Based Administration is recorded in the system History File. The record format is as follows:

```
ADMINSET {login name} [TN of admin set] [time and date stamp]
[CHG:/NEW:] { who's being changed} [item changed] { current value->}
[new value]
```

Note that items between [ ] always appear, while items between { } appear depending on the function being performed or configuration options.

Examples:

An administrator on set TN 12 0 4 12 changes TN 12 0 3 3's Voice Call key 3 from DN 8626 to 8723:

```
ADMINSET ADMIN5 012 0 04 12 12:42 22/02/1993
CHG: TN 01200303 KEY 3 VCC 8626 ->8723
```

An administrator on set TN 12 0 04 14 changes the system time from 12:53 to 12:50.

```
ADMINSET SBA01 012 0 04 14 12:50 03/05/1993
```

```
CHG: TIME 12:53:16 -> 12:50:00
```

An installer on an Option 11E set TN 2 15 adds the new CPND name “Darth Vader.”

```
ADMINSET INST04 02 15 12:48 28/11/1993
```

```
NEW: DN 8723 NAME Darth Vader
```

## Limited Access Passwords

The Set-Based Administration access passwords, which are added to LAPW, are subject to the same conditions as the overlay access passwords with the following exceptions:

- Set-Based Administration passwords must be numeric.
- There is no maximum number of login attempts for administration sets or installer sets. Lockout procedures are not used.
- TTY users are not permitted to log in using a Set-Based Administration password although an overlay password can be the same as an SBA password.
- Administration sets and installer sets are not permitted to log in using overlay access passwords (although an overlay password can be the same as an SBA password).

The total number of LAPW passwords allowed, including overlay access and Set-Based Administration access, is 100.

The permissions and restrictions associated with a Set-Based Administration password used to log in to an administration set or installer set remain unchanged throughout the login session. Thus, if a TTY user changes a Set-Based Administration password (in LD 17) while an administration set or installer set is logged in with the same password, the permissions and restrictions associated with the session are not affected. The changes become effective the next time a user logs in using that password.

## **Option 11 set-based installation**

The Option 11 set-based installation functions are not changed by Set-Based Administration enhancements. However, the menu structure is altered as described in “Trunk Installation menu” on page 78 and “Installation Options menu” on page 79.

## **Model sets for Option 11E**

The User Level Access Allowed (ULAA) Class of Service can be assigned to a model on an Option 11E system. After set installation, the craftsperson may need to assign an SCPW in LD 10 or 11 to a set.

## **Maintenance sets**

Telephone sets with Maintenance Allowed (MTA) Class of Service provide an alternative means of access to system maintenance and diagnostic procedures. Through one of these sets a user is able to log in to the system using one of the maintenance passwords and execute maintenance overlays. The operation of maintenance sets is not affected by the Set-Based Administration feature; however, a maintenance set becomes an administration set if a user logs in using an administrator access Set-Based Administration password.

## **Set relocation**

Prior to Set-Based Administration, the set relocation password was used for logging in through the administration set. This feature decouples the set relocation password from the Set-Based Administration password, which is now configured under LAPW in LD 17.

The operation of set relocation is not affected by Set-Based Administration Enhancements.

Sets that have been relocated out cannot be administered. Since they no longer have physical TNs, they cannot be selected from an administration set. Sets that have been relocated out are treated exactly the same as sets that do not exist.

## **Data dump (LD 43)**

Login through an administration set or user set is not permitted while a data dump is in progress. Trying to log in during a data dump results in overflow tone and the message “LOGIN UNAVAILABLE PLEASE TRY AGAIN” being displayed.

If an attempt is made to load a data dump while there are active Set-Based Administration logins, the logins are treated as TTY logins and the situation is handled by the Multi-User Login feature.

## **Busy Forward Status**

When a BFS key is changed through Set-Based Administration, the lamp state of the key is updated accordingly.

## **Office Data Administration**

Changes to data blocks made using Set-Based Administration cause the Office Data Administration System (ODAS) time stamps to be updated.

## **Remote Call Forward**

A set can be Remote Call Forwarded while someone is actively logged into it with a Set-Based Administration login.

## **Phantom TNs**

Set-Based Administration supports making data changes to Phantom TNs, with the exception of changing Hunt DNs, since Phantom TNs cannot have Hunt DNs.

## **User Selectable Call Redirection**

If a user is performing User Selectable Call Redirection, data changes (to the user’s set) attempted with Set-Based Administration are blocked since the user’s set is not idle.

## Network Time Synchronization

Changing the time and date on a master or slave node interacts with the Network Time Synchronization feature in the same manner as the attendant time and date functions. The master keeps track of the correct time; when a slave sends a request for time synchronization the master responds with a signal of the correct time. The slave requests a time stamp during midnight routines or when it tries to change the time or date.

---

# Configuring a system for Set-Based Administration

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This section describes the configuration procedures that must be performed on a system before Set-Based Administration can be used.

To configure the Set-Based Administration feature, with administrator and installer access, complete the following steps:

- 1 Increase the output buffers in LD 17 (500B prompt) as needed. These are used for set displays.
- 2 Define Set-Based Administration passwords in LD 17.
- 3 Define Set-Based Administration FFCs in LD 57.
- 4 Give Maintenance Allowed (MTA) Class of Service to an administration set or sets.
- 5 Optionally, change the value for the maximum number of concurrent logins in LD 17.
- 6 Optionally, define the types of logins to print in the History File in LD 17.

To configure user-level access, complete the following additional steps:

- 1 Optionally, enable use of station control passwords in LD 15 and define whether users need to enter the SCPW after dialing the FFC.
- 2 Assign User Level Access Allowed (ULAA) Class of Service to user sets in LD 10 and 11.

## Increasing output buffers

Depending on system traffic, the 500 buffers need to be increased if you start losing characters from the display. The following table shows an example of the prompts and responses to increase the number of output buffers.

### LD 17–Increase buffers

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	PARM	Change system parameters
...	...	
500B	16-5000	Output buffers for single line and digital telephones, and trunks, range depends on system type

## Configuring passwords

The following table shows the prompts and responses for configuration of a Set-Based Administration administrator or installer password.

### LD 17–Define Set-Based Administration passwords

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	PWD	Password data
...	...	
PWD	YES	Change password options
PWD2	x...x	Password 2
...		
LAPW	nn	Limited Access to Overlays Password number
PWTP	SBA	Set-Based Administration password
PWnn	x...x	Password (must be numeric)

**LD 17**–Define Set-Based Administration passwords

LOGIN_NAME	aaa	Login name for this password, if LAPW login names enabled
LEVL	(INST) ADMN	Installer or administrator access level
CUST	xxx ALL	Customer to be accessible by way of PWnn
TEN	xxx ALL	Tenant to be accessible by way of PWnn

**LD 17**–Define Set-Based Administration passwords

OPT	aaaa	Specify permissions and restrictions associated with Set-Based Administration password PWnn. At least one permission must be given. The default is no permissions.
	(FEAD) FEAA	(Deny) allow Change Set Features (administrator and installer access)
	(NAMD) NAMA	(Deny) allow Change CPND Names (administrator and installer access)
	(TADD) TADA	(Deny) allow Set Time and Date (administrator and installer access)
	(TOLD) TOLA	(Deny) allow Change Toll Restrictions (administrator and installer access)
	(DTD) DTA	(Deny) allow DN-TN Correspondence (administrator access only)
	(TRKD) TRKA	(Deny) allow Change Trunks (option 11 administrator access only)
	(INSD) INSA	(Deny) allow Installation Options (option 11 administrator access only)

## Defining FFCs

The following table shows an example of the configuration of SBA FFCs.

### LD 57–Define Set-Based Administration FFCs

Prompt	Response	Comment
REQ	NEW	Create data request
TYPE	FFC	Type of data block
CUST	xx	Customer number associated with this function
...	...	
CODE	ADMN	SBA administrator access
ADMN	*41	Enter Administrator FFC
CODE	INST	SBA installer access
INST	*44	Enter Installer FFC
CODE	USER	SBA user access
USER	*45	Enter User FFC
CODE	<CR>	

## Changing maximum logins

The following table shows an example of the configuration of the maximum concurrent logins allowed. See Table 2 on page 9 for actual values allowed for the different machines.

### LD 17–Maximum logins

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	PARM	Change system parameters
...	...	
SBA_ADM_INS	5	5 administrators/installers at once
SBA_USER	10	10 users at once

## Assigning MTA Class of Service

Each administration set must have Maintenance Allowed (MTA) Class of Service, to be able to use the Set-Based Administration feature. An administrator can log in on a set with MTA Class of Service by entering an administrator FFC and password.

The following table shows the prompts and responses in LD 11 for configuring MTA Class of Service on an M2616 set.

### LD 11–Assign MTA Class of Service

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	2616	Meridian digital set
TN	l s c u	Terminal Number
...	...	
CLS	MTA	Maintenance Allowed Class of Service

## Configuring a History File

The following table shows an example of the configuration of the types of access to record in the History File.

### LD 17–History File

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	ADAN	Action Device And Number
ADAN	CHG HST	Change the History File
SIZE	<CR>	Size of History File buffer
USER	ADM, INS, USR XADM, XINS, XUSR	Set-Based Administration access levels to be stored in the History File: administrator, installer, user. Use X to keep the SBA access level from printing in the History File.  Accepted if ADMINSET package 256 is equipped.

## Enabling use of SCPW for user access

The following table shows an example of the configuration of station control password length (SCPL). To enable the new SCPL value, a data dump and sysload must be performed.

### LD 15–Enable use of station control passwords

Prompt	Response	Comment
REQ:	CHG	Change data request
TYPE:	FFC	Flexible Feature Code
...	...	
SCPL	4	Station control password length (SCPL)
SBUP	YES	Users must dial an FFC followed by a station control password for this set
- PWD2	x...x	Enter Password 2 to confirm SBUP response

## Assigning User Level Access Class of Service

The following table shows an example of the configuration of User Level Access Allowed (ULAA) or User Level Access Denied (ULAD) Class of Service for an M2616 set.

### LD 11–Assign ULAA/ULAD Class of Service

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	2616	Meridian digital set
TN	l s c u	Terminal Number
...		
SCPW	1234	Station control password for this set
CLS	(ULAD) ULAA	User-level access (denied) or allowed for SBA

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# Using Set-Based Administration

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This section describes how to use Set-Based Administration once it has been configured.

## Gaining access

You can gain access to Set-Based Administration as an administrator, installer or user. Access as an administrator allows data to be changed for the customer (and tenant if applicable) on any set, including the administration set. Access as an installer allows data to be changed only for the set on which the installer is logged in. Access as a user allows changes only to the Calling Party Name Display (CPND) data for the user's set.

### Administrator access

To gain administrator access, dial the Administrator Flexible Feature Code (FFC) followed by an administrator password from an administration set. Using the Limited Access Passwords (LAPW) feature, it is possible to configure several administrator passwords (up to the system maximum number of LAPW passwords). Each password can be configured to allow or deny access to any of the system administrator main menu options.

### Installer access

To gain installer access, dial the Installer FFC followed by an installer password from any supported set type. Using the Limited Access Passwords (LAPW) feature, it is possible to configure several installer passwords (up to the system maximum). Each password can be configured to allow or deny access to any of the four installer main menu options.

## User access

To gain user access, dial the User FFC, optionally followed by the station control password for the telephone set. There are a fixed set of permissions that are currently limited to CPND access.

## Set Features Administration

With administrator access from an administration set (MTC Class of Service), or installer access from a user set, it is possible to change data associated with certain set related features. Consequently, LDs 10 and 11 can be avoided for simple changes to set feature data. It is not possible to add or delete set features via Set-Based Administration.

### Administrator access

Access to the Set Features menu from an administrator login allows data to be changed on any set, including the administration set.

After logging in to the administration set, the administrator can select the "1 SET FEATURES" menu item to invoke the change set features function. After selecting the change set features option, the administrator is prompted for the extension number (DN) of the set to be changed. Refer to Appendix B: "Menu hierarchy diagram" on page 101 for a map of all the SBA menus.

The prompt sequence is illustrated in the Set Features menu, shown in Table 8 on page 45.

### Installer access

Access to the Set Features menu from an installer login allows only data belonging to the set from which the login was made to be modified. The function will not, therefore, prompt for the extension number (DN) to be modified.

The prompt sequence is illustrated in the Set Features menu, shown in Table 8 on page 45.

### User access

The Set Features menu cannot be accessed from a user login.

A list of the set features which can be changed under the Set Features Menu is presented in [Table 3](#).

**Table 3**  
**Set-associated features**

Feature	Description
Hunting (HUNT)	Change the Hunt DN for internal calls.
Hunting (EHD)	Change the Hunt DN for external calls.
Call Forward All Calls (CFW)	Change call forward all calls DN.
Flexible Call Forward No Answer (EFD)	Change call forward No Answer DN for external calls.
Flexible Call Forward No Answer (FDN)	Change call forward No Answer DN for internal calls.
Busy Forward Status	Change the TN monitored by a BFS key.
Dial Intercom Group	Change Dial Intercom Group data.
Group Call Key	Change Group Call key.
Ringing Number Pickup	Change Ringing Number Pickup group.
System Speed Call User (SCU)	Change SCU key.
System Speed Call Controller (SSC)	Change SSC key.
Personal Speed Call User	Change SSU key.
Personal Speed Call Controller	Change SSC key.
Voice Call	Change extension called by VCC key.
Hot Line (HOT L)	Change HOT L key.

## CPND Administration

The Calling Party Name Display (CPND) function allows names to be stored for most types of Directory Numbers so that calling parties can be identified on set displays before calls are answered.

The CPND function allows additions or modifications of the CPND name information to be performed from a set. This function is included as an item in the administrator and installer menus. Currently anyone logging in under user access is placed directly into the Name Display function.

### Administrator access

Access to the Name Display function from an administrator login allows changes to the name information for any Directory Number (DN) which can have CPND name data.

After logging in to an administration set, the administrator selects the “2 NAME DISPLAY” menu item to invoke the Name Display function. After selecting the “NAME DISPLAY” option, the administrator is prompted for the extension number (DN) to which the change is to be applied. The administrator is then prompted for the first and last names to apply to that extension.

The CPND Menu prompt sequence is described in Table 27 on page 68.

### Installer access

Access to the Name Display function from an installer login allows changes to the name information for the DN associated with the key used to activate the feature. The function will not, therefore, prompt for the extension number (DN) to be modified.

The CPND Menu prompt sequence is described in Table 27 on page 68.

### User access

A user login provides access only to the Name Display function and allows changes only to the name information for the DN associated with the key used to activate the feature. The function will not, therefore, prompt for the extension number (DN) to be modified.

The CPND Menu prompt sequence is described in Table 27 on page 68.

## Time and Date Administration

This function allows modification of the system TIME and DATE from an administration set or user set listed in Table 1 on page 7, using administrator or installer access. The operation provides the same functionality as that offered by the attendant console but in a more user friendly way. Instead of using dedicated feature keys, as in the attendant console, the set administrator/installer is prompted for the new values by the Set-Based Administration feature.

### Administrator and installer access

After logging in as an administrator or installer, the user selects the “3 TIME AND DATE” menu item. After selecting this option, the user is presented with a submenu containing the functions “1 TIME” and “2 DATE”, which are individually selected.

By selecting either one of these functions, the current system value for the selected option is displayed while the user is prompted for individual fields. The correct entry is then acknowledged by the “OK” response and the special dial tone, followed by the next prompt. If the user chooses NOT to change the value by entering only the “#” the system time and date are left unchanged and the menu is advanced to the next prompt.

The prompt sequences are illustrated in Table 30 on page 74.

### User access

User logins cannot access the Time and Date function.

## Toll Restrictions Administration

This function allows an administrator or installer to change the toll restrictions of a telephone set. This only allows the changing of the toll Class of Service options in LDs 10 and 11. It does not allow any administration of New Flexible Code Restriction (NFCR) data.

## Administrator access

After logging in to an administration set, the administrator selects “4 TOLL RESTRICTIONS”. The administrator is then prompted for the extension (DN) of the set to be changed. Administrator logins may change the toll restrictions (Class of Service) of any set within the same customer and if applicable, the same tenant. After selecting the extension to be modified, the administrator is presented with a list of the possible toll Class of Service settings. The administrator scrolls through the list by pressing “\*” and selects a new Class of Service by pressing “#”.

The prompt sequences are illustrated in Table 31 on page 75.

## Installer access

Installer logins can change only the toll restrictions of the set from which the login was made. Therefore, installers are not prompted for a DN.

The prompt sequences are illustrated in Table 31 on page 75.

## User access

User logins cannot access the Change Toll Restrictions function.

## DN-TN Correspondence

This feature allows an administrator to determine the hardware addresses (TNs) associated with any extension (DN) on the same customer as the administration set.

## Administrator access

The administrator selects “5 EXTENSION - TN” and is prompted to enter the desired DN. Once the DN has been entered, the administrator is presented with a scrollable list of TNs associated with the DN. The status, IDLE or NOT IDLE, of each TN is also displayed (see Glossary). The administrator scrolls through the list by pressing “\*”.

The prompt sequence is illustrated in Table 32 on page 76.

## Installer access

Installer logins cannot access the DN-TN Correspondence function.

## User access

User logins cannot access the DN-TN Correspondence function.

## Trunk Installation (option 11E only)

Trunk Installation includes adding and removing trunks and changing trunk route access codes. For more information, see Option 11 documentation.

## Installation Options (option 11E only)

Installation Options include specifying default sets and a numbering plan. For more information, see Option 11 documentation.

## Operation overview

*Note:* All prompts and messages in this document are given in English. However, in actual set operation they appear in the currently selected language.

### Logging in

To gain access to the Set-Based Administration feature, log into a telephone set as an administrator, an installer, or a user.

- To gain administrator access, dial the Administrator FFC (defined in LD 57) followed by a valid administrator level LAPW password (defined in LD 17) from a DN key on an administration set.
- To gain installer access, dial the Installer FFC (defined in LD 57) followed by a valid installer LAPW password (defined in LD 17) from a DN key on a user set.

*Note:* For administrators and installers, after the FFC is entered, you are prompted for a password, if the set is a Meridian digital set with a display.

- To gain user access, dial the User FFC (defined in LD 57), optionally followed by the station control password, depending on the value of the SBUP prompt in LD 15 (see “Enabling use of SCPW for user access” on page 22).

If password validation is successful, you are presented with the appropriate main menu and can begin data administration. See “Administrator login” on page 40 and “Installer login” on page 41.

If an invalid password is entered, the message “LOGIN INCORRECT” is displayed for 4 seconds and overflow tone is provided. The call is then disconnected.

If the login is blocked by the system because of multi-user conflicts or because the maximum number of users is already logged in, the message “LOGIN UNAVAILABLE PLEASE TRY AGAIN” is displayed for four seconds and overflow tone is provided. The call is then automatically disconnected.

## Getting around

Once logged in, you are presented with a menu of available functions. You navigate through the menus by selecting items and entering data using the digit keys on the telephone keypad. Refer to the following sections for details on the user interface:

[“User interface” on page 31](#) details the user interface standards that apply throughout this document.

Appendix B: “Menu hierarchy diagram” on page 101 details the exact hierarchy of the menu structure.

Refer to “Performing Set-Based Administration” on page 39 for examples of the operation of each menu.

## Logging out

To log out, press the RLS key or go on hook.

## User interface

The Set-Based Administration user interface consists of a hierarchical menu structure that accepts input from the telephone set keypad. These menus are visually presented to the user by displaying prompts on the telephone set display (and by lighting the appropriate key lamps). In addition, some of the visual displays are augmented with audible tones.

The major components of the user interface are keys on the telephone keypad, menus, and data prompts.

M2317, SL-1, and M5317 BRI set displays are not supported.

### Selecting the display language

Selecting display languages for Set-Based Administration is performed by changing the language on the Meridian digital set using the PROGRAM key. The Set-Based Administration prompts and messages appear in the currently selected language, provided it is one of the supported languages listed in the Introduction section. The display language can be changed at any time, even during a login.

*Note:* After system initialization, the set's display language is English until lamp audit runs. The length of time until a lamp audit runs depends on the configuration of the system. If the language is changed while performing Set-Based Administration, the display changes to the new language the next time the screen display is updated.

### Reserved and Unused Keys

The asterisk (\*) and octothorpe (#) keys have predefined functions in navigating the Set-Based Administration menus. Because of this, data that is to be entered by means of the Set-Based Administration feature cannot contain either of these symbols: \*, #.

The asterisk (\*) is used to scroll through the items in a menu or the prompts in a data prompt list.

The octothorpe (#) is used to indicate completion of input or acceptance of the current data in response to a data prompt or to move backward through the menu tree.

Once logged in to Set-Based Administration, the only keys that are recognized are the keypad keys (digits, \*, and #) and the RLS key. All other keys are ignored until the set is logged out, at which point normal operation is restored.

## Audible tones

Certain prompts and messages are accompanied by audible tones. [Table 4](#) shows the relationship between these messages and the corresponding tones. Elsewhere in this document whenever one of the message types listed below is referenced, the reference should be taken to refer to the corresponding audible tone as well (or in place of the display, if the set in question does not have a display). Whenever one of the message types listed is cleared from the display, the corresponding tone is also removed from the set.

**Table 4**  
**Correspondence between visual indications and audible tones**

Screen Display	Audible Tone
"OK"	Special dial tone
Any error message	Overflow tone

## Menus

Menus consist of a list of options that are selected by pressing the corresponding digit (1–9) key on the telephone keypad. When a menu is presented to the user the first selectable item in the menu is displayed. The user can use the \* key to scroll through the list of menu items. To leave the current menu and return to the previous menu in the hierarchy, the user presses the # key.

### Menu items

Menu items can be one of the following:

- Functions: Selecting one of these allows the user to make a data change.
- Submenus: Selecting one of these moves the user to another menu.

- Sections: Menus having more than eight items are divided into sections. The user can move from section to section by pressing the “9 MORE...” key (keypad 9). If the user is in the last section of the menu when this key is pressed, the menu wraps around to the first section again.

**Note:** There is no visible difference between functions and submenus.

Menu items are selected by pressing the digit key corresponding to the digit displayed beside the menu item on the telephone set’s display. The item to be selected need not be currently displayed. However, with a multi-section menu, the item must be in the section currently displayed.

### **Restricted menu items**

Menu items that are restricted by the login password are displayed as “RESTRICTED” and cannot be selected.

Menu items that are not applicable to the set being modified are displayed as “NOT AVAILABLE” and cannot be selected.

## **Selection lists**

A selection list is presented when the system requires the user to select one item from a list of possible choices. Currently this occurs only when the administrator is prompted for an extension and the entered extension is a Multiple Appearance DN. In this situation the administrator is presented with a list of the TNs on which the DN occurs. The administrator must then choose which TN is to be modified.

The \* key is used to scroll through the items in the list. If \* is pressed when the last item in the list is being displayed, wraparound occurs and the first item is displayed.

The user selects an item by pressing # when that item is displayed. The user must scroll until the desired item is displayed before pressing #.

## **Data prompts**

A data prompt is presented when the user selects a function from one of the menus. Data prompts have two forms, single data prompts and data prompt lists.

### **Single data prompts**

Single data prompts are presented when there is only one item that can be changed by the selected function (for example, the function being changed is not key related or there is only one key configured for a key-related function).

To enter data in response to a prompt, the user keys in the data on the keypad and terminates the input with #. To accept default data, which is displayed with the prompt, the user enters # with no data input.

### **Data prompt lists**

Data prompt lists are presented when there are multiple items that can be changed under the selected function. For example, if the user is changing the Voice Call (VCC) key DN, and there are three such keys on the set, and the user is presented with a list containing a prompt for each VCC key.

To advance through the list of prompts, the user presses the \* key. Data prompt lists do not wrap around. Once the last item is reached the user must either change it or press # to exit. The presence of more prompts in the list is indicated by “\* next” on the second line of the display. If “\* next” is not displayed, then this is the last prompt in the list and pressing \* is ignored.

To enter data in response to a prompt in a data prompt list, the user keys in the data and terminates the input with the # key. If the data change is successful, the user is presented with the “OK” response, the special dial tone, and the next prompt in the list. If an error occurs, after the error message the user is reprompted with the same prompt.

The user can exit the data prompt list, skipping any remaining prompts, from any of the prompts by entering # without any data.

### **Restricted keys for data entry**

The menu software use the \* and # keys as the controls for navigating through the menus. Therefore, the \* and # keys cannot be used as input to data prompts. Data prompts only accept digits (0–9) as valid input. If \* and # are entered, they are interpreted as per their normal functions (scroll, accept data, backup one menu level, etc.).

## TN formats

Set-Based Administration displays TNs as one large number. Each digit of a TN is displayed with no spaces between the digits. For options 21E through 81C, the TN format is LLLSCCUU, in which LLL is the loop number, S is the shelf, CC is the card, and UU is the unit. For option 11E machines, TNs are displayed in the form CCUU.

This document uses the option 21E through 81C TN format for examples. However, all examples also apply to the option 11E TN format.

## Aborting an operation

Pressing RLS at any point in the menus or at a data prompt disconnects the call and logs the user out. All data changes prior to the last “OK” message have already been committed and are therefore unaffected by aborting. Only the data change currently being performed is aborted.

### Menus

Exiting a menu is performed by pressing the # key. This places the user at the previous menu in the menu hierarchy.

### Data prompts

The user can abort from a data prompt, singular or list, by pressing the # key without entering any data. This leaves the existing data unchanged.

Once the user has begun to enter data in response to a prompt, there is no way to abort without pressing the RLS key. This results in the set being logged out.

## CPND Help

Help is currently provided only for the change CPND name function. If \* is pressed while entering the CPND name, the user is presented with a list of the characters available on each key of the telephone set’s keypad. The list can be scrolled through using the \* key and exited from by pressing the # key or a digit key. If the # is pressed the user is returned to the same state as before Help was selected. If a digit key is pressed, the user is returned to the same point of data entry as before Help was selected except that the digit key just pressed becomes the currently selected key, as if the user had pressed that digit key without first selecting Help.

## System responses

### Successful data change

The system indicates that it has accepted and successfully completed the required data changes by displaying the prompt “OK” for 4 seconds and the special dial tone. After 4 seconds have elapsed the next appropriate prompt is given. In addition to the display, a successful operation is indicated by providing special dial tone.

The user need not wait for the “OK” message display to terminate before continuing. If the user is familiar enough with the menus to know what comes next, the user can press the next key immediately. This key is received and processed just as if the user had waited for the “OK” display to be replaced by the next prompt.

### Error conditions

An error condition is indicated by displaying an error message and providing overflow tone. Error messages cannot be cleared by pressing keys. Once an error message is displayed, the user must wait 4 seconds for it to be cleared by the system before proceeding. In general, once the error is cleared the user is given the opportunity to reenter the correct data.

**Restricted menu items** If the user attempts to select an option that is restricted by the login password, the message “FUNCTION RESTRICTED” is displayed and overflow tone is given.

**Unavailable menu items** If the user attempts to select a menu item that is currently unavailable, the message “NOT AVAILABLE” is displayed and overflow tone is given. Reasons for the menu item being unavailable could be not having the feature equipped on the set to be changed, not having the feature enabled for the customer, or not having a required package equipped.

**Invalid menu items** If the user attempts to select a menu item that does not exist, the message “INVALID SELECTION” is displayed and overflow tone is given.

**Sets that are not idle** A set cannot be administered using Set-Based Administration if it is not idle. A set is considered to be not idle if any of the following conditions are true:

- the set is active on any key (the key had an established or held call or is in the process of being programmed from the set)
- the set is disabled
- the set is being administered from another set or an overlay

This condition can occur either when the set is selected by the administrator or when the system attempts to commit the data change. In either case the administrator receives overflow tone and the message “DENIED: SET NOT IDLE.” After 4 seconds the administrator is returned to the Set Features menu.

*Note:* CPND is an exception to this. CPND data can be changed even though one or more of the sets associated with the extension being changed are not idle.

## Abnormal operation

Set-Based administration provides the following protection from abnormal operation.

### Data integrity and protection

SBA with the Multi-User Login conflict resolution mechanism determines which overlays can be run simultaneously by more than one logged in user. It also prevents the same TN or DN from being changed by more than one administration overlay user.

If a TN cannot be modified due to a possible conflict, the set performing the administration receives the message “DENIED: SET NOT IDLE” indicating that the targeted set is not idle (see “Glossary” on page 109).

### Initialization

If the system initializes while a user is logged in, the set will be disconnected and the user will be logged out. Initialization during a data change is handled in the same manner as with overlays. Any actions performed since the last “OK” message are lost. Data changes made prior to the last “OK” message are not affected by an initialization.

## Set relocation

If the administrator selects a set to be modified and then the set relocates out before the administrator commits the data change, the change is blocked and the administrator receives the message “DENIED: SET NOT IDLE.”

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## Performing Set-Based Administration

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This section describes how to use menus and respond to prompts on a telephone set to perform Set-Based Administration.

The tables in this section represent examples of performing Set-Based Administration operations. For a complete map of the menus see Appendix B.

## Administrator login

An administrator is presented with the entire main menu upon successfully logging in.

**Table 5**  
**Administration set main menu**

Administration set display	Response	Description
	off hook	Press DN key or lift handset.
Dial tone	*41	Enter Administrator FFC to log in (configured in LD 57).
PASSWORD?	1234#	Enter LAPW password (configured in LD 17).
PRESS DIGIT, * FOR NEXT 1 SET FEATURES	*	Scroll to next menu item.
PRESS DIGIT, * FOR NEXT 2 SET NAME DISPLAY	*	Scroll to next menu item.
PRESS DIGIT, * FOR NEXT 3 TIME AND DATE	*	Scroll to next menu item.
PRESS DIGIT, * FOR NEXT 4 TOLL RESTRICTIONS	*	Scroll to next menu item.
PRESS DIGIT, * FOR NEXT 5 EXTENSION - TN	*	Scroll to next menu item (wraps to top of menu on options 21E through 81C).
PRESS DIGIT, * FOR NEXT 6 TRUNK INSTALLATION	*	Scroll to next menu item (displayed for option 11E only).
PRESS DIGIT, * FOR NEXT 7 INSTALLATION OPTIONS	*	Scroll to next menu item (displayed for option 11E only).
PRESS DIGIT, * FOR NEXT 1 SET FEATURES	*	Scroll to next menu item (wraps to top of menu).

Items 1, 2, 3, 4, and 5 are introduced in release 21. Item 6 provides a grouping of trunk-related options that were previously available on option 11. The functionality of the trunk-related options is not changed. Item 7 also existed on option 11 prior to release 21. Items 6 and 7 are available only on option 11E, and are not available on other system types.

If the administrator password entered by the user is restricted from using one of these options, the option is not displayed. The first available item is displayed. If the administrator attempts to select a restricted option, the prompt “FUNCTION RESTRICTED” is displayed.

## **Installer login**

An installer is presented with a main menu of SBA functions 1-4 upon successfully logging in. An installer can use a digital or 2500 set to change certain parts of the set’s feature data.

Installer access allows changes to feature data only for the telephone through which the installer has logged in, so there is no need to supply the DN of the set to be changed. The installer is not prompted for an extension like an administrator.

[Table 6](#) shows an example of installer-level login.

**Table 6**  
**Installer login**

Administration set display	Response	Description
	off hook	Press DN key or lift handset.
dial tone	*52	Enter Installer FFC (configured in LD 57).
PASSWORD?	1234#	Enter LAPW password (configured in LD 17).
PRESS DIGIT, * FOR NEXT 1 SET FEATURES	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 2 NAME DISPLAY	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 3 TIME AND DATE	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 4 TOLL RESTRICTIONS	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 1 SET FEATURES		

If a feature is not already configured on the terminal being changed, the feature option is not displayed on the menu.

If the terminal being changed is not a digital set, feature options 4, 5, 9-1, and 9-3 are not displayed on the menu.

It is not possible to add a feature from an installer login.

After gaining access to the system using an Installer FFC and password from a user set, an installer can change each of the Set Features menu items in exactly the same manner as described for the administrator set. At this level in the menus, there is no difference between the installer and the administrator interfaces.

## User login

User access gives set operators the ability to add and change their own CPND name when logged in through their own telephone set.

Upon login the user is placed directly into the Name Display function and is presented with the prompt “FIRST NAME?.” From here name entry proceeds as described on [Table 27](#), [Table 28](#), and [Table 29](#). Upon completion of entering the last name, the “OK” prompt is displayed for four seconds, with the special dial tone, and the user is then logged out.

[Table 7](#) shows how a user gains access to Set-Based Administration.

**Table 7**  
**User-level login**

Set Display	Response	Description
	off hook	Press DN key or lift handset.
dial tone	*53	Enter User FFC (configured in LD 57).
PASSWORD?	1234#	Enter station control password (configured in LDs 11 and 15). Prompted if station control passwords are configured and the SBUP prompt in LD 15 is set to YES.
FIRST NAME? (Peter) # WHEN DONE, * FOR HELP	*	Press * to review letter/key associations.

## Set Features (key sequence: 1)

The administrator is prompted to enter the extension (DN) of the telephone set to be changed. Only telephones configured on the same customer (and tenant, if applicable) as the administration set are accessible. If the selected DN is a Multiple Appearance DN, the administrator is prompted with a list of TNs within the same customer and tenant that are associated with the DN.

If the TN selected to be changed is not idle, the administrator is not permitted to select it and receives the message “DENIED: SET NOT IDLE.” After four seconds, the administrator is returned to the main menu.

If the TN is idle when the administrator selects it, but is not idle when the administrator attempts to change its feature data, the administrator receives the message “DENIED: SET NOT IDLE” and is not permitted to change the feature data. After four seconds the administrator is returned to the Set Features menu. Feature data changes can be made only to idle TNs.

If the administrator attempts to select a TN that is currently being changed by another administration set or by a service change overlay, the prompt “CHANGE IN PROGRESS” is displayed and the administrator is not allowed to select it. After 4 seconds the administrator is returned to the main menu.

[Table 8](#) shows the Set Features menu for a Single Appearance DN. [Table 9](#) shows the Set Features menu for a Multiple Appearance DN.

[Table 10](#) shows section 2 of the Set Features menu.

**Table 8**  
**Set Features menu: Section 1 (Single Appearance DN)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 1 SET FEATURES	1	Select Change Set Features Item.
EXTENSION?  01200410 IDLE	3024#	Respond with DN to be modified.  Entered DN corresponds to one idle TN. Display TN for four seconds. (CCUU displayed for option 11E.) This prompt is interruptible, digit input selects the menu option, * input displays the first menu option.
PRESS DIGIT, * FOR NEXT 1 HUNTING	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 2 CALL FORWARD NO ANSWER	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 3 CALL FORWARD ALL CALLS	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 4 BUSY FORWARD STATUS	*	Scroll to see next menu item. "NOT AVAILABLE" when changing 500/2500 sets.
PRESS DIGIT, * FOR NEXT 5 VOICE CALL	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 9 MORE...	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 1 HUNTING		

**Table 9**  
**Set Features menu: Section 1 (Multiple Appearance DN)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 1 SET FEATURES	1	Select Change Set Features Item.
EXTENSION?	8666#	Enter DN to be modified.
MULTI TN, # TO SELECT 00800412 IDLE, * NEXT TN	*	Entered DN that corresponds to multiple TNs. First TN is offered. (CCUU is displayed on option 11E.) Enter * to see the next TN in the list. "IDLE" indicates that the set is not active.
DENIED: SET NOT IDLE	*	Enter * to select the next TN.
MULTI TN, # TO SELECT 00400201 NOT IDLE, * NEXT TN	#	Enter # to select this TN. "NOT IDLE" indicates that the set is active.
PRESS DIGIT, * FOR NEXT 1 HUNTING	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 2 CALL FORWARD NO ANSWER	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 3 CALL FORWARD ALL CALLS	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 4 BUSY FORWARD STATUS	*	Scroll to see next menu item. "NOT AVAILABLE" when changing 500/2500 sets
PRESS DIGIT, * FOR NEXT 5 VOICE CALL	*	Scroll to see next menu item. "NOT AVAILABLE" when changing 500/2500 sets
PRESS DIGIT, * FOR NEXT 9 MORE...	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Wraps to first menu item.

**Table 10**  
**Set Features menu: Section 2**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll to see next menu item. "NOT AVAILABLE" for 500/2500 sets
PRESS DIGIT, * FOR NEXT 2 GROUP CALL	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 3 RINGING NUMBER PICKUP	*	Scroll to see next menu item. "NOT AVAILABLE" for 500/2500 sets
PRESS DIGIT, * FOR NEXT 4 SYSTEM SPEED CALL	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 5 PERSONAL SPEED CALL	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 6 HOT LINE	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Enter 9 to see next section of menu.
PRESS DIGIT, * FOR NEXT 1 RINGING NUMBER PICKUP		Displays first menu item in next section of menu.

If one of the key-related features (menu options 3, 4, 5, 9-1, 9-2, 9-3, 9-4, 9-5) is selected to be changed for a digital telephone, the key number associated with the feature is displayed.

If the selected TN is that of the administration set, or if the set being changed is a Meridian digital set, and one of the key-related features is selected, the number of the key associated with the feature is displayed. The corresponding lamp is lit on the administration set.

If one of the key-related features is selected to be changed for a digital telephone and the feature appears more than once on the terminal being changed, then each key associated with the feature is sequentially indicated.

If the feature is not already configured on the terminal being changed, then the feature option is not displayed on the menu. Instead “NOT AVAILABLE” is displayed and overflow tone is given.

If the terminal being changed is not a digital telephone, then feature options 4, 5, 9-1, and 9-3 are not displayed.

It is not possible to add a feature through the administration set.

Once you have successfully selected and changed a feature on a set, the data is stored, “OK” is displayed for four seconds with the special dial tone.

## Hunting (key sequence: 1-1)

Selecting the Change Hunt DN item brings up a submenu containing two items: “1 HUNT EXTENSION” and “2 EXTERN HUNT EXTENSION.” The administrator or installer selects item 1 or item 2 and is prompted as shown in [Table 11](#). The following description applies to both internal and external Hunt DN changes.

The current Hunt DN is shown and you are prompted to enter a new Hunt DN. Operation of this menu is identical for changing both 500/2500 sets and digital telephone sets.

To enter a new Hunt DN, enter the DN on the keypad and terminate the input with an octothorpe (#). At this point the Hunt DN is changed, “OK” is displayed with the special dial tone. After four seconds the Hunt menu appears.

If you enter a Hunt DN that is not valid (that is, the DN is a prefix of a longer DN), overflow tone is given and “INVALID HUNT EXTENSION” is displayed. After four seconds you are reprompted for input.

Entering an octothorpe (#) without preceding it with a DN leaves the Hunt DN unchanged and returns to the Hunt menu.

**Table 11**  
**Change Hunt DN**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 1 HUNTING	1	Select change Hunt extension.
PRESS DIGIT, * FOR NEXT 1 HUNT EXTENSION	1	Select change internal Hunt extension.
HUNT? (8750)	0000#	Enter new Hunt extension. Press # to accept the current (displayed) Hunt DN.
INVALID HUNT EXTENSION		Entry not a valid Hunt extension. Error message displayed for four seconds.
HUNT? (8750)	8040#	Enter new Hunt extension.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNT EXTENSION	*	After four seconds, you return to Hunt menu. Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 2 EXTN HUNT EXTENSION	2	Select change external Hunt extension. “NOT AVAILABLE” if Class of Service of set being changed is Call Forward by Call Type Denied (CFTD).
EHT? (8750)	8040#	Enter new Hunt extension.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNT EXTENSION		Return to Hunt menu.

## Call Forward No Answer (key sequence: 1-2)

Selecting the change Call Forward No Answer (CFNA) item brings up a submenu containing two items: “1 CFNA EXTENSION” and “2 EXTERN CFNA EXTENSION.” The administrator or installer selects item 1 or item 2 and is prompted as shown in [Table 12](#) and [Table 13](#), respectively. The following description applies to both internal and external CFNA extension changes.

The current CFNA extension is shown and you are prompted to enter a new extension. Operation of this menu is identical for changing both 500/2500 sets and digital telephone sets.

To enter a new CFNA extension, enter the DN on the keypad and terminate the input with an octothorpe (#). At this point, the CFNA extension is changed and “OK” is displayed with the special dial tone. After four seconds the CFNA menu appears.

If you enter an extension that is not valid (that is, the DN is a prefix of a longer DN), overflow tone is given and “INVALID CFNA EXTENSION” is displayed. After four seconds you are reprompted for input.

Entering an octothorpe (#) without preceding it with a DN leaves the CFNA extension unchanged and returns to the CFNA menu.

## Call Forward All Calls (key sequence: 1-3)

Call Forward All Calls extension changes are performed as shown in [Table 14](#). The current extension is shown and you are prompted to enter a new extension. Operation of this menu is identical for changing both 500/2500 sets and digital telephone sets.

To enter a new Call Forward extension, enter the DN on the keypad and terminate the input with an octothorpe (#). At this point, the Call Forward extension is changed and “OK” is displayed with the special dial tone. After four seconds the Set Features menu appears.

If you enter an extension that is not valid (that is, the DN is a prefix of a longer DN), overflow tone is given and “INVALID CFW EXTENSION” is displayed. After four seconds you are reprompted for input.

**Table 12**  
**Change Internal CFNA Extension**

<b>Administration set display</b>	<b>Response</b>	<b>Description</b>
PRESS DIGIT, * FOR NEXT 2 CALL FORWARD NO ANSWER	2	Select change CFNA extension.
PRESS DIGIT, * FOR NEXT 1 CFNA EXTENSION	1	Select change internal CFNA extension.
FDN? (8750)	0000#	Enter new CFNA extension. Press # to accept the current (displayed) CFNA DN.
INVALID CFNA EXTENSION		Entry not a valid extension. Error message displayed for four seconds.
FDN? (8750)	8040#	Enter new CFNA extension.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 CFNA EXTENSION		Return to CFNA menu.

**Table 13**  
**Change External CFNA Extension**

<b>Administration set display</b>	<b>Response</b>	<b>Description</b>
PRESS DIGIT, * FOR NEXT 1 CFNA EXTENSION	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 2 EXTERN CFNA EXTENSION	2	Select change external CFNA extension. "NOT AVAILABLE" if Class of Service of set being changed is CFTD.
EFD? (8750)	8040#	Enter new CFNA extension.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 CFNA EXTENSION		Return to CFNA menu.

Entering an octothorpe (#) without preceding it with a DN leaves the Call Forward extension unchanged and returns to the Set Features menu.

**Table 14**  
**Change Call Forward All Calls Extension**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 3 CALL FORWARD ALL CALLS	3	Select change Call Forward extension.
CALL FORWARD (8733) EXTENSION?	0000#	Enter new Call Forward extension. Press # to accept the current (displayed) extension.
INVALID CFW EXTENSION		Entry not a valid extension. Error message displayed for four seconds.
CALL FORWARD? (8750) EXTENSION	8040#	Enter new Call Forward extension.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

### Busy Forward Status (key sequence: 1-4)

This menu option is not offered for 500/2500 sets.

Busy Forward Status (BFS) key data changes are performed as shown in [Table 15](#) and [Table 16](#). If more than one BFS key is defined on the terminal being changed, a list of all available BFS keys is provided. Advance through the list of keys by pressing \*.

To select a BFS TN to be monitored, enter the DN of the set to be monitored on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the BFS TN unchanged for that key and returns you to the Set Features menu.

If the extension entered is a Multiple Appearance DN, you are presented with a scrollable list of the TNs of sets with that extension. Scroll through the list and press # when the desired TN is displayed.

If you enter a BFS extension that is not valid (for example, the TN does not exist), overflow tone is given, “INVALID BFS EXTENSION” is displayed, and you are reprompted for input.

The lamp state of the modified BFS key is updated in the same way as it is in LD 11.

Changes to BFS data may actually acquire and release data store, similar to the CPND feature changes.

[Table 15](#) shows how to change a set with one BFS key. The key is changed to monitor a Single Appearance DN.

**Table 15**  
**Change Busy Forward Status key (Single Appearance DN)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 4 BUSY FORWARD STATUS	4	Select change Busy Forward Status key.
BFS KEY 2 (TN 00400212) EXTENSION?	8626#	Enter extension of set to be monitored by this BFS key or press # to accept the current value. Note that the displayed value is the TN of the set currently being monitored.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

[Table 16](#) shows how to change a set with three BFS keys. The data for BFS keys 2 and 4 is changed while the data for BFS key 3 is left unchanged.

**Table 16**  
**Change Busy Forward Status key (Multiple Appearance DN)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 4 BUSY FORWARD STATUS	4	Select change Busy Forward Status key.
BFS KEY 2 (TN 00800101) EXTENSION? * next key	8526#	Enter extension of set to be monitored by this BFS key or press # to accept the current value. Note that the displayed value is the TN of the set currently being monitored.
MULTI TN # TO SELECT 01200103 * next TN	*	Press * to scroll through the list of TNs.
MULTI TN # TO SELECT 01200104 * next TN	#	Press # to select the TN to be monitored by the BFS key.
OK		Data change complete, OK displayed for four seconds with special dial tone.
BFS KEY 3 (TN 00800105) EXTENSION? * next key	*	Display next BFS key. Press * to scroll through list of keys.
BFS KEY 4 (TN 01200102) EXTENSION?	8723#	Enter extension of set to be monitored by this BFS key.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

## Dial Intercom Group (key sequence: 1-9-1)

This menu option is not offered for 500/2500 sets.

Changes to DIG data may acquire and release data store, similar to the CPND feature changes.

Dial Intercom Group (DIG) data changes are performed as shown in [Table 17](#).

If you enter a Dial Intercom Group or member number that is not valid (group does not exist, member number conflicts), overflow tone is given, “INVALID GROUP NUMBER” or “INVALID MEMBER NUMBER” is displayed, and you are reprompted for input.

To enter new DIG data, enter the group number on the keypad and terminate the input with an octothorpe (#). You are then prompted for a member number. Respond with the member number followed by an octothorpe (#).

Entering an octothorpe (#) at the GROUP prompt without preceding it with data leaves the group and member numbers unchanged and returns you to the Set Features menu.

Entering an octothorpe (#) at the MEMBER prompt without preceding it with data leaves the member number unchanged. You are then prompted with GROUP for the next key or returned to the Set Features menu if there are no more DIG keys.

[Table 17](#) shows how to change the data for DIG keys 2 and 4 while leaving the data for DIG 3 unchanged.

**Table 17**  
**Change Dial Intercom key**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	1	Select change Dial Intercom Group.
DIG KEY 2 (740:8 GROUP? * NEXT KEY	#	Press # to accept current group for this DIG key or enter new group for this DIG key, or press * to scroll through DIG keys.
MEMBER? (8)	19#	Enter new member for this DIG key, or press # to accept current member.
OK		Data change complete, OK displayed for four seconds with special dial tone.
DIG KEY 3 (2:50) GROUP? * next key	*	Next DIG is displayed. Press * to scroll through DIG keys.
DIG KEY 4 (34:2) GROUP?	120#	Enter a new group for this DIG key. Press # to accept current group.
MEMBER?	3#	Enter new member for this DIG key. There is no default since the group was changed.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

## Group Call (key sequence: 1-9-2)

This menu option is not offered for 500/2500 sets.

Group Call (GRC) key data changes are performed as shown in [Table 18](#). If more than one GRC key is defined on the terminal being changed, a list of the GRC keys is given. Advance through the list by pressing the asterisk (\*).

To enter a new GRC group number, enter the group number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the GRC data unchanged and returns you to the Set Features menu.

If you enter a GRC number that is not valid (for example, the group does not exist), overflow tone is given, “INVALID GROUP NUMBER” is displayed, and you are reprompted for input.

[Table 18](#) shows how to change the data for GRC key 2 while leaving the data for GRC keys 3 and 4 unchanged.

**Table 18**  
**Change Group Call key**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
PRESS DIGIT, * FOR NEXT 2 GROUP CALL	2	Select change Group Call key from Set Features menu.
GFC KEY 2 (23) GROUP? * next key	12#	Enter new group for this Group Call key. Press # to leave current (displayed) group number unchanged.
OK		Data change complete, OK displayed for four seconds with special dial tone.
GFC KEY 3 (17) GROUP? * next key	*	Next GRC key displayed. Press * to scroll through GRC keys.
GFC KEY 4 (18) GROUP?	#	Accept current group number.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

### Voice Call (key sequence: 1-5)

This menu option is not offered for 500/2500 sets.

Voice Call (VCC) key data changes are performed as shown in [Table 19](#). If more than one VCC key is defined on the terminal being changed, then a list of VCC keys is given. Advance through the list of keys by pressing the asterisk (\*).

To enter a new VCC DN, enter the DN on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the VCC DN unchanged for that key and returns you to the Set Features menu.

If you enter a VCC DN that is not valid (for example, the DN does not exist), overflow tone is given, “INVALID VCC EXTENSION” is displayed, and you are prompted for input.

[Table 19](#) shows how to change the data for VCC key 2 while leaving the data for VCC keys 3 and 4 unchanged.

**Table 19**  
**Change Voice Call key**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 5 VOICE CALL	5	Select change Voice Call key.
OK		N for VCC key. Current Voice Call DN is displayed.
VCC KEY 3 (5268) EXTENSION? * next key	#	Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Accept current VCC DN. Key 4 is not displayed because # was entered rather than *.
		Return to Set Features menu.

### **Ringling Number Pickup (key sequence: 1-9-3)**

Ringling Number Pickup (RNP) key data changes are performed as shown in [Table 20](#). If more than one RNP key is defined on the terminal being changed, then a list of RNP keys is given. Advance through the list of keys by pressing the asterisk (\*).

To enter a new RNP group number, enter the group number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the RNP data unchanged and returns you to the Set Features menu.

If you enter an RNP number that is not valid (for example, group does not exist), overflow tone is given, “INVALID GROUP NUMBER” is displayed, and you are reprompted for input.

**Table 20**  
**Change Ringing Number Pickup Group**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
PRESS DIGIT, * FOR NEXT 2 GROUP CALL	*	Scroll.
PRESS DIGIT, * FOR NEXT 3 RINGING NUMBER PICKUP	3	Select change Ringing Number Pickup data.
RNPG (2000) GROUP?	3000#	Enter new RNP group for this key.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

### System Speed Call (key sequence: 1-9-4)

System Speed Call Controller/User (SSC/SSU) data changes are performed as shown in [Tables 21](#) and [22](#). This menu option is offered for both 500/2500 sets and digital telephone sets; however, the menu structures are slightly different.

If you enter a System Speed Call List number that is not valid (for example, list does not exist), overflow tone is given, “INVALID LIST NUMBER” is displayed, and you are reprompted for input.

#### 500/2500 sets

500/2500 sets can be configured as System Speed Call Users but not as System Speed Call Controllers.

To enter a new SSU list number, enter the list number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the SSU data unchanged and returns you to the Set Features menu.

[Table 21](#) shows the prompts for a single-line set.

**Table 21**  
**Change System Speed Call User: 500/2500 set**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
...	*	Scroll through menu items.
PRESS DIGIT, * FOR NEXT 4 SYSTEM SPEED CALL	4	Select change System Speed Call data.
SSU LIST (1) LIST?	1090#	Enter new System Speed Call User list.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS 1 DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

### Multiline sets

If more than one SSC/SSU key is defined on the terminal being changed, a list of SSC/SSU keys is given. Advance through the list of keys by pressing the asterisk (\*).

If the terminal is a Controller of a System Speed Call list, the SSC key is displayed. If the terminal is a User of a System Speed Call list, the SSU key is displayed.

To enter new SSC/SSU data, enter the Speed Call list number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the SSC/SSU data unchanged for that key and returns you to the Set Features menu.

[Table 22](#) shows how to change the data for SSC keys 2 and 4 while leaving the data for SSU key 3 unchanged.

**Table 22**  
**Change System Speed Call Controller/User key: Multiline set**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
...	*	Scroll through menu items.
PRESS DIGIT, * FOR NEXT 4 SYSTEM SPEED CALL	4	Select change System Speed Call data.
SSC KEY 2 (4090) LIST? * next key	123#	Enter new list for this System Speed Call Controller key.
OK		Data change complete, OK displayed for four seconds with special dial tone.
SSU KEY 3 (200) LIST? * next key	*	Scroll through list of System Speed Call keys.
SSC KEY 4 (2) LIST?	1195#	Enter new list for this System Speed Call Controller key.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS 1 DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

## Personal Speed Call (key sequence: 1-9-5)

Personal Speed Call Controller/User (SCC/SCU) data changes are performed as shown in [Tables 23](#) and [24](#). This menu option is offered for both 500/2500 sets and digital telephone sets; however, the menu structures are slightly different.

If you enter a Personal Speed Call list number that is not valid (for example, the list does not exist), overflow tone is given, “INVALID LIST NUMBER” is displayed, and you are reprompted for input.

### 500/2500 sets

To enter a new SCC/SCU list number, enter the list number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the SCC/SCU data unchanged and returns you to the Set Features menu.

[Table 23](#) shows how to change the data for a single-line set with an SCC list.

**Table 23**  
**Change Personal Speed Call Controller/User: 500/2500 set**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
...	*	Scroll through menu items.
PRESS DIGIT, * FOR NEXT 5 PERSONAL SPEED CALL	5	Select Personal Speed Call data.
SSC (1234) LIST?	16#	Enter new Personal Speed Call list.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS 1 DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

### **Multiline sets**

If more than one SCC/SCU key is defined on the terminal being changed, a list of SCC/SCU keys is given. Advance through the list of keys by pressing the asterisk (\*).

If the terminal is a Controller of a Speed Call list, the SCC key is displayed. If the terminal is a User of a Speed Call list, the SCU key is displayed.

To enter new SCC/SCU data, enter the Speed Call list number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the SCC/SCU data unchanged for that key and returns you to the Set Features menu.

[Table 24](#) shows how to change the data for SCC keys 2 and 4 while leaving the data for SCU key 3 unchanged.

### **Hot Line (key sequence: 1-9-6)**

The Hot Line function allows you to change which member of a Hot Line list is associated with a HOT L key. The Hot Line list is defined in LD 18. There can be one Hot Line list per customer.

Hot Line list (HOT L) data changes are performed as shown in [Tables 25](#) and [26](#). This menu option is offered for both 500/2500 sets and digital telephone sets; however, the menu structures are slightly different.

If you enter a member number that is not valid (for example, the list does not exist), overflow tone is given, “INVALID MEMBER NUMBER” is displayed, and you are prompted for input.

#### **500/2500 sets**

To enter a new Hot Line list member number, enter the member number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the member number unchanged and returns you to the Set Features menu.

**Table 24**  
**Change Personal Speed Call Controller/User key: Multiline set**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
...	*	Scroll through menu items.
PRESS DIGIT, * FOR NEXT 5 PERSONAL SPEED CALL	5	Select change Personal Speed Call data.
SCC KEY 2 (8190) LIST? * next key	3#	Enter new Speed Call list. Current Speed Call list is displayed.
OK		Data change complete, OK displayed for four seconds with special dial tone.
SCU KEY 3 (4) LIST? * next key	*	Scroll through list of Personal Speed Call keys.
SCC KEY 4 (145) LIST?	8190#	Enter new Speed Call list. Current Speed Call list is displayed.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

[Table 25](#) shows how to change the data for a single-line set.

**Table 25**  
**Change Hot Line: 500/2500 set**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE....	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
...	*	Scroll through menu items.
PRESS DIGIT, * FOR NEXT 6 HOT LINE	6	Select change Hot Line data.
HOT LIST MEMBER? (12) MEMBER?	90#	Enter new Hot Line list member number. Current Hot Line list member is displayed.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

If more than one Hot Line list key is defined on the terminal being changed, a list of Hot Line list keys is given. Advance through the list of keys by pressing asterisk (\*).

To enter a new Hot Line list member number, enter the member number on the keypad and terminate the input with an octothorpe (#).

Entering an octothorpe (#) without preceding it with data leaves the member number unchanged and returns you to the Set Features menu.

[Table 26](#) shows how to change the data for HOT L keys 2 and 4 while leaving the data for HOT L key 3 unchanged.

**Table 26**  
**Change Hot Line key: Multiline set**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 9 MORE...	9	Press 9 to access second section of Set Features menu.
PRESS DIGIT, * FOR NEXT 1 DIAL INTERCOM GROUP	*	Scroll.
...	*	Scroll through menu items.
PRESS DIGIT, * FOR NEXT 6 HOT LINE	6	Select change Hot Line data.
HOT LIST KEY 2 (90) MEMBER? * next key	2#	Enter new Hot Line list member number. Current Hot Line list member is displayed.
OK		Data change complete, OK displayed for four seconds with special dial tone.
HOT L KEY 3 (16) MEMBER? * next key	*	Scroll through list of Hot Line keys.
HOT L KEY 4 (52) MEMBER?	19#	Enter new Hot Line list member number. Current Hot Line list member is displayed.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 HUNTING		Return to Set Features menu.

## Name Display (key sequence 2)

This function allows you to add or change CPND names. Before this function can be used, the CPND data block must be configured in LD 95.

Activate this function by selecting “2 NAME DISPLAY” from the main menu. After selecting the Name Display function, you are prompted for the extension to which the changes will be applied. Names can be changed for any DN within the same customer (and tenant if applicable), including ACD queues, route access codes, and so on.

You are then prompted to enter the last name. [Table 27](#) shows the prompts for changing CPND data.

**Table 27**  
**Change Name Display**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 2 NAME DISPLAY	2	Select change CPND name data.
EXTENSION?	3024#	Enter DN to be modified.
FIRST NAME? (Paul) # WHEN DONE, * FOR HELP		System prompts for new first name and displays current first name.

Each letter in the name can be obtained by pressing the corresponding dial pad key until the desired character appears under the current cursor. When the desired character is displayed, press # to accept that character and move to the next. Once all characters have been entered for the first name, # must be pressed a second time to indicate the end of all characters. This causes the “LAST NAME?” prompt to appear. The last name is entered using the same key sequences as for the first name.

## Help

Help is available at any time while entering a CPND name by pressing #. Help consists of a list of keys and the characters associated with each key. Scroll through the help list by pressing “\*”. If approximately six seconds pass without any key presses, the screen returns to the previous state of name entry. If you press a digit key, the Help function stops and the key takes effect immediately, just as if Help had never been entered. Pressing # exits Help, returning you to the state prior to entering Help.

**Table 28**  
**Change CPND Name Help (Part 1 of 2)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 2 NAME DISPLAY	2	Select change CPND name data.
EXTENSION?	3024#	Enter DN to be modified.
FIRST NAME? (Paul) # WHEN DONE, * FOR HELP	*	Press * to review letter/key associations.
PRESS DIGIT, * FOR NEXT 1:SPACE-.,# & 1	*	Scroll.
PRESS DIGIT, * FOR NEXT 2: a b c A B C 2	*	Scroll.
PRESS DIGIT, * FOR NEXT 3: d e f D E F 3	*	Scroll.
PRESS DIGIT, * FOR NEXT 4: g h i G H I 4	*	Scroll.
PRESS DIGIT, * FOR NEXT 5: j k l J K L 5	*	Scroll.
PRESS DIGIT, * FOR NEXT 6: m n o M N O 6	*	Scroll.
PRESS DIGIT, * FOR NEXT 7: p q r s P Q R S 7	*	Scroll.

**Table 28**  
**Change CPND Name Help (Part 2 of 2)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 8: t u v T U V 8	*	Scroll.
PRESS DIGIT, * FOR NEXT 9: w x y z W X Y Z 9	*	Scroll.
FIRST NAME? (Paul) # WHEN DONE, * FOR HELP		Back to initial screen.

[Table 29](#) shows how to change the name for DN 3024 from “Paul Smith” to “Bailey Smith.”

**Table 29**  
**Example of Name Entry (Part 1 of 3)**

Set Display	Response	Description
PRESS DIGIT, * FOR NEXT 2 NAME DISPLAY	2	Select change CPND name data.
EXTENSION?	3024#	Enter DN to be modified.
FIRST NAME? (Paul) # WHEN DONE, * FOR HELP	*	Press * to review letter/key associations.
FIRST NAME? (Paul) 1:SPACE-. 1	*	Enter * to scroll through help.
FIRST NAME? (Paul) 2: a b c A B C 2	2	Press 2 to select “abc ABC 2” group.
FIRST NAME? (Paul) <b>a</b>	2	Scroll for B.
FIRST NAME? (Paul) <b>b</b>	2	Scroll for B.
FIRST NAME? (Paul) <b>c</b>	2	Scroll for B.

**Table 29**  
**Example of Name Entry (Part 2 of 3)**

Set Display	Response	Description
FIRST NAME? (Paul) <b>A</b>	2	Scroll for B.
FIRST NAME? (Paul) <b>B</b>	#	Select B.
FIRST NAME? (Paul) B	2	
FIRST NAME? (Paul) <b>Ba</b>	#	Press 4 to select "ghi GHI 4" group.
FIRST NAME? (Paul) <b>Bag</b>	4	Scroll for i.
FIRST NAME? (Paul) <b>Bah</b>	4	Scroll for i.
FIRST NAME? (Paul) <b>Bai</b>	#	Select i.
FIRST NAME? (Paul) Bai	5	Press 5 to select "jkl JKL 5" group.
FIRST NAME? (Paul) <b>Baij</b>	5	Scroll for l.
FIRST NAME? (Paul) <b>Baik</b>	5	Scroll for l.
FIRST NAME? (Paul) <b>Bail</b>	#	Select l.
FIRST NAME? (Paul) Bail	3	Press 3 to select "def DEF 3" group.
FIRST NAME? (Paul) <b>Baild</b>	3	Scroll for e.
FIRST NAME? (Paul) <b>Baile</b>	#	Select e.

**Table 29**  
**Example of Name Entry (Part 3 of 3)**

Set Display	Response	Description
FIRST NAME? (Paul) Baile	9	Press 9 to select "wxyz WXYZ 9" group.
FIRST NAME? (Paul) Baile <b>w</b>	9	Scroll for y.
FIRST NAME? (Paul) Baile <b>x</b>	9	Scroll for y.
FIRST NAME? (Paul) Baile <b>y</b>	#	Select y.
FIRST NAME? (Paul) Bailey	#	Press # to end name entry.
LAST NAME? (Smith) # WHEN DONE, * FOR HELP	#	Press # to leave last name unchanged.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 1 SET FEATURES		Return to the main menu.

### Time and Date (key sequence: 3)

Activate this function by selecting "3 TIME AND DATE" from the main menu. After selecting this function from the main menu, you are presented with a menu containing two items "1 TIME" and "2 DATE." Changing time and date operations are shown in [Table 30](#).

- After selecting the first function, "1 TIME," you are prompted for hours and minutes in two separate sequences.
- After selecting the second function, "2 DATE," you are prompted for year, month, and day in three separate sequences.

Each response has to be terminated by an octothorpe (#) to confirm the newly entered values. If an invalid entry is detected, an overflow tone is given and you are reprompted for input.

Whenever the time or date is changed, a CDR time stamp is printed to all TTYs exactly as if the change had been made by the attendant. Also, similar to the attendant changing the time or date, the Time Synchronization feature is activated for masters and slaves in a network, and messages are sent to auxiliary machines.

## Validation

Each section of the data is validated when it is entered.

- For times, hours are entered before minutes.
- For dates, first the year, then the month, then the day is entered. The year and month are entered first so that the highest valid day can be determined based on the month and whether it is a leap year.

If an illegal value is entered, the message “INPUT OUT OF RANGE” is displayed for four seconds and you are reprompted for input.

## Format

### Time

HH = Hour from 0 to 23 (one or two digits)

MM = Minute from 0 to 59 (one or two digits)

### Date

YYYY = Year from 1975 to 9999 or

YY = Last two digits of the year from 0 to 99 (If  $\geq 75$ , equals 1900. If  $< 75$ , equals 2000.)

MM = Month from 1 to 12 (one or two digits)

DD = Day of the month from 1 to 31 (one or two digits)

[Table 30](#) shows an example of changing both the time and date.

## Toll Restrictions (key sequence: 4)

Changes to toll Class of Service are performed as shown in [Table 31](#). You are prompted with the current Class of Service and a scrollable list of valid options from which to choose a new Class of Service. Operation of this menu is identical whether changing 500/2500 sets or digital telephone sets.

**Table 30**  
**Change Time and Date**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 3 TIME AND DATE	3	Select change system time and date.
PRESS DIGIT, * FOR NEXT 1 TIME	1	Select change system time.
HOUR? (5)	17#	Enter hour. Pressing # leaves the hour unchanged.
MINUTE: (31) 17:	45#	Enter minutes. Pressing # leaves the minutes unchanged.
OK		Data change complete, OK displayed for four seconds with special dial tone.
PRESS DIGIT, * FOR NEXT 2 DATE	2	Select change system date.
YEAR (1993)	#	Enter year. Pressing # leaves the year unchanged.
MONTH? (4) 1993/	7#	Enter month. Pressing # leaves the month unchanged.
DAY? (12) 1993/07	9#	Enter day. Pressing # leaves the day unchanged.
OK		Data change complete, OK displayed for four seconds.
PRESS DIGIT, * FOR HELP 1 SET FEATURES		Return to main menu.

To select a new Class of Service, enter the number of the desired Class of Service. Entering an octothorpe (#) without preceding it with data, leaves the Class of Service unchanged and returns you to the Set Features menu.

[Table 31](#) shows how to change the class of a set to fully restricted.

**Table 31**  
**Change Toll Class of Service**

<b>Administration set display</b>	<b>Response</b>	<b>Description</b>
PRESS DIGIT, * FOR NEXT 4 TOLL RESTRICTIONS	4	Select change Toll Class of Service.
EXTENSION?	3024#	Enter extension of set to be modified.
RESTRICTIONS? (FR1) 2 COND UNRESTRICT (CUN)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 3 COND TOLL DENY (TLD)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 4 TOLL DENY (TLD)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 5 SEMIRESTRICT (SRE)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 6 FULLY RESTRICT (FRE)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 7 FULLY RESTRICT 1 (FR1)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 8 FULLY RESTRICT 1 (FR2)	*	Scroll to next Class of Service.
RESTRICTIONS? (FR1) 1 UNRESTRICT (UNR)	6	Select item 6, fully restricted Class of Service (FRE).
OK		Data change complete, OK displayed for four seconds.
PRESS DIGIT, * FOR NEXT 1 SET FEATURES		Return to the main menu.

## Extension-TN correspondence (key sequence: 5)

Select the Extension-TN correspondence function by selecting “5 EXTENSION-TN” from the main menu. Operation of the Extension-TN correspondence function is shown in [Tables 32](#) and [33](#).

After selecting the Extension-TN correspondence function, you are prompted to enter the extension of the telephone sets to be queried. Only telephones configured on the same customer (and tenant if applicable) as the administration set are accessible. If the selected extension is a multiple appearance number, a scrollable list of TNs associated with the extension is displayed. Browse the list of TNs by pressing \*. If you enter # without first entering an extension, you are returned to the main menu.

[Table 32](#) shows how to browse a Single Appearance DN.

**Table 32**  
**Extension-TN correspondence (Single Appearance DN)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 5 EXTENSION-TN	5	Select Extension-TN correspondence.
EXTENSION?	3738#	Enter extension.
SINGLE APPEARANCE TN 00000412 IDLE		Entered DN corresponds to one TN, the TN is displayed. “IDLE” indicates that the set is not active.

[Table 33](#) shows how to browse a Multiple Appearance DN.

**Table 33**  
**Extension-TN correspondence (Multiple Appearance DN)**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 5 EXTENSION-TN	5	Select Extension-TN correspondence.
EXTENSION?	5027#	Enter extension.
MULTI APPEARANCE TN 01200201 IDLE, * next TN	*	Entered DN corresponds to multiple TNs. The first TN is displayed, press * to scroll through the list. "IDLE" indicates that the set is not active.
MULTI APPEARANCE TN 00800210 NOT IDLE, * next	*	Scroll to see next TN. "NOT IDLE" indicates that the set is active.

## Trunk Installation (key sequence: 6)

This option is only available from an administration set on an option 11/11E machine. The functions pertaining to trunk installation and removal and route access code changes are not changed by this feature; they are just grouped under a single item on the main menu.

[Table 34](#) shows the prompts for this feature. For more information, see the option 11 documentation.

**Table 34**  
**Trunk Installation menu**

Administration set display	Response	Description
PRESS DIGIT, * FOR NEXT 6 TRUNK INSTALLATION	6	Select change trunk data.
PRESS DIGIT, * FOR NEXT 1 ADD TRUNK	*	Scroll through Trunk Installation menu.
PRESS DIGIT, * FOR NEXT 2 CHANGE ROUTE ACCESS	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 3 REMOVE TRUNK	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 1 ADD TRUNK		

## Installation Options (key sequence: 7)

This option is only available from an administration set on an option 11E system.

[Table 35](#) shows the prompts for this feature. For more information, see the option 11 documentation.

**Table 35**  
**Installation Options menu**

<b>Administration set display</b>	<b>Response</b>	<b>Description</b>
PRESS DIGIT, * FOR NEXT 7 INSTALLATION OPTIONS	7	Select installation options.
PRESS DIGIT, * FOR NEXT 1 DEFAULT SETS	*	Scroll through Installation Options menu.
PRESS DIGIT, * FOR NEXT 2 NUMBERING PLAN	*	Scroll to see next menu item.
PRESS DIGIT, * FOR NEXT 1 DEFAULT SETS		



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## Changing Service Options

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This section describes the overlays that need to be modified to change service when using Set-Based Administration.

### Modified LDs 10 and 11

LD 10 is modified to accept a new Class of Service. This allows or denies Set-Based Administration user-level access. If SBUP = YES in LD 15 (users must dial the station control password to log in), and there is no station control password defined for this set, the SCH6460 (“Warning: An SCPW must be defined for this set”) message is printed. [Table 36](#) shows the prompts and responses.

**Table 36**  
**LDS 10 and 11**

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	aaa	Type of data block
...		
CLS	(ULAD) ULAA	Deny access to Set Based Administration Allow access to Set Based Administration Accepted if the ADMINSET package 256 is equipped.

## Modified LD 15

If the response to the SBUP prompt is YES, a user must dial the User FFC followed by the station control password to access user-level changes. If the response to the SBUP prompt is NO, a user must dial only the User FFC. [Table 37](#) shows the prompts and responses for customer data.

**Table 37**  
**LD 15**

Prompt	Response	Comment
REQ	CHG	Change existing data block
TYPE	FFC	Flexible Feature Code
CUST	0-99	Customer number
...		
SCPL	(0)-8	Station control password length (default 0)
SBUP	(YES)/NO	Set-Based User Passwords: (Yes) needed/No not needed, for user-level access to data change Accepted if ADMINSET package 256 is equipped.
PWD2	x...x	If a response other than <CR> is entered for SBUP, Password 2 must be entered for confirmation. Prompted if the response to SBUP is not <CR>.

## Modified LD 17

LD 17 includes service change for passwords, the History File, and the maximum login limits.

### Passwords

LD 17 has prompts for the Set-Based Administration passwords, their levels,

and options. See [Table 38](#) for the prompts and responses.

**Table 38**  
**LD 17 – Passwords (Part 1 of 2)**

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	PWD	Change Password options
PWD2	x...x	Password 2
LNAME_OPTION	(NO) YES	Require login name for password access
NPW1	x...x	New Password 1 (PWD1 login password)
LOGIN_NAME	aaa	Login name for password access
NPW2	x...x	New Password 2 (PWD2)
LOGIN_NAME	aaa	Login name for password access
LAPW	nn	Limited Access to Overlays Password number
PWTP	(OVLY) SBA	Password Access Type. Prompted if ADMINSET package 256 is equipped. (Overlay) Password Access Type Set-Based Administration Password Access Type
PWnn	x...x	Password (must be numeric for Set-Based Administration)
LOGIN_NAME	aaa	Login name for password access
LEVL	(INST) ADMN	Access level for Set-Based Administration password. Prompted for SBA passwords. (installer) access level for SBA administrator access level for SBA
CUST	xxx ALL	Customer to be accessible by way of PWnn
TEN	xxx ALL	Tenant to be accessible by way of PWnn (prompted only if response to CUST is other than ALL or <CR>)

**Table 38**  
**LD 17 – Passwords (Part 2 of 2)**

Prompt	Response	Comment
OPT		Specify permissions and restrictions associated with password PWnn. At least one permission must be given. The default for each permission is denied. SCH6465 prints if a non-installer option is requested for an installer password
	(FEAD)	Deny Change Set Features( Administrator & installer access)
	FEAA	Allow Change Set Features( Administrator & installer access)
	(NAMD)	Deny Change CPND Names( Administrator & installer access)
	NAMA	Allow Change CPND Names( Administrator & installer access)
	(TADD)	Deny Set Time and Date( Administrator & installer access)
	TADA	Allow Set Time and Date( Administrator & installer access)
	(TOLD)	Deny Change Toll Restrictions( Administrator & installer access)
	TOLA	Allow Change Toll Restrictions( Administrator & installer access)
	(DTD)	Deny DN-TN correspondence( Administrator & installer access)
	DTA	Allow DN-TN correspondence( Administrator & installer access)
	(TRKD)	Deny Change Trunks (option 11E administrator access only)
	TRKA	Allow Change Trunks (option 11E administrator access only)
	(INSD)	Deny Installer Options (Option 11E administrator access only)
	INSA	Allow Installer Options (Option 11E administrator access only)
	<CR>	SCH6464 if all OPTs are denied

**History File**

The History File option prints records only for the requested access level. [Table 39](#) shows the prompts and responses.

**Table 39**  
**LD 17 – History File**

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	ADAN	Action Device And Number
ADAN	NEW, CHG, OUT HIST	Add, change, or remove the History File
SIZE	(0)–65534	Size of History File buffer in characters
USER	ADM, INS, USR XADM, XINS, XUSR	Set-Based Administration access levels to be stored in the History File: administrator, installer, user. Use X to keep the SBA access level from printing in the History File. Accepted if the ADMINSET package 256 is equipped.

**Maximum logins**

There are limits on the number of users allowed to log in at any one time for each access level. These limits can be configured in the parameters section of the configuration record. There are defaults set up and maximums allowed. [Table 40](#) shows the prompts and responses.

**Table 40**  
**LD 17 – Maximum logins**

Prompt	Response	Comment
REQ	CHG	Change data request
TYPE	PARAM	Change system parameters
...	...	

**Table 40**  
**LD 17 – Maximum logins**

Prompt	Response	Comment
SBA_ADM_INS	0-(1)-2 (Opt 11E) 0-(2)-64 (Opt 21-71) 0-(2)-64 (Opt 81)	Maximum administrator and/or installer logins allowed at one time (defaults in brackets). Prompted if ADMINSET, package 256, is equipped.
SBA_USER	0-(10)-20 (Opt 11E) 0-(50)-250 (Opt 21-71) 0-(100)-500 (Opt 51C, 61C, 81, 81C)	Maximum user logins allowed at one time (defaults in brackets). Prompted if ADMINSET, package 256, is equipped.

### Modified LD 57

Use LD 57 to configure and print the Administrator, Installer, and User Flexible Feature Codes. See [Table 41](#) for the prompts and responses.

**Table 41**  
**LD 57 – Configure FFCs**

Prompt	Response	Comment
REQ	NEW, CHG	Add or change data
TYPE	FFC	Type of data block
CUST	xx	Customer number associated with this function
FFCT	(NO) YES	Flexible Feature Code Confirmation Tone
CODE	ADMN	SBA Administrator FFC. Prompted if ADMINSET, package 256, is equipped.
ADMN	xxxx	Enter Administrator FFC
CODE	INST	SBA Installer FFC. Prompted if ADMINSET, package 256, is equipped.
INST	xxxx	Enter Installer FFC

**Table 41**  
**LD 57 – Configure FFCs**

Prompt	Response	Comment
CODE	USER	SBA User FFC. Prompted if ADMINSET, package 256, is equipped.
USER	xxxx	Enter User FFC
CODE	<CR>	
...	...	

[Table 42](#) shows the prompts to print the FFCs. Administrator information prints only if the ADMINSET package is equipped. LD 22 prints information about the software package, as shown in Table 48 on page 95.

**Table 42**  
**LD 57–Print FFCs**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	FFC	Type of data block
CUST	5	Customer number
CODE	ADMN	SBA Administrator FFC
Example: The following administrator information prints to the active TTY.		
CUST	05	
FFCT	NO	No Confirmation Tone
ADMN	*41	SBA Administrator FFC

**Table 42**  
**LD 57–Print FFCs**

Prompt	Response	Comment
CODE	INST	SBA Installer FFC
Example: The following installer information prints to the active TTY.		
CUST	05	
FFCT	NO	No Confirmation Tone
INST	*44	SBA Installer FFC
CODE	USER	SBA User FFC
Example: The following user information prints to the active TTY.		
CUST	05	
FFCT	NO	No Confirmation Tone
USER	*45	SBA User FFC

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# Print Routines

---

This section describes how to set up overlays to print out Set-Based Administration information.

- LD 20
- LD 21
- LD 22
- LD 81
- LD 83

## **Modified LD 20**

LD 20 prints the TN data blocks and the DN block.

## TN blocks

LD 20 prints the Class of Service ULAA/ULAD for set TN blocks. See [Table 43](#) for the prompts and responses.

**Table 43**  
**LD 20—Print TN blocks**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	TNB	Type of data block
TN	l s c u, c u	Terminal Number
CDEN	SD, SS, 4D, 8D	Card density
CUST	xx	Customer number associated with this set
TEN	0-51	Tenant Number
DATE	dd mmm yyyy	Print data from date specified
PAGE	(NO) YES	Data printed on a per-page basis
DES	dddddd	Office Data Administration System Station Designator
Example: The following information prints to the active TTY.		
TN	016 0 04 00	TN being printed
TYPE	2616	Set type
...		
CLS	UNR DTN FBD...	Class of Service
	...ULAA...	User level access allowed on this set

## DN blocks

LD 20 prints the Administrator, Installer, and User Flexible Feature Codes (FFCs). See [Table 44](#) for the prompts and responses.

**Table 44**  
**LD 20—Print DN blocks**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	DNB	Type of data block (Directory Number block)
CUST	xx	Customer number associated with this set
DN	x...x	Directory Number
DATE	dd mmm yyyy	Date from which to print
PAGE	(NO) YES	Data printed on a per-page basis
DES	aaaaaa	Office Data Administration System Station Designator
<p>Example: The following is installer information that prints to the active TTY.</p>		
DN	*42	Installer Flexible Feature Code example
TYPE	FFC	
FEAT	INST	

## Modified LD 21

LD 21 prints the Customer Data Blocks.

Change LD 21 to print the prompt SBUP for Customer Data Blocks if the ADMINSET package is equipped. See [Table 45](#) for the prompts and responses.

**Table 45**  
**LD 21—Print Customer Data Blocks**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	CDB	Type of data block
CUST	0-99	Customer number
Example: The following information prints to the active TTY.		
CUST	5	Customer number
...		...
SCPL	4	Station control password length
SBUP	YES	Station control password is required for user-level access to data change. Printed if ADMINSET, package 256, is equipped and SCPL > 0.

## Modified LD 22

LD 22 prints the passwords, History File configuration, package list, DN blocks, and maximum login configurations.

### Passwords

LD 22 prints the LAPW data created in LD 17.

If you log in with a PWnn password and respond to the PWD2 prompt by pressing <CR>, only the information for that TTY login password prints. If you log in with PWD2, the only acceptable response to this prompt is the PWD2 password. All the LAPW information, both TTY and SBA passwords, and the other information associated with LAPW prints. See [Table 46](#) for the prompts and responses.

**Table 46**  
**LD 22—Print password configuration**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	PWD	Print System Passwords
PWD2	xxxx	Password 2
Example: The following information for an SBA password prints to the active TTY.		
PW00	1234	LAPW password 00
PWTP	SBA	Password type (SBA or OVLY)
LOGIN_NAME	JOHNSMITH	Login name for this password
LEVL	ADMN	Access level for this password
CUST	05	Customer/Tenant list for this password
TEN	ALL	
	FEAA NAMA TADD TOLA DTA TRKD INSD	Administrators with this password can change set features, CPND names, and toll restrictions and can see DN-TN correspondence. Administrators cannot change trunks or installation options and cannot set the time or date with this password.

### History File

LD 22 prints the History File configuration as defined in LD 17. [Table 47](#) shows the prompts and responses.

**Table 47**  
**LD 22—Print History File configuration**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	ADAN HST	History Files
Example: The following information prints to the active TTY.		
ADAN	HIST SIZE	History File configuration
	200	Buffer size
	USER MTC BUG ADM	Message types recorded including administrator sessions

**Packages**

LD 22 prints the Set-Based Administration package. See [Table 48](#) for the prompts and responses.

**Table 48**  
**LD 22—Print software packages**

<b>Prompt</b>	<b>Response</b>	<b>Comment</b>
REQ	PRT	Print data request
TYPE	PKG	Software Packages
Example: The following information prints to the active TTY.		
BASIC	0	Basic Package
OPTF	1	Optional Features Package
...		...
ADMINSET	256	Package mnemonic for Set-Based Administration

### Maximum logins

LD 22 allows printing of the maximum number of administrator and/or installer logins, and User logins. See [Table 49](#) for the prompts and responses.

**Table 49**  
**LD 22—Print maximum login configuration**

Prompt	Response	Comment
REQ	PRT	Print data request
TYPE	PARM	System parameter information
Example: The following information prints to the active TTY.		
PARM		System parameter information
SBA_ADM_INS	10	Maximum number of administrator/installer logins
SBA_USER	50	Maximum number of user logins

## Modified LD 81

LD 81 prints a list or count of telephones with selected features. All sets with the Class of Service ULAA/ULAD print. See [Table 50](#) for the prompts and responses.

**Table 50**  
**LD 81—Print features**

Prompt	Response	Comment
REQ	LST, CNT	Request
CUST	xx xx	Customer number or range of customer numbers
DATE	dd mmm yyyy	Date from which to print
PAGE	(NO) YES	Data printed on a per-page basis
DES	aaaaaa	Office Data Administration System Station Designator
FEAT	ULAA/ULAD	Print sets with ULAA/ULAD Class of Service. Prompted if ADMINSET, package 256, is equipped.

Example: The following is part of the information that prints to the active TTY for a list.

```
ULAA 00 TN 003 0 00 01 2000 MODL21 22 May 1993
ULAA 00 TN 003 0 00 01 2000 MODL21 22 May 1993
```

Example: The following information prints to the active TTY for a count.

```
FEAT CUST TOTAL SL1 500 2500 3000 2000
ULAA 00 CNT 18 0 0 10 0 8
```

## Modified LD 83

LD 83 allows printing of a list of TNs and of TN blocks in designation (DES) order.

Change LD 83 so that the Class of Service ULAA/ULAD prints with the TN blocks. The list of TNs is not changed by the Set-Based Administration enhancements. [Table 51](#) shows the prompts and responses.

**Table 51**  
**LD 83—Print sorted TNs**

Prompt	Response	Comment
REQ	TNB	Print TN blocks in designation order
CUST	xx xx	Customer number or range of customer numbers
DATE	dd mmm yyyy	Date from which to print
PAGE	Yes/(No)	Data printed on a per-page basis
The following is an example of the information printed to the active TTY.		
DES JSMITH		ODAS description
TN 016 0 04 00		TN being printed
TYPE 2000		Set type
...		...
CLS UNR FBD..		Classes of service, user-level access is
...ULAA...		allowed on this set

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## Appendix A: CPND character set

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**Table 52**  
**CPND character set**

Key	Available characters
1	space - . , # & 1
2	a b c A B C 2
3	d e f D E F 3
4	g h i G H I 4
5	j k l J K L 5
6	m n o M N O 6
7	p q r s P Q R S 7
8	t u v T U V 8
9	w x y z W X Y Z 9
0	0

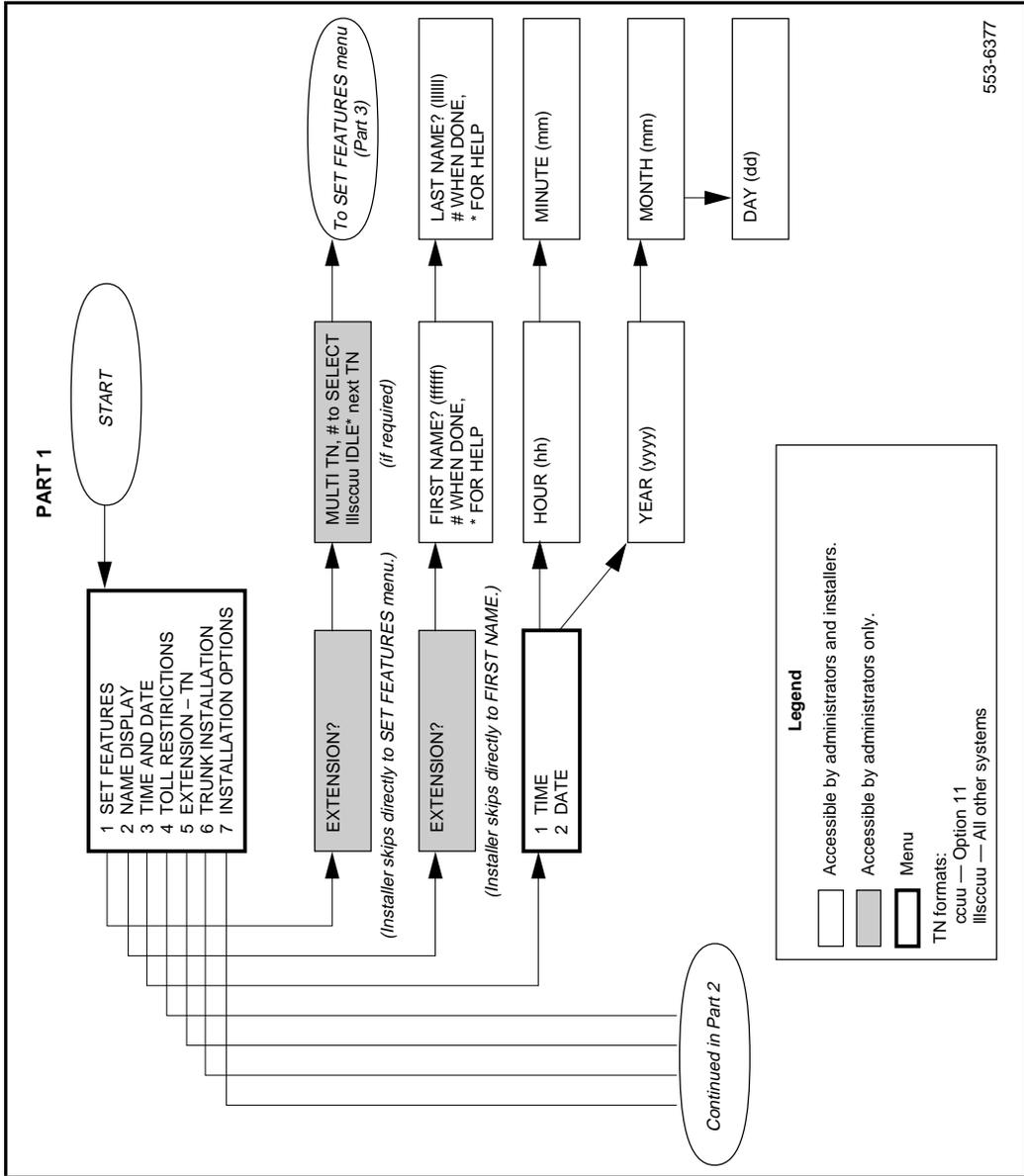


---

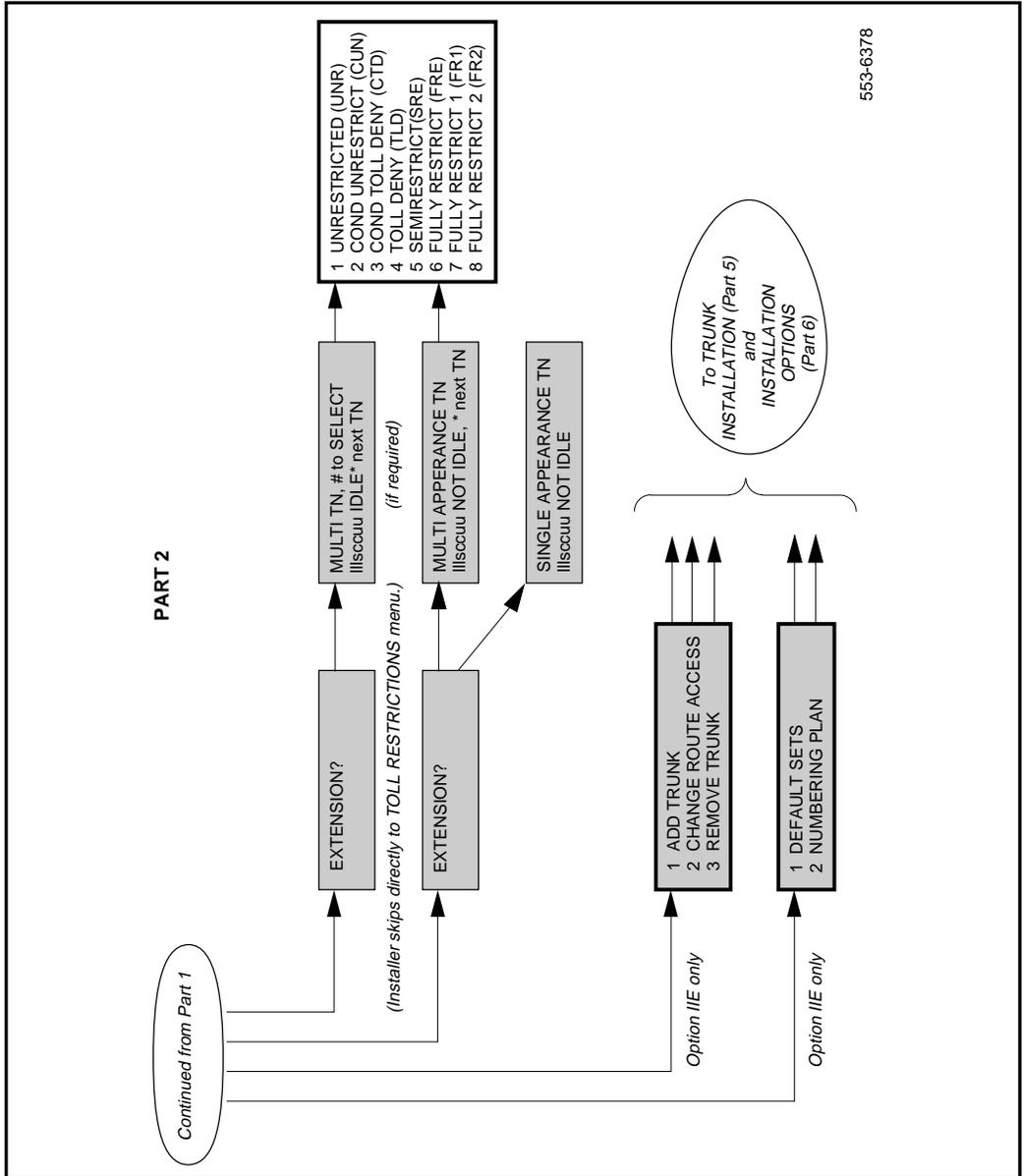
## **Appendix B: Menu hierarchy diagram**

---

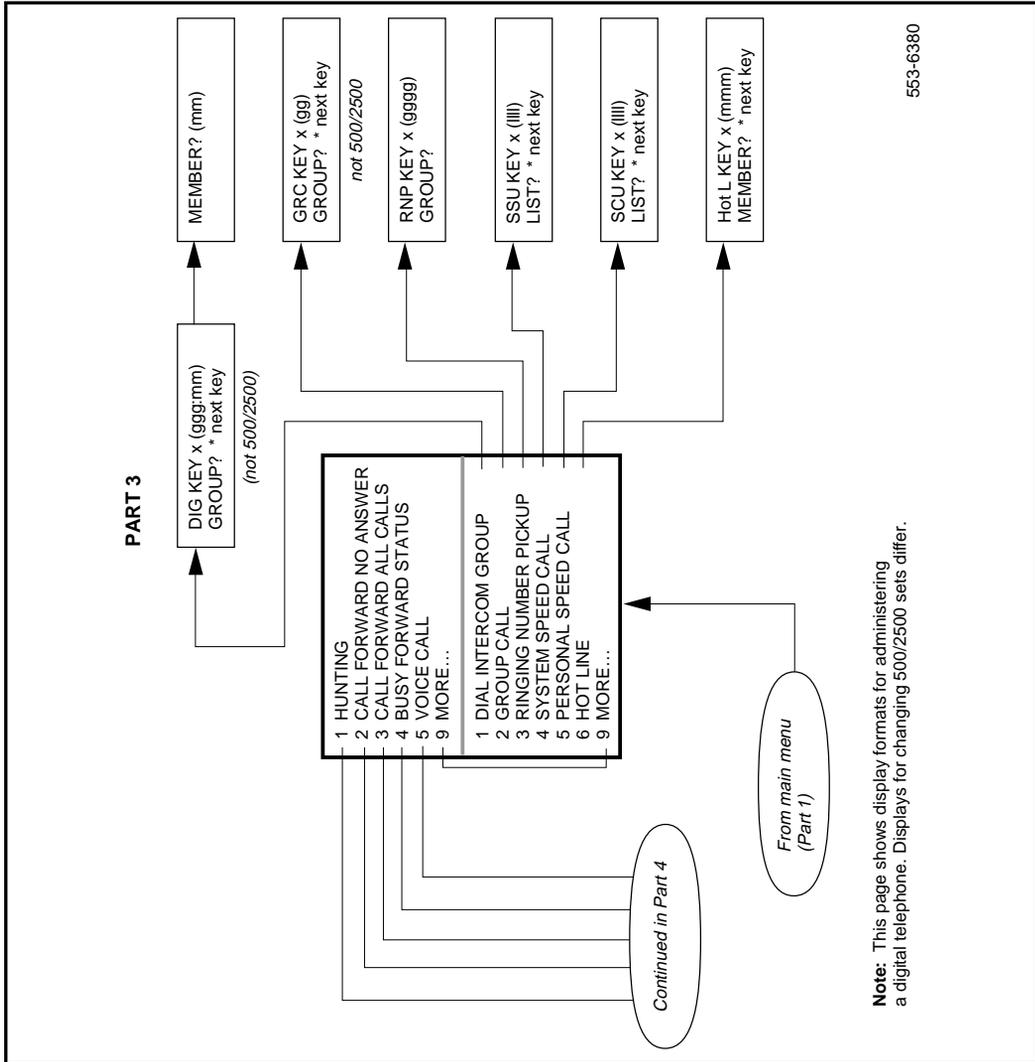
**Figure 1**  
Menu hierarchy diagram (Part 1 of 6)



**Figure 1**  
**Menu hierarchy diagram (Part 2 of 6)**



**Figure 1**  
**Menu hierarchy diagram (Part 3 of 6)**



**Figure 1**  
Menu hierarchy diagram (Part 4 of 6)

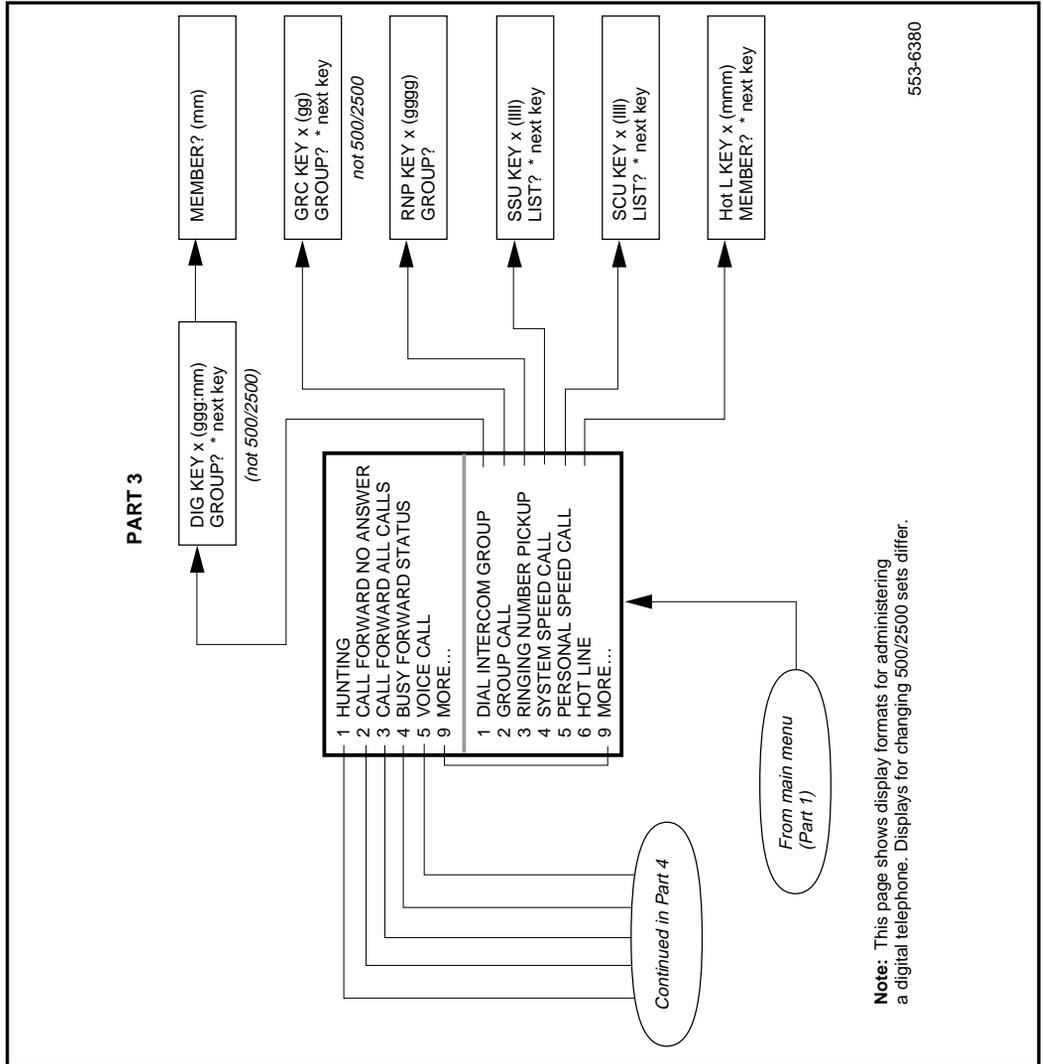


Figure 1  
Menu hierarchy diagram (Part 5 of 6)

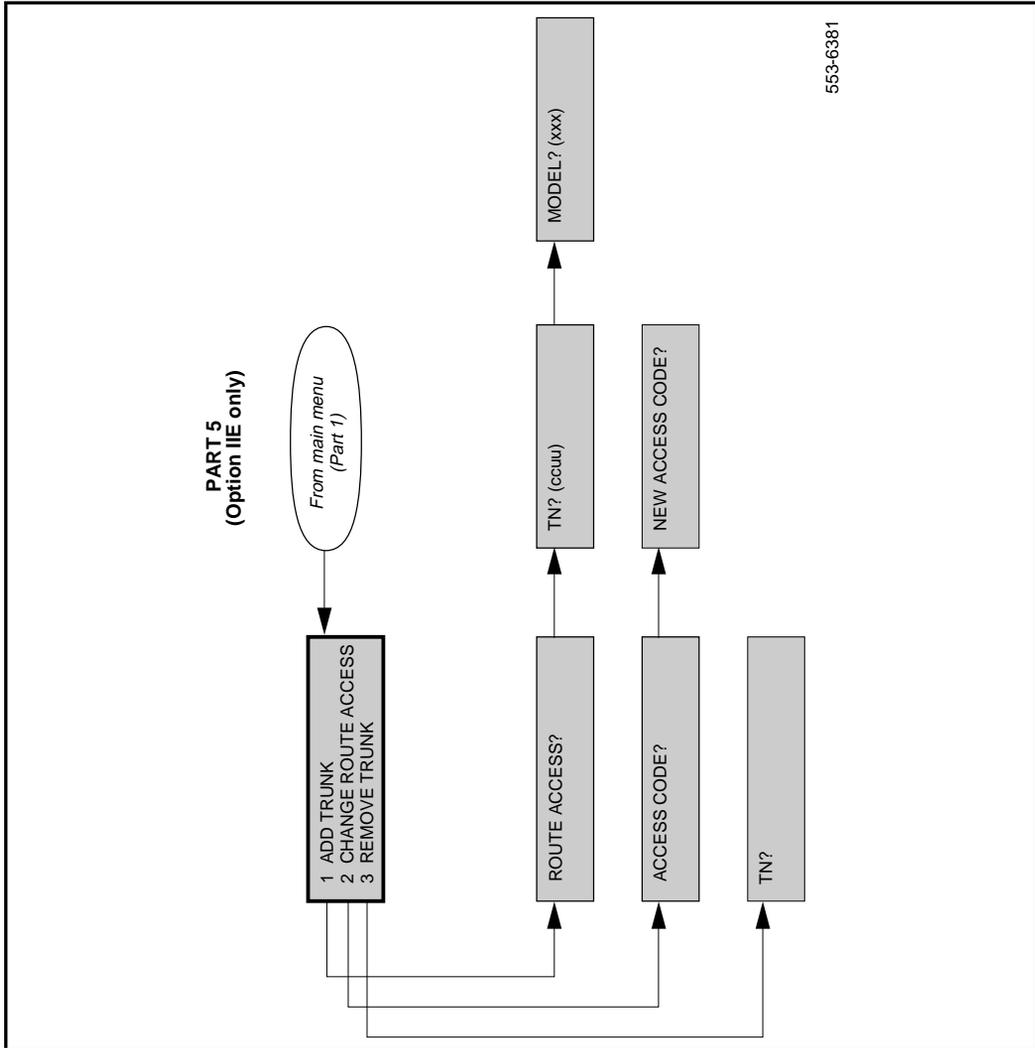
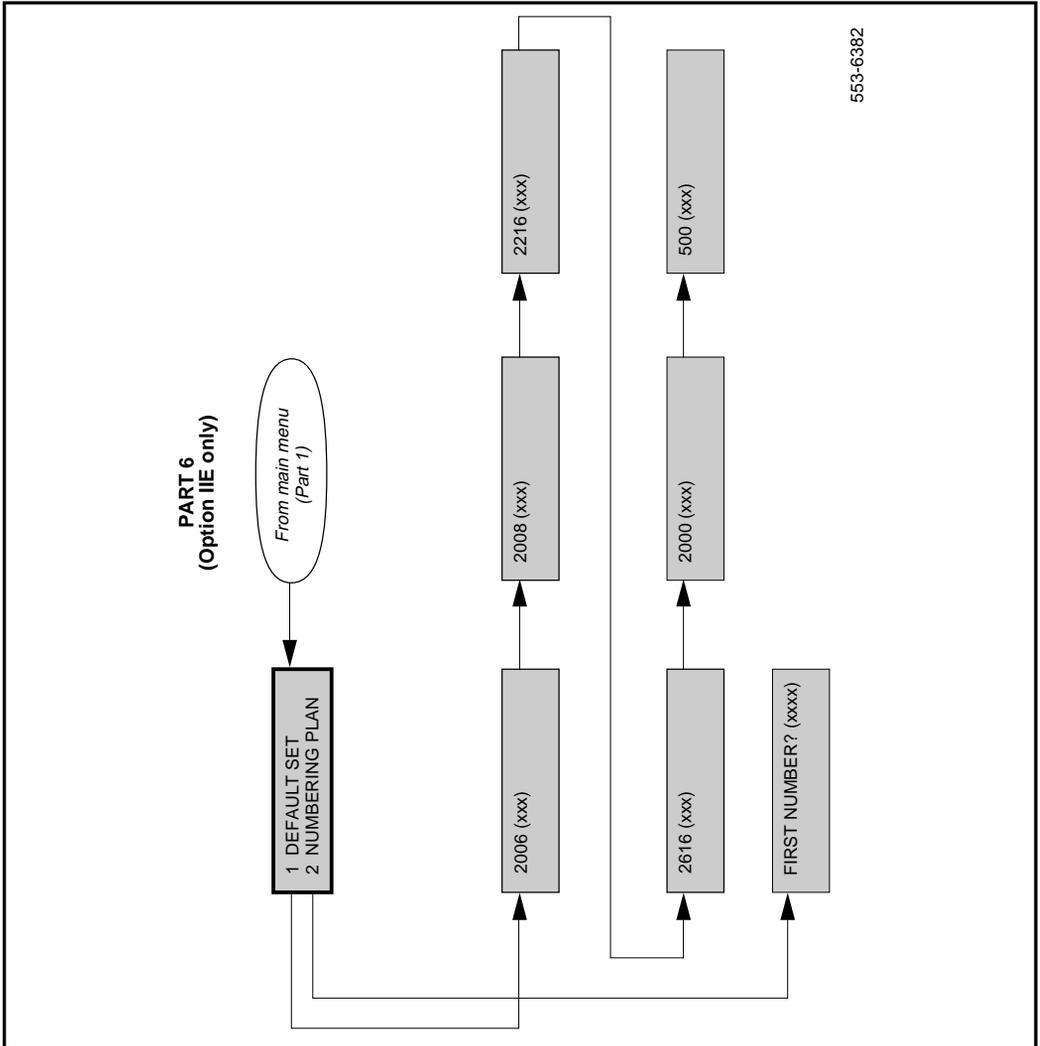


Figure 1  
Menu hierarchy diagram (Part 6 of 6)





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# Glossary

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**active key**

A call is present (established or on hold) on the key or the key is in the process of being programmed (for example, entering a new autodial or call forward number).

**administration set**

An M2008, M2216, or M2616 with a two-line, 24-character display and Maintenance Allowed (MTA) Class of Service, to which an administrator is logged in.

**administrator**

Anyone logged into an administration set using an Administrator FFC and administrator password.

**digit**

Any set keypad digit. This includes the digits 0 through 9.

**installer**

Anyone logged into a telephone set using an Installer FFC and installer password.

**not idle**

A set is considered not idle by Set-Based Administration if any of the following is true:

- The set has an active key (except a key that the set operator uses to login to Set-Based Administration).
- The set is disabled.
- The set is being administered from another set or an overlay.

**set operator**

An administrator, installer, or user logged into a telephone set.

**user**

Anyone logged into a telephone set with ULAA Class of Service using a User FFC and, optionally, a station control password.

**user set**

Any set listed in Table 1, “Supported telephones,” on page 7, without MTA Class of Service.

Meridian 1  
**Set-Based Administration**

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