



DEFINITY Communications System Generic 2.2

Administration of Features and Hardware

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Acknowledgment

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AUTOMATIC CALL DISTRIBUTION
AUTOMATIC CALLBACK
AUTOMATIC CIRCUIT ASSURANCE
AUTOMATIC IDENTIFICATION OF OUTWARD DIALING
AUTOMATIC TRANSMISSION MEASUREMENT SYSTEM
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ABOUT THIS DOCUMENT

Purpose of this Document

This document is a guide for administering DEFINITY Generic 2.2 features and hardware, and was written primarily for system administrators and AT&T services personnel. Readers should have a working knowledge of the DEFINITY Generic 2.2 features and capabilities and should be familiar with the DEFINITY Manager II administration tool.

How to Use This Document

This manual has two major parts:

- Administration of basic components such as the attendant console, voice terminals (telephone sets), trunks, DCIU links, class of service, and the dialing plan. The chapters in this part are divided as follows:
 - System Administration
 - Attendant Console Administration
 - Trunk Administration
 - Voice Terminal and Data Module Administration
 - DCIU Administration.
- 2. Administration of features. Each chapter covers the administration of a particular feature. This part of the manual is meant to be used in conjuction with *DEFINITY*TM *Communications System Generic 2 and System 85 Feature Descriptions* (555-105-301).

Conventions Used in This Document

The following subheadings appear throughout the manual:

• Task or Feature Description

These descriptions are brief and only intended to give a few insights to the system administrator before administering the task or feature. For more information, refer to *DEFINITY*TM *Communications System Generic 2 and System 85 Feature Descriptions* (555-105-301) or *DEFINITY*TM *Communications System Generic 2 and System 85 System Description* (555-105-201).

• Prerequisite Administration

This section lists the tasks or features that must be administered before continuing on with the administration of the specific task or feature. Some of the administration listed may have already been completed or may be part of the basic feature package purchased. You must determine which prerequisite administration applies.

• Related Administration

This section lists tasks or features that may be administered to enhance the specific feature's capabilities.

• Procedure Sequence

This section lists procedure numbers and the order in which they should be used to add the feature or task to the system, change or enhance the task or feature, or remove the specific task or feature. If only one procedure is used to administer a task or feature, this section is omitted.

Procedure Usage

This section lists specific procedures and fields used to administer the specific task or feature. Some of the fields may contain a specific entry for that field, a typical value that may be used, or a range of values corresponding to specific encodes for the task or feature. For more information about Procedures, refer to *DEFINITY*TM *Communications System Generic 2 Administration Procedures* (555-105-506).

Another convention used frequently in this document is "n-n" to give a range of numbers. For example, "1-5" means 1 through 5, inclusive.

Trademarks and Service Marks

ACCUNET® digital service

AUDIXTM Voice Messaging System

CallVisorTM ASAI Gateway

DEFINITYTM Communications System

DIMENSION® PBX system

MEGACOM® telecommunications service

ESSTM electronic switch

5ESS® electronic switch

MS*-DOS operating system

IBM† personal computers

^{*} MS is a trademark of Microsoft Corp.

 $[\]dagger$ $\;$ IBM is a registered trademark of International Business Machines Corp.

ADDENDUM DESCRIPTION

This addendum revises the *DEFINITY*TM *Communications System, Generic 2 Administration of Features and Hardware*, 555-104-507, Issue 1, dated June 1989.

This addendum addresses administration procedure enhancements, modifications, updates, and additions in DEFINITY Generic 2.1, Issue 2.0.

Identifying New Material

New and significantly changed text in previously existing sections is identified by margin rule marks located in the right hand margin as follows:

New or changed text.

Errata Sheet

Insert this Introduction and Errata Sheet ahead of the Table of Contents. This will aid in identifying changes that have been made.

Replace or insert the following pages or sections as indicated.

Section and Page Replacements

Remove Original Material	Insert Addendum Material
Table of Contents, all	Table of Contents, all
About This Document, all	About This Document, all
Section 1, all	Section 1, all
Using Manager II	Using Manager II
Section 2, all	Section 2, all
System Administration	System Administration
Section 3, all	Section 3, all
Attendant Console Administration	Attendant Console Administration
Section 4, all	Section 4, all
Voice Terminal Administration	Voice Terminal Administration
Section 5, all	Section 5, all
Trunk Administration	Trunk Administration
Section 6, pages 6-1 to 6-2, 6-13 to 6-14	Section 6, pages 6-1 to 6-2, 6-13 to 6-14
6-21 to 6-22	6-21 to 6-22, 6-33 to 6-36 (new)
DCIU Administration	DCIU Administration
Section 21, all	Section 21, all
Automatic Alternate Routing	Automatic Alternate Routing
Section 22, all	Section 22, all
Automatic Call Distribution	Automatic Call Distribution
Section 26, all	Section 26, all
Automatic Route Selection	Automatic Route Selection
Section 27, pages 27-1 to 27-2	Section 27, pages 27-1 to 27-2
Automatic Transmission Measurement System	Automatic Transmission Measurement System
Section 28, pages 28-1 to 28-2, 28-7 to 28-8	Section 28, pages 28-1 to 28-2, 28-7 to 28-8
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Call Vectoring	Call Vectoring

Remove Original Material	Insert Addendum Material
Section 42, pages 42-1 to 42-2	Section 42, pages 42-1 to 42-2
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Primary Rate Interface	Primary Rate Interface
Not applicable	Section 67A, all
Integrated Telemarketing Gateway Interface	Integrated Telemarketing Gateway Interface
Section 78, all	Section 78, all
Look-Ahead Interflow	Look-Ahead Interflow
Section 94, all	Section 94, all
PC/PBX Connection	PC Interface
Section 102, all	Section 102, all
Recall Signaling	Recall Signaling
Section 104, all	Section 104, all
Remote Access	Remote Access
Section 116, all	Section 116, all
Service Node Controller Tandem	Service Node Controller Tandem
Section 129, all	Section 129, all
Trunk Verification — Voice Terminal	Trunk Verification — Voice Terminal
Section A, all	Section A, all
Configuration Limits	Configuration Limits
Index, all	Index, all

USING MANAGER II

Manager II is an MS-DOS package that runs on several AT&T personal computers or other IBM-compatible personal computers. In its simplest form, Manager II emulates the operations of the Maintenance and Administration Panel (MAAP) and System Management Terminal (SMT) used in System 85. It also emulates the operation of the Visual MAAP (VMAAP).

Manager II operates in three different modes:

- Basic similar to VMAAP.
- Enhanced provides a full-screen layout of the administration and maintenance procedures and includes extensive on-line help.
- Task packages several procedures into a single task.

This chapter gives the typical commands used during an administrative session. For more detailed information on Manager II operations, see *DEFINITY*TM *Manager II Operation MS-DOS*® *Version* (555-104-505).

The Manager II Software and Support Files

The software for Manager II is delivered on diskettes. There are two main parts of software:

- Executable files contain the software that runs Manager II.
- Switch Support Base (SSB) contains the electronic flipcharts (EFCs) and EFC help files that are used by Manager II enhanced mode.

The SSB received on diskettes is also loaded as part of the software on the switch (also called the SSB). This is done so that you can download new EFCs from the switch when the switch software is updated. You will not always receive new SSB diskettes when changes are made. Updating the SSB on the PC is discussed later in this chapter.

Installing Manager II and the SSB

There are two different install programs: one to install Manager II and one to install the SSB. This was done in case you want to install only Manager II and not the SSB. (It does no good to install only the SSB without also installing Manager II.) If you are using a PC that doesn't have enough storage to hold the entire SSB, you can still administer the system using Manager II, but access to the SSB used with the enhanced mode is done via the diskette drive.

The program used to install Manager II and the SSB is straight-forward and easy to use. Unless your installation is different than others, use the default entries of the Manager II install program. Select these entries by simply pressing (Return).



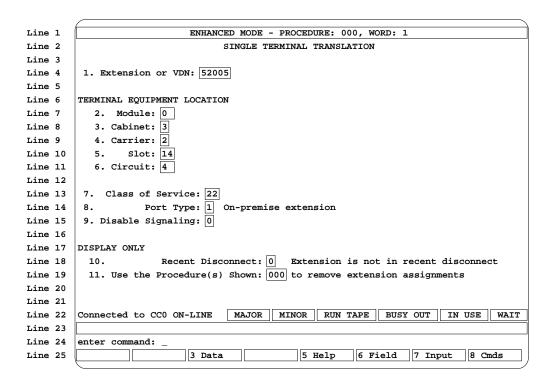
While the computer is accessing the diskette drive, the light on the diskette drive will illuminate. DO NOT remove any diskette while this light is on!

- 1. Put the Manager II diskette in the PC's diskette drive.
- 2. At the keyboard, type a:install Return

The install software begins working. The first screen starts the Manager II install program. Note that you can exit the install routine at this time by typing ctrl-break.

- 3. Continue through the install program until it completes and asks if you want to install the SSB. If you want to install the SSB, answer **y**; otherwise answer n.
- 4. Reset the PC by typing ctrl-alt-del.
- 5. When the PC has reset, Manager II is ready to use.

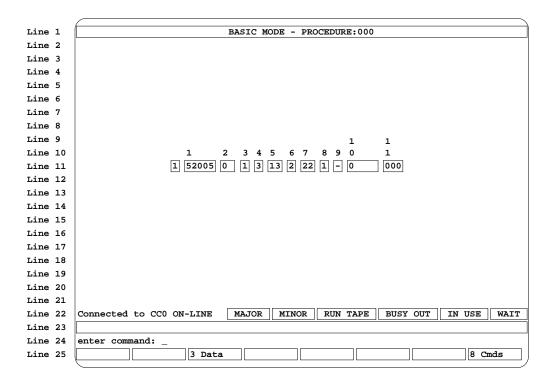
The Manager II Screen Layout



Each screen contains 25 lines of data. They are designated as follows:

- Line 1 **Activity Line** Shows whether you are in Manager II basic or enhanced mode and what procedure you are currently using; shows if you are looking at the on-line help for enhanced mode; shows in task mode what operation you are doing (display, add, change, or remove).
- Line 2 **Title Line** Shows the title of the current procedure or task, if appropriate.
- Lines 3-21 **Text Lines** Contains the procedure or task data fields. On-line help is also shown in this area.
- Line 22 **Status Line** Shows if connected to a switch. When connected to a switch, it also shows the Major Alarm, Minor Alarm, Run Tape, Busy Out, In Use, and Wait status. These status conditions signify the same thing for Generic 2 that LEDs on the SMT and MAAP signify for System 85. The status line is not used in task mode.
- Line 23 **Message Line** Displays error codes, Manager II software information and error messages, and range values for input fields.
- Line 24 Command Line Accepts system commands.
- Line 25 **Function Key Line** Displays the functions keys. The labels on the function keys change depending on the current operation.

Basic Mode



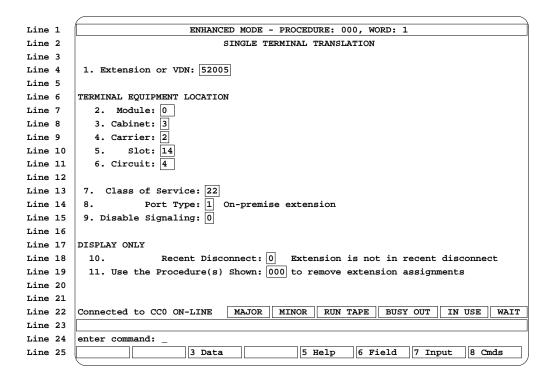
Basic mode provides access to System 85s and DIMENSION PBXs by displaying "raw" procedure data in a horizontal format on the screen much like the LED display on the MAAP or the screen display of VMAAP. Manager II provides field numbering for each procedure and a clearer cursor indicator, making data entry and interpretation easier than with VMAAP, MAAP, or SMT.

Basic mode requires the use of switch specific documentation (administration manuals) as a reference to identify field values, error information, procedure specific help, etc. General help about the Manager II commands, connections, and logs are available in basic mode. Basic mode may also be used for Generic 2 and is the default mode if Manager II is unable to find the appropriate switch support files necessary for enhanced mode.

Mapping of universal or XE modules location is not done automatically in basic mode for Generic 2 because it doesn't have access to switch support files. Equipment mapping redefines a physical location on a universal or XE module to a logical location on a traditional module as if it were located on a traditional module. A special command can be invoked to convert the equipment locations.

Another type of mapping called character mapping is also not available in basic mode. Character mapping allows users to enter alphabetic characters in data fields of procedures where previously you could enter only numeric encodes.

Enhanced Mode



Enhanced mode provides a full-screen interface to the administration and maintenance procedures for Generic 2. Fields are displayed on the screen in a "fill in the blank" format with easy to understand labels. The layout of the screen closely resembles that of Manager I. Reference material is not necessarily needed with enhanced mode because extensive on-line help is provided with the support files. Enhanced mode is primarily used in this document.

Electronic Flipcharts and the Switch Support Base

Manager II provides a switch support base (SSB) that contains the screen interfaces and on-line help that makes enhanced mode easier to use. Enhanced mode also does equipment mapping automatically. Equipment mapping redefines a physical location on a universal or XE module to a logical location on a traditional module as if it were located on a traditional module.

Another type of mapping called character mapping is also available in enhanced mode. Character mapping allows you to enter alphabetic characters in data fields of procedures where previously you could only enter numeric encodes.

Electronic flipcharts (EFCs) are the files that are stored with the switch software and on the PC used with Manager II. Part of the EFCs are encode definitions that are displayed on screens permitting quicker interpretation of data on the screens. For example in the screen above, the encode definition for 1 in field 8 is **On-premise extension**. As changes are made to the switch software, new versions of EFCs can be downloaded to the PC for Manager II. The EFCs for Manager II are available in both 5½-inch and 3½-inch diskettes.

Task Mode

```
display station 52005
Line 1
                                                                            Page 1 of
Line 2
                                            STATION_
Line 3
Line 4
          Extension: 52005
Line 5
               Type: analog
                                                                           Hot Line? n
          Equip Loc: 0 /0/2/0 /1
                                         COS: 22
Line 6
                                                                          Port Type: 1
Line 7
               Name:
Line 8
Line 9
         FEATURE OPTIONS
Line 10
                     LWC Destination: 0
                                                                Call Coverage Group: 0
Line 11
                           AP Number: 0
Line 12
                                                             Coverage Msg Retrieval? n
Line 13
                AUDIX Machine Number: 0
                                                                  Call Pickup Group: 0
Line 14
                       Auxiliary ANI? n
                                                                  Hunt-To Extension:
Line 15
Line 16
               Automatic Msg Waiting? n
                                                              Bearer Capability COS: 0
Line 17
            Audible Auto Msg Waiting? n
                                                       Dedicated Switch Connection? n
Line 18
               Attd Cont Rest Group: 0
Line 19
Line 20
Line 21
Line 22
Line 23
Line 24
Line 25
        1 Cancel 2 Refrsh
                                                5 Help
                                                                    7 NextPg 8 PrevPg
```

Terminal administration involves accessing several fields across several Procedures. Task mode simplifies terminal administration by consolidating all data entry and display onto a few screens. The software running task mode accesses all of the relevant Procedures and fields to add, change, remove, or display the administration data associated with terminal being administered.

Manager II Commands

Manager II commands are done with basic keystrokes and the use of function keys. In this chapter, keystrokes are represented in **constant-width bold**, keyboard control keys in keycaps, and functions keys in boxes.

Using the Keyboard

In Manager II, the following keys are used regularly.

Return or **blank space** — enter data

The Return key is used to send data to the switch during administration and maintenance. This key may also be identified as the "Carriage Return", "Enter", or a down-then-left arrow. A Return is used to separate data entered in each field of a procedure. When entering commands on the command line, a blank space (space bar) also represents the Return key, but when typing a long string of commands, you still have to end the string with a Return. To skip a data field when entering data on the command line, use the ; to skip over that field. Using a blank space will not work.

For example, **p011 1 dx** (Return) calls in Procedure 011 Word 1, puts the number 1 in field 1, and does a display execute. You could also do this string of commands as follows:

```
p011 (Return)
1 (Return)
dx (Return)
```

Each of these commands produce the same results.

To skip over field 1 and put data in field 2, type **p011**; **1** (Return).

(Backspace) — back up spaces on a command line

When entering a command string, use Backspace to back-up on the command line to correct an error or change some information. After completing the command line, press Return.

" " — double quotes

To enter a block of text when associated with a command, surround the text with double quotes ("). For example, to get names to display on voice terminals, administer names to go along with extensions and trunk groups. This is administered in Procedure 012 Words 1 and 2. To enter a name for an extension after setting up some preliminary information in Procedure 012 Word 1, type w2 1 "John Jones" cx (Return).

This tells the switch that the letters **J** o h n **J** o n e s are to be placed in translation. If you don't enter the characters of a name this way, you must enter them one character at a time (a much longer process).

Executing the Manager II Software

To execute the Manager II software, type **mgrii** (Return). You are prompted for a login and password. Get these from the account team.

The software begins operating. The first thing seen is the copyright screen displayed momentarily on the PC. This will be followed by the Manager II "signature" screen.

There are two function keys now active, the 5 Help and 8 Cmds keys.

Command Help

The 5 Help key gives access to help on how to use Manager II, the administration and maintenance procedures, and feature and task administration. You will be instructed later how to use this help. Exit from this help by using the 1 Exit key.

The 8 Cmds key gives a list of commands available in Manager II. All these commands will be explained in this chapter. Exit from this help by pressing Return or using the 1 Exit key.

Connecting to a Switch

The **con** command is used to connect to a switch. When the Manager II is directly connected to a switch, type **con** (Return). If connecting to a switch using a dial-up port, a user data base entry has been created for that switch by AT&T at installation time. Type **con** switch name (Return).

When the connection is being established, call progress messages are displayed on the message line. These messages will differ depending on the type of modem or data module used.

If you don't have a hardwired connection, you can use different types of hardware for the connection. You can use a DTDM or a PDM for a digital connection or an AT&T 4112 modem or a Hayes 1200 modem for an analog connection.

Reduced port contention in Generic 2 supports four simultaneous port connections. This allows an administration task to be done by the system administrator (through a local Manager II) while a maintenance task is also being done (through a remote Manager II).

Once connected to a switch, several changes occur on the Manager II screen. The status line shows that you are connected to the switch and gives the common control number. Also, any alarms that are currently active on the switch will be displayed on the status line. Manager II will show Procedure Mode and the cursor will be active on the command line.

Using Procedure Mode

ENHANCED MODE - PROCEDURE: MODE	
SYSTEM MANAGEMENT ACCESS PORT STATUS	
CURRENT PORT M	ODE CONTROLLER
1. Administration: 0 Not active	11. Administration: - Not active
2. Maintenance: 0 Not active	12. Maintenance: - Not active
3. Disk/Tape System: 0 Not active	13. Disk Tape System: - Not active
	14. RAMP: - Not active
AGENTS	15. SMAP: - Not active
4. TN492 Port 0:	_
5. TN492 Port 1: 71 Manager II - cust	tomer
6. TN563 Port 0:	
7. TN563 Port 1:	
8. Pseudo Port 0:	
9. Pseudo Port 1:	
10. DCIU Port:	
Garage at all the GGO ON TIME OF MY TOP WITHOUT	DIDL MADD DUGU OUM THE UGD LIVET
Connected to CC0 ON-LINE V MAJOR MINOR	RUN TAPE BUSY OUT IN USE WAIT
enter command:	
3 Data 5	Help 6 Field 7 Input 8 Cmds

"'Procedure Mode' isn't a Manager II mode of operation such as basic mode, enhanced mode, or task mode. Instead, it's a "Procedure" named "Mode" just as "Procedure 010" is a "Procedure" named "010."

Manager II automatically uses enhanced mode if the switch support base (SSB) is installed.

Generic 2 allows only a limited combination of administration and maintenance activities to take place simultaneously. Consequently, Procedure Mode was designed to regulate access. Access is granted on a per-port basis.

Procedure Mode grants control of the administration and maintenance procedures or the disk/tape subsystem to the port you are currently connected to, provided those resources aren't being used by another port. You will be blocked from doing administration, maintenance, or disk/tape operations unless the current port is activated for the those operations. Procedure Mode also displays the current port status, the mode controllers, and the agents controlling the modes.

Procedure Mode works differently from any other procedure. Instead of entering data into fields, type a number that represents one of the three modes. The numbers for the modes are 1 for administration, 2 for maintenance, and 3 for the disk/tape system.

For example, to gain control over the administration and the disk/tape subsystem while connected to a switch, type **13** (Return). To release control of these two areas, type **13** (Return). These commands toggle between having and not having control of administration and the disk/tape subsystem.

Setting Procedure Mode

To begin the administration, get Procedure Mode to grant access to the administration and disk/tape subsystem by typing 13 (Return). Since you were already in Procedure Mode, typing 13 (Return) was all that was necessary. Had you been in some other procedure, you would have had to type m13 (Return). Remember this for future reference.

There are four ports available for connections to the switch. There are two ports on the TN492 and two ports on the TN563. The TN492 provides an analog interface to the switch while the TN563 provides an EIA interface to the switch using an Asynchronous Data Unit (ADU).

In the example, the user has connected to the switch through TN492 port 0 and has gained access to the administration and disk/tape modes. The screen may have different data depending on the connection.

Status Indicators

The information on the status line (line 22) represents the current state of the switch.

Connected to CCX ON/OFF LINE — processor status

This identifies which common control Manager II is connected to (CC0 or CC1) and whether it is connected to the on-line or off-line processor.

DISCONNECTED — disconnected from switch

This is displayed before making a switch connection and when disconnected from the switch.

♥ — processor heartbeat

The ♥ flashes to indicate that the processor is operating normally.

MAJOR — major alarm

This indicator is on when there is a major alarm registered on the switch.

MINOR — minor alarm

This indicator is on when there is a minor alarm registered on the switch.

RUN TAPE — do a run tape

This indicator is on after making a translation change, and it goes off after doing a run tape (save translation changes on tape).

BUSY OUT — a facility is busied out

This is displayed when a facility examined has been busied out.

IN USE — facility is in use

This is displayed when trying to remove something and it is currently in use. Facilities in use cannot be removed.

warr — wait for the system to complete its task

This is displayed when changes are being sent to the switch after doing an add, change, remove, etc.

Moving Between Modes

The following commands are used to move between the different modes of Manager II. They will be used later in this chapter. These commands only work when connected to a switch.

bas — go to basic mode

Use this command from either the enhanced or the task mode. To use this command, type **bas** (Return).

enh - go to enhanced mode

Use this command from either the basic or the task mode. To use this command, type enh (Return).

task — go to task mode

Use this command from either the basic or the enhanced mode. To use this command, type task (Return).

Using Basic or Enhanced Mode

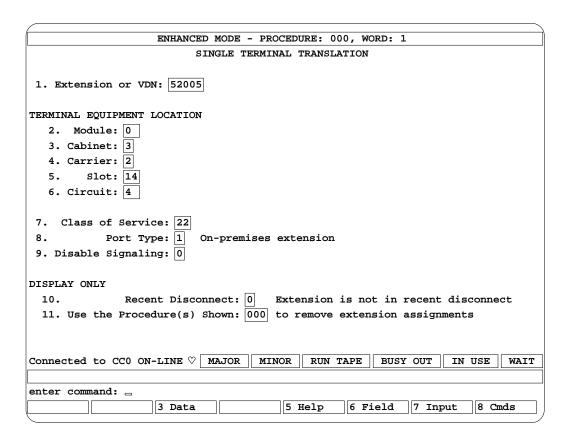
The following sections discuss using administration procedures while in basic or enhanced modes. A similar section with task mode is given in this book under *Voice Terminal and Data Module Administration*. The figures shown in this section show only enhanced mode screens. Most of these commands can be used in basic mode. These exceptions are noted in the section.

Displaying a Procedure

The basic command used to call in a procedure is **p###** where **###** represents a 3-digit procedure number. For example, type **p000** (Return) to call in Procedure 000 Word 1. For another example, type **p011** (Return) to call in Procedure 011 Word 1.

Don't specify a word unless it is something other than Word 1. Word 1 is brought in as the default. For example, type **p000w3** (Return) to call in Procedure 000 Word 3. When done like this, Procedure 000 Word 1 is displayed momentarily, and then Procedure 000 Word 3 is displayed.

Another convenient command to call in a particular word of a procedure is the **w#** command where # represents a single-digit word number. This only works when already in a multiword procedure. For example, if you are already in Procedure 000 Word 3 and you want to go to Procedure 000 Word 1, type **w1** (Return).



Entering Data From the Command Line

Call in Procedure 000. As a default, the cursor resides on the command line (line 24) next to the *enter command:* prompt. From here you can enter data into the data fields. Field 1 is highlighted and the cursor is blinking on the command line. If you type an extension followed by Return, the extension will display in the field 1 data field and the highlight will move to field 2. The cursor remains on the command line waiting for the next command. Use the Backspace key to correct an entry, but this only works before pressing Return.

If you then type a module number followed by Return, the module number will display in the field 2 data field and the highlight will move to field 3. Again, the cursor remains on the command line waiting for the next command.

To skip a data field, type ; (Return). This will move the field highlight to the next field and only dashes are shown in the field skipped.

Continue to enter data or skip fields for all remaining data fields until no data field is highlighted. When no data field is highlighted, this means that data is entered or all available entry fields have been skipped. Notice that fields 10 and 11 only display information. Several procedures have fields that only display information.

Normally, you would now add this data to the switch as a translation. For now, let's reset the procedure by typing **rs** Return. The **rs** command resets the procedure and clears out all data fields as if the procedure was called in again.

You can also string commands together on the command line. For example, enter the enter the extension and the equipment location in fields 1-6 by typing 52005 0 3 2 14 4 Return. As soon as you type Return, the data starts displaying up in the data fields one field at a time. The field highlight moves through each field where data is entered. Reset the procedure by typing rs (Return).

Entering Data in the Data Fields

Find the function key 3 Data. Press that key. Immediately, the label on the function key changes to 3 Line and the cursor is now up in the field 1 data field. The 4 Clear key is also displayed.

Now type an extension to be entered in the field. As you type in the extension, the numbers are entered into the field character-by-character. When the extension was entered on the command line, the number didn't appear in the field until after pressing (Return).

With this feature, the data entered into the field is seen as it is typed. Use the (Backspace) key to back up and correct any errors. After typing the extension in the field, press (Return) to move to the next field. If you want to skip a data field, press (Return). This leaves dashes in the field(s) skipped. To back up to a previous field, use the (Shift) (Tab) or (\uparrow) keys. Use the (Tab) and (\downarrow) keys to move forward to the next data fields.

Continue to enter data or skip data fields until all data fields have been filled.

After filling the last data field, press Return, and the function keys 3 Line and 4 Clear immediately blank out and the cursor returns to the command line waiting for the next command (usually an add or a change or a correction to some field data).

In other words, the 3 Data and 3 Line keys toggle the cursor between the command line and the data fields. Experiment with each way of entering data to find the one that best suits your needs.

Commands Used to Process Data Entered in a Procedure

After entering data into fields of a procedure, you must send this information to the switch as a translation. Here are some commands that do this.

dx — display execute

Use this command after paging in a procedure to display information stored in translations. For example, to see what has been administered for extension 52005, type p000 52005 dx (Return).

This will display any translations already there for extension 52005. If no translations are there, dashes are displayed in all other data fields (in some procedures, zeros are displayed when nothing is translated).

nd - next data

Use next data while in procedures to search through a series of translation items. For example, to display all assigned coverage groups, type **p011 1 dx** (Return) to display coverage group 1 and then **nd** (Return) repeatedly to search through the other coverage groups.

When all coverage groups have been displayed, dashes are displayed in all fields signifying that the search is complete. A subsequent **nd** (Return) will start the search over again.

ax — add execute

Use **ax** to add translations to the switch. After entering data into the fields, type **ax** (Return). After a successful add, the first input field is highlighted. There is no other positive indication that the operation was successful.

After every **ax**, also do a **dx** to verify that the data was added correctly. If the data fields all have dashes after doing the display, something has gone wrong and the translation was not sent to the switch.

cx — change execute

Use **cx** to change translations that already exist on the switch. After changing data in a field, type **cx** (Return). After a successful change, the first input field is highlighted. There is no other positive indication that the operation was successful.

After every **cx**, also do a **dx** to verify that the data was changed correctly. If the changed data fields have something different after doing the display, something has gone wrong and the translation was not sent to the switch.

rx — remove execute

Use **rx** to remove translations from the switch. After displaying translations from a procedure, type **rx** (Return).

After every remove execute, also do a display execute to verify that the data was removed. If the data fields have data in them even after doing a remove, something may have gone wrong and the translation was not sent to the switch.

Other Commands Used Regularly

The following is a list of other commands used regularly when sending translations to the switch.

v — verify

This can be used to redraw the screen in case a data transmission error has invalidated the screen display. To use this command, type \mathbf{v} (Return). Any data in the fields remains intact.

This command is used to clear out a data field (put dashes in the field). When on the command line, type **ce** (Return). When entering data when the cursor is in the data fields, press 4 Clear.

cf## — change field

The cf## command, where ## represents a one- or two-digit field number, allows you to go directly to a specified field to enter some data. For example, to enter a 10 in field 13, type cf 13 10 Return. After entering this data, you would typically do a display, add, or change.

hist — history

The **hist** command displays the last nine commands sent to the switch and responses received from the switch. This is handy when multiple error messages get displayed on the message line and they go by too quickly to read. To use this command, type **hist** Return. Exit from this screen by typing Return or Exit properties.

In the hist command, each line is preceded by either a < or > or !. The < identifies a command sent to the switch, the > identifies a response from the switch, and the ! identifies a status message from the switch.

Enhanced Mode Help

The enhanced mode help is available whether or not you are connected to the switch but only if the switch support base electronic flipcharts are loaded on the PC. While using Procedure 000 Word 1, take time to look at the help available.

The help information may be contained in several help windows. Use the (Page)Up (Page)Down (\uparrow) and (\downarrow) keys to display multipage help windows.

h or help or 5 Help — general help

Use this command to display a menu of help available for the current procedure plus other help information. To access this help, press $5 \, \text{Help}$ or type h Return or help Return. The available items are also selected by using the highlight bar with the \uparrow and \downarrow keys and then either Return or $3 \, \text{Select}$. After reading the help, press either Return or $2 \, \text{Return}$ to get back to the previous help menu. After selecting this help, two new keys are displayed. The first is named $5 \, \text{Errors}$. Use this key to get a complete listing of the special error codes available for that procedure. This is helpful if a special error code is longer than the one line that is displayed. Use this help to see the entire special error code. The second new key is $6 \, \text{Field}$. Use this key to get field help on a procedure even when you aren't connected to a switch. Step through the fields in the procedure using the Return key.

To leave the help menu all together, press 1 Exit

hf or 6 Field — field help

This gives specific information about data fields within a procedure. At a minimum, a range of input numbers is displayed on the message line. In addition, text explanations for that field, if appropriate, are displayed. If encodes are used as input for that field, they are also displayed and may be selected.

To access field help when the cursor is in a field, press 6 Field. To access field help when the cursor is on the command line and a field is highlighted, either press 6 Field or type **hf** (Return).

If encodes are displayed, they will be after any help text and in a format like this:

0=Not assigned 1=Assigned In this example, a highlight bar will rest on the first selection. You can move up and down through all possible selections by using \uparrow and \downarrow To make a selection using the highlight bar, type either Return or 3 Select. You may also manually enter the encode by leaving the help screen (press 1 Exit) and then typing in the desired encode on the command line or in the data field.

```
hi or 7 Input — input help
```

This help shows which procedure fields must have data to execute the standard display, add, change, and remove commands. This help is also available in basic mode. To access this help, press 7 Input or type **hi** (Return). To leave the command help, press either (Return) or 1 Exit.

```
hc or ? or 8 Cmds — command help
```

This help gives a one-page summary of all the commands discussed in this chapter. This help is also available in basic mode. To access this help, press 8 Cmds or type ? Return or type hc Return). To leave the command help, press either Return or 1 Exit.

Advanced Commands

The following commands will rarely be used during normal operations but are given here for information.

```
sw — switch processors
```

The **sw** command is used by maintenance personnel to switch between the on-line and the off-line when they want to run tests on the off-line processor. They type **sw** (Return) to switch to the off-line processor. When the switch is completed, the status line is updated.

```
get — get electronic flipcharts from the switch support base (SSB)
```

The **get** command allows you to download electronic flipchart information from the SSB in switch memory to the PC. The electronic flipcharts are only used in enhanced mode. This is usually done only after updates have been made to the switch software and new versions of electronic flipcharts are required.

rld — reload the common control

The rld command reloads the Generic 2 switch common control from the system disk (not from tape). When a reload is done, the common control is taken out of service for just a few minutes. Any translation changes done since the last run tape will be lost during a reload. To start a reload, type rld Return disc Return. Reconnect to the switch after the reload is finished.

```
ptx — park tape execute
```

Use this command to return a tape to the beginning of tape (BOT) mark. To use this command, type ptx (Return). A park tape is done automatically after every run tape. Any procedure used before doing a park tape will have to be called in after the park tape is completed.

el module cabinet carrier slot circuit — equipment location mapping

Use **e1** to convert universal or XE module equipment locations to their traditional module equivalent. For example, if you typed **e1 1 0 e 15 20** (Return), the message line will display the equivalent equipment location as if it were on a traditional module. This command will usually be used only while in basic mode.

Using Task Mode

The task mode of Manager II is an extension of the basic and enhanced modes. It takes administration information about voice terminals and executes the appropriate procedures to complete the request. You still enter information into data fields but they are arranged differently from how basic and enhanced mode fields are presented. With task mode you can display, add, change, and remove a voice terminal or data module. See *Voice Terminal and Data Module Administration*.

Ending the Session

After doing all the translations for a session, end your session by saving your changes, disconnecting from the switch, and exiting from the Manager II program.

rtx — run tape execute

After making any translation changes, the RUN TAPE indicator will light on the status line. This means you need to do a run tape. If a run tape is not done, translation changes will be lost if the switch should reload. To start a run tape, type rtx Return. Status messages will be sent to the screen showing the progress of the run tape. This operation takes about 15-30 minutes depending on the translations and longer if you have duplicated common control. Normal switch operation is not affected when doing a run tape except that the switch cannot be accessed by any system management agent (Manager II, Manager IV, etc).

In case you forget to do a run tape after your session, there is an automatic run tape done at 29-hour intervals. This automatic update should not be relied upon for normal updating because a reload will cause translations to be lost if a run tape was not done after making translation changes.

disc — disconnect from the switch

After saving the translations using run tape, disconnect from the switch. The **disc** command simply disconnects Manager II from the current switch connection. This leaves you within the Manager II operating system so that you can do other operations, such as, connect to another switch. To disconnect, type **disc** (Return).

quit — quit out of the Manager II

SYSTEM ADMINISTRATION

General Information

This chapter describes some of the basic administration required for activating system-level hardware and software. Many of these items are administered at installation, but are provided here for completeness.

- Identifying equipment locations
- Loading software
- Run tape
- System access with Procedure MODE
- Security code and customer identification
- Carriers
- Duplicated common control
- Cache memory
- Combined Common Control/Time Multiplexed Switch (CC/TMS)
- Touch-tone receivers and senders
- Tone plants
- Dial pulse originating records and intercom records
- Synchronization Clock (Stratum 3)
- System clock
- Dialing plan
- Class of service
- Names database
- Remote carrier groups
- Traffic
- Alarms.

Identifying Equipment Locations

Many of the procedures used in administering features on the DEFINITY Generic 2 system will use the equipment locations of specific circuit packs. Therefore, it is necessary to understand how the equipment locations within the cabinets are specified.

The equipment locations are set up in one of three basic cabinet configurations:

- Universal Module
- Traditional Module
- XE Module.

Within each of these cabinet configurations, the equipment locations are similar. Each equipment location consists of the following addressing hierarchy:

- Module (0-30)
- Cabinet (0-7 for traditional modules, 0 for universal and XE modules).
- Carrier (0-3 for traditional modules, a-e for universal and XE modules).
- Slot (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, and 1-18 for XE modules).
- Circuit (Refer to Table 2-1 for circuit numbers on specific circuit packs).

The **module** number indicates a specific group of system cabinets that function as a unit. A module must contain the required module control carrier(s) and port carrier(s).

The cabinet number indicates a specific cabinet within the module.

NOTE

Universal modules are entirely contained within single cabinet. For administration, XE modules are also considered to be entirely contained within a single cabinet (phyically they actually consist of a stack of single-carrier cabinets). Universal modules and XE modules are always assigned as cabinet number 0.

Traditional modules typically have more than one cabinet.

The **carrier** number indicates the carrier position within the cabinet. Figures 2-1, 2-2, and 2-3 illustrate the basic layout and carrier positions for the universal, traditional, and XE modules. The only difference between the universal and XE modules is the number of slots, and the service slot for the XE is slot 1.

Universal module carrier positions are identified by the letters 'a-e'. The carrier positions located above the fan assembly are identified as 'a', 'b', and 'c' from the bottom to the top. The carrier positions located below the fan assembly are identified as 'd' and 'e' from top to bottom (see Figure 2-1).

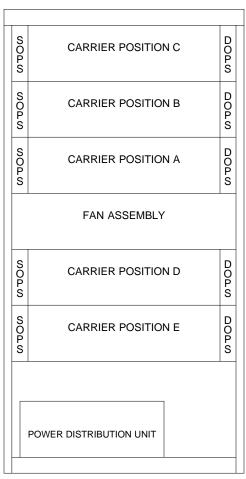


Figure 2-1. Universal Module

The traditional module's carrier positions are identified by the numbers '0-3'. The carrier positions are numbered from bottom to top in ascending order (see Figure 2-2).

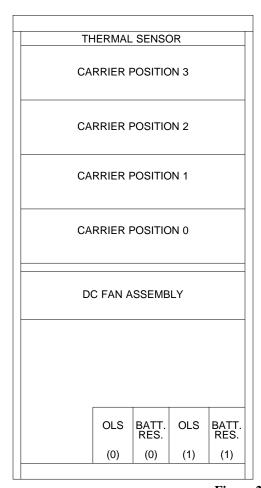


Figure 2-2. Traditional Module

The XE module's carrier positions are identified by the letters 'a-e'. The XE module is housed in single-carrier cabinets. The bottom cabinet contains one or two module control complexes; the upper cabinets each contain 18-slot port carriers.

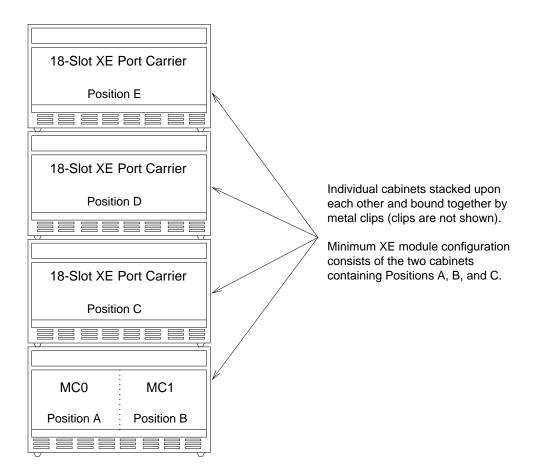


Figure 2-3. XE Module

The **slot** number indicates the specific slot within a carrier. The numbering schemes for the slot number are similar for both the universal module carrier and the traditional module carrier. The slots are numbered from left to right starting with the number '0' (see Figures 2-4 and 2-5). For universal module port carriers, the slot labeled ''service'' (slot 0) is reserved for the TN748 or is left blank.

	*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
+5V P O W E R	TN748C or BLANK	TN768 or PORT PACK	PORT PACK	P O R T P A C K	P O R T P A C K	P O R T P A C K	P O R T P A C K	P O R T P A C K	P ORT PACK	P O R T P A C K	P ORT PACK	PORT PACK	P ORT P A C K	PORT PACK	-5V/-48V P O W E R							

^{*} Labeled as 'Service Slot' with the slot number of '0' (See Note below). **Figure 2-4.** Universal and XE Module Port Carrier

NOTE

The XE module doesn't have a service slot 0. The XE has slots 1-18 on each carrier. The service slot for the XE is slot 1.

	00	01	02	03	04	05	06	07	80	09	10	11	13	14	15	16	17	18	19	20	21				٦
	PORT PACK	P O R T P A C K	PORT PACK	PORT PACK	T N 4 5 4 P O R T D A T A	PORT PACK	P O R T P A C K	P O R T P A C K	P O R T P A C K	TN452 PORT CONTRO	4 9 4 GA POWER UNIT	4 9 4 GA POWER UNIT	P O R T P A C K	P O R T P A C K	P O R T P A C K	P O R T P A C K	TN454 PORTDATA	P O R T P A C K	P O R T P A C K	P O R T P A C K	PORT PACK	-48 F3 13-16 18-21 F2 10	0	BAT 00-0: 05-0: 05-0: 13-1: 18-2	3 8 6 1
										L												F1		00-0	3
																						11		05-0	3

Figure 2-5. Traditional Module Port Carrier

The **circuit** number indicates the specific circuit on the specific circuit (port) pack. The number of circuits (ports) on the circuit packs can be found in Table 2-1. The circuits are numbered starting at '0' and increasing up to one less than the total number of ports on the circuit pack. For example, an ANN11E circuit pack has 24 ports total; therefore, the numbering scheme would be '0-23'. Please note that the values given in this document are usually the largest available numbers. This means that if you are administering an 8-port circuit pack (circuits 0-7) but the range given for that procedure is 0-15, don't try to administer circuits 8-15. The software, not knowing what circuit pack you are using, may let you do this but your administration will be faulty and it will not work.

Table 2-1. Traditional Module to Universal/XE Module Port Circuit Cross-Reference

140		ional Module	11000		sal Module
Code	Ports	Description	Code	Ports	Description
SN224B	4	MFET line port	TN735	4	MET line/106B display [Note 1]
SN228B	8	OPS line circuit	TN742	8	Analog line
SN229	8	ONS line circuit	TN746B	16	Analog line (ONS/OPS)
SN230B	4	CO trunk	TN747B	8	CO trunk
SN231	4	Auxiliary trunk	TN763C	4	Auxiliary trunk
SN232B	4	DID trunk	TN753	8	DID Trunk
SN233C	4	Tie trunk/ Attendant interface	TN760C	4	Tie trunk/ Attendant interface
SN238	4	EIA port	TN726	8	Data line
SN241	8	Contact interface	NA	NA	No equivalent
SN243B	4	Computer data port	TN742	8	Analog line
SN244	2	ANI data transmitter	NA	NA	No equivalent
SN250	NA	Call-progress tones	TN768	NA	Tone/Clock
SN251	4	Touch tone receiver	TN748C	4 (of 8)	Tone detector
SN252	4	Touch tone sender	TN768	NA	Tone/Clock
SN253C	1	Auxiliary tones	TN768	NA	Tone/Clock
SN254	1	Attendant 6-way Conf.	NA	NA	No equivalent
SN255	4	Tone detector 2	TN748C	2 (of 8)	Tone detector
SN260		Facility test circuit	NA	NA	No equivalent
SN261C	1	ADFTC	TN771B	3	MTCP
SN270B	4	General purpose port	TN754B	8	Digital line
	NA	No equivalent	TN556	12	ISDN—BRI
ANN11E	24	DS1 interface	TN767	24	DS1 Interface
ANN15B	NA	RGI — central	NA	NA	No equivalent
ANN16B	NA	RGI — remote	NA	NA	No equivalent
ANN17B	8	7303/7305 interface	TN762B	8	Hybrid line
ANN35	24	ISDN—PRI [Note 2]	TN767 + TN555	24	DS1 interface [Note 3] DS1 packet adjunct

Note 1:

The TN735 only supports the 106B display unit. MET sets, such as those used for Electronic Custom Telephone Service with DIMENSION PBX, and 7200 Series voice terminals (e.g., Models 7203H and 7205H) are not supported.

Note 2:

Only 23 of the 24 channels are B-channels unless Nonfacility Associated Signaling is used. In that case, all 24 channels may be assigned as B-channels.

Note 3:

ISDN—PRI requires both the TN767 DS1 and the TN555 DS1 circuit packs (except in an NFAS arrangement).

Load Software

System software is provided on a cartridge tape. At installation, the software is loaded onto a hard disk unit with the appropriate cartridge tape. It is unlikely that you will need to reload your system from tape, but these instructions are given here for your information.

- 1. On the tape cartridge you will find a set-screw that controls the writability of the tape. For loading, set the tape to the "SAFE" position. When you want to later save translation changes, you must change the position of the set-screw opposite from the "SAFE" position.
- 2. Next insert the cartridge tape into the Disk/Tape Subsystem (DTS) drive. The tape will "click" into position when successfully inserted.
- 3. On the alarm panel in the common control cabinet, there is a GO/HALT toggle switch. Set this to HALT. This halts the processor.
- 4. Next to the GO/HALT switch is a RESET button. Press the RESET button.
- 5. Set the GO/HALT switch to GO.
- 6. There is a thumbwheel on the alarm panel. Move the thumbwheel so that the number "9" is showing.
- 7. Find the ENABLE switch. This is a "momentary on-off" switch. Press the ENABLE switch. The lights on the alarm panel should go out momentarily and the green PASS lamp will light.
- 8. Move the thumbwheel until the number "15" is showing.
- 9. Press the ENABLE switch.

The lights will again go out on the alarm panel. The lights will remain off until the software is loaded. When the software is loaded, the green PASS lamp will flash at a steady beat.

Run Tape

Run-tape copies the translations from processor memory onto the tape and disk. This is done to save translation changes. If the system reloads before doing a run-tape, all the translation changes done since the last run-tape will be lost. As a safety measure, the system does an automatic run-tape every 29 hours. This is done to save any translations that were not saved manually or through a scheduled run-tape operation.

The run-tape operates differently between duplicated and unduplicated systems. On duplicated systems, the run-tape must update both the on-line and off-line disk/tape systems (DTS). On the unduplicated system, you only have one DTS. The DTS also keeps two versions of the software in what is called section A and section B. The version on section A is a copy of the last loaded tape and the version on section B is a copy of the tape that is currently in the tape drive.

- 1. On the tape cartridge you will find a set-screw that controls the writability of the tape. For run-tape, set the set-screw opposite from the "SAFE" position. This allows you to write changes on this tape.
- Insert the cartridge tape into the DTS drive. The tape will "click" into position when successfully inserted. Under most conditions, this tape should remain in the tape drive at all times.
- 3. At the Manager II console, connect to the system if not already connected.
- 4. To start the run-tape immediately, type **rtx** <CR>.

When the process begins, Procedure TPE displays on Manager II. Status is displayed in fields 1 and 2. There are also two status lamps (green and red) on the front of the DTS unit.

If on a duplicated system, the translations between both processors are compared (field 2 = 1). If they are not the same, error 75 (mismatch memories) is displayed. You can continue by typing **rtx** <CR>. By continuing with mismatched memories, only the on-line DTS is updated.

If the translations between processors match, the installed tape is copied onto section B of the disk. The green lamp is lit and the red lamp is flashing on the DTS and Procedure TPE has field 1 = 1 and field 2 = 2.

When complete, the processor translations are copied to section B on the disk. The red lamp is lit almost steadily during this operation.

The entire section B is now copied back onto the tape. The red lamp is now flashing and the green lamp is lit steadily.

The entire processor memory is now copied onto section A of the disk.

The contents of section A of the tape are compared with the processor memory. The red lamp is lit steadily on the DTS and Procedure TPE has field 1 = 1 and field 2 = 3.

If everything compares correctly, the tape is parked and the disk heads are parked. Procedure TPE field 1 = 1 and field 2 = 4 (very briefly).

This process is now repeated for the off-line tape in a duplicated system. Procedure TPE field 1=2 during the off-line update.

5. To schedule a run-tape operation for a later time, complete fields 1 through 3 in Procedure 384 Word 2. Any errors that occur during the run-tape will be reported in fields 4 and 5.

System Access (MODE)

There are several administration tools available that can connect to a Generic 2. Among these are Manager II, Manager IV, the Translation Recovery, Additions and Conversion System (TRACS), the Initialization and Administration System (INADS), and the Remote Maintenance, Administration, and Traffic System (RMATS). You can control access to your system by these "agents" by setting parameters in these procedures.

Procedure Sequence

ADD	CHANGE	REMOVE
277 Word 4	277 Word 3	277 Word 3
277 Word 1	277 Word 4	277 Word 2
277 Word 2	277 Word 1	277 Word 1
	277 Word 2	277 Word 4

Procedure Usage

277 Word 1

Administers an Operational Support Systems (OSS) agent to a set of application numbers. Only the OSS agent assigned to a set will be allowed to use applications in that set to change translations. A set can be assigned to only one agent, but an agent may be assigned to many sets.

Field 1	Enter the	set number (0-9).
Field 2	Enter the	OSS agent encode:
	3	RMATS II
	4	INADS - green
	5	INADS - red
	6	Remote Carrier Group maintenance
	7	TRACS
	8	Manager II - installation and maintenance
	9	SHOPS
	10	Run tape
	11	Delayed termination
	12	EMAP
	14	Park tape
	15	Trouble Tracker
	50	Manager III - services
	51-59	Manager III - customer
	60	Manager IV - services
	61-69	Manager IV - customer
	70	Manager II - services
	71-79	Manager II - customer

- 80 LMAAP
- 99 Translation audit
- 277 Word 2 Administers the restricted applications to an application set. These application sets are associated with agents in Procedure 277 Word 1. Administer the application set, the type of restriction, and the procedures or SMAP applications not allowed.
 - Field 1 Enter the set number (0-9).
 - Field 2 Enter the type of restricted application:
 - 0 Procedure
 - 1 System Management Application Protocol (SMAP) administration
 - 2 SMAP data collection
- This procedure gives a history of system management access. It includes the date, time, procedure accessed, and which agent accessed the procedure. Viewing these results may help you make decisions as to who should have access to the procedures.
 - Field 1 Enter the history index (1-16).
- 277 Word 4 Administers which agents are allowed to access the system.
 - Field 1 Enter the type of agents:
 - 3 RMATS II
 - 4 INADS green
 - 5 INADS red
 - 6 Remote Carrier Group maintenance
 - 7 TRACS
 - 8 Manager II installation and maintenance
 - 9 SHOPS
 - Run tape
 - 11 Delayed termination
 - 12 EMAP
 - 14 Park tape
 - 15 Trouble Tracker
 - Manager III services
 - 51-59 Manager III customer
 - 60 Manager IV services
 - 61-69 Manager IV customer
 - 70 Manager II services
 - 71-79 Manager II customer
 - 80 LMAAP
 - 99 Translation audit

Field 2 Enter the access authorization:

- 0 Access not allowed
- 1 Access allowed

Security Code and Customer Identification

When your system was first installed, a serial number, customer name, security code, and an alarm-reporting phone number were probably administered. You can change these assignments with the following procedures. The only thing that you shouldn't change is the serial number.

Procedure Sequence

ADD	CHANGE	REMOVE
497 Word 1	497 Word 1	497 Word 2
497 Word 2	497 Word 2	497 Word 3
497 Word 3	497 Word 3	

Procedure Usage

497 Word 1 Administers the serial number and displays the tape load currently on the system.

Field 2 Enter the serial number (00000001-999999999).

497 Word 2 Administers the customer name by segments and characters.

Field 1 Enter the segment number:

- 1 Segment 1 (characters 1-10)
- 2 Segment 2 (characters 11-20)

The applicable encodes for fields 2 - 11 are listed in the following table:

		CHARA	CTER ENCODE	S	
21 = A	11 = Q	44 = g	94 = w	18 = ?	58 = -
22 = B	72 = R	45 = h	95 = x	19 = ;	59 = +
23 = C	73 = S	46 = i	96 = y	20 = :	60 = *
31 = D	81 = T	54 = j	15 = z	27 = "	67 = {
32 = E	82 = U	55 = k	00 = 0	28 = '	68 = }
33 = F	83 = V	56 = 1	01 = 1	29 = '	69 =
41 = G	91 = W	64 = m	02 = 2	30 = ,	70 = \
42 = H	92 = X	65 = n	03 = 3	37 = (77 = <
43 = I	93 = Y	66 = 0	04 = 4	38 =)	78 = >
51 = J	12 = Z	74 = p	05 = 5	39 = _	79 = =
52 = K	24 = a	14 = q	06 = 6	40 = ~	80 = %
53 = L	25 = b	75 = r	07 = 7	47 = [87 = #
61 = M	26 = c	76 = s	08 = 8	48 =]	88 = &
62 = N	34 = d	84 = t	09 = 9	49 = ^	89 = @
63 = 0	35 = e	85 = u	10 = . (period)	50 = blank	90 = \$
71 = P	36 = f	86 = v	17 = !	57 = /	

```
Field 2
                Enter character 1 or 11 (-, 00-12, 14-15, 17-96).
Field 3
                Enter character 2 or 12 (-, 00-12, 14-15, 17-96).
Field 4
                Enter character 3 or 13 (-, 00-12, 14-15, 17-96).
Field 5
                Enter character 4 or 14 (-, 00-12, 14-15, 17-96).
Field 6
                Enter character 5 or 15 (-, 00-12, 14-15, 17-96).
Field 7
                Enter character 6 or 16 (-, 00-12, 14-15, 17-96).
Field 8
                Enter character 7 or 17 (-, 00-12, 14-15, 17-96).
Field 9
                Enter character 8 or 18 (-, 00-12, 14-15, 17-96).
Field 10
                Enter character 9 or 19 (-, 00-12, 14-15, 17-96).
Field 11
                Enter character 10 or 20 (-, 00-12, 14-15, 17-96).
```

497 Word 3 Administers the telephone number to where alarms are reported and the security code used to allow remote system management users to gain access to the system.

Field 1	Enter the prefix, if required (-, 0-9).
Field 2	Enter the area code, if required (-, 000-999).
Field 3	Enter the central office code (000-999).
Field 4	Enter the station number (0-9999).
Field 5	Enter the security code (000000-999999).

Carriers

At installation, all carriers should have been administered for you. If you do need to administer carriers later, use this section. The common control carrier is always administered, but it can be accessed to make changes.

Carriers must be administered in a certain order. Generally, this order is as follows:

- Common control (always administered)
- Time multiplex switch (TMS) control
- TMS growth
- Module control
- Port.

Procedure Usage

250 Word 1 Administers carriers to the system. When you administer the module control carriers, you are also administering that particular module as part of the system.

Field 1 Enter the module number (0-30, 99). Module 99 is used for CC/TMS cabinets and, where applicable, for common control cabinets and TMS/RMI cabinets. For the CC/TMS cabinet, the common control portion of the cabinet is administered as cabinet 0, carriers 0 and 1; the TMS portion of the cabinet is administered as cabinet 1, carriers 0 and 1.

Field 2 Enter the cabinet number (0-3 for common control/TMS, 0-7 for traditional modules, 0 for universal and XE modules).

Field 3 Enter the carrier number (0-3)for common control/TMS/traditional modules, c-e for universal and XE modules). When adding a new universal or XE module, module control carrier "a" must be entered as carrier position "0". This initial carrier must be added before the system can recognize the module as a universal/XE module. Once added, the system will display that carrier as "a". After adding the first module control carrier, the rest of the carriers in the module can be entered using letters (b-e).

Field 4 Enter the carrier type. Remember to administer the carriers in the order recommended above.

- 0 Unequipped
- 1 Common control
- 2 Universal module control 0
- 3 Universal module control 1

- TMS control 0
 TMS growth 0
 Traditional module control 0
 Traditional module control 1
- 8 TMS control 1
- 9 TMS growth 1
- 10 Universal port
- 11 DS1 port
- 12 Traditional port
- 15 Remote module interface (RMI)
- 16 XE universal module control 0
- 17 XE universal module control 1
- 18 XE universal port

Fields 5-8 only apply when administering module control carriers.

- Field 5 Enter the I/O assignment (-, 0-3). Field 6 Enter the port data store (PDS) assignment (-, 1-6). Field 7 Enter the duplicated module control assignment: Disable 1 Enable Field 8 Enter the TMS module control assignment: 0 Disable 1 Enable Field 9 Enter the port electrical carrier number (-, 0-11).
- Field 10 Enter the TMS electrical carrier number:
 - 0 TMS control (serves modules 0-6)
 - 1 TMS growth 1 (serves modules 7-14)
 - 2 TMS growth 2 (serves modules 15-22)
 - 3 TMS growth 3 (serves modules 23-30)
- Field 11 Enter the assignment that applies whether the system clock synchronizer (SCS) is installed.
 - 0 Disable
 - 1 Enable

Fields 12-15 identify the local equipment location for the interface to a remote module.

- Field 12 Enter the module number (0-30).
- Field 13 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
- Field 14 Enter the carrier number (0-1).
- Field 15 Enter the slot number:

15-21 Universal module control
25 Traditional module control
11A, 11B XE module control
0-3, 5-8, 13-16, 18-21
RMI Carrier

The following tables show the valid values for carrier assignments based on carrier type. For more information on administering carriers, see Procedure 250 Word 1 in *DEFINITY*TM *Communications System Generic 2 Administration Procedures* (555-105-506).

Cai	rr Equip	p.	Type		Mod	Cntrl.	
Mod 1	Cab 2	Car 3	4	I/O 5	PDS 6	Dup 7	TMS 8
0-max	0-7	0-3	1	-	-	-	-
99	0-3	0-3		-	-	-	-
0-max	0	0,b*	2,3	-	-	0-1	0-1
99	0-3	0-3	4,8,5,9	-	-	-	-
0-max	0-7	0-3	6,7	1-3	1-6	0-1	0-1
0-max	0	с-е	10	-	-	-	-
0-max	0-7	0-3	11	-	-	-	-
0-max	0-7	0-3	12	-	-	-	-
99	0-3	0-3	15	-	-	-	-
0-max	0-7	0-3	-	-	-	-	
0-max	0	0,b*	16,17	-	-	0-1	0-1
0-max	0	с-е	18	-	-	-	-

^{*} When adding a new universal or XE module, use "0" instead of carrier position "a". Once this is done, the system recognizes the module as a universal or XE module. On subsequent displays an "a" will be displayed instead of a "0". The remaining carriers are assigned using the letters "b-e".

T	Port	TMS	SCS		Loc	al RMI Equi	p.
Type 4	Elec Carr 9	Elec Carr 10	11	Mod 12	Cab 13	Carr 14	Slot 15
1	-	-	-	-	-	-	-
	-	-	-	-	-	=	
	-	-	0-1	-	-	-	-
	-	-	0	0-max	0-7	0-3	25
2,3	-	-	0 (RMI	99 carr)	0-3	0-3	0-3,5-8 13-16,18-21
	-	-	0 (RMI	0-max carr)	0-7	0-3	0-3,5-8 13-16,18-21
	-	-	0 (Univ.	0-max carr)	0	0-3 or a-b	15-21

	Port	TMS			Loc	al RMI Equi	p.
Type 4	Elec Carr 9	Elec Carr 10	SCS 11	Mod 12	Cab	Carr 14	Slot 15
4,8,	-	0	0-1	-	-	-	-
5,9	-	1-3	-	-	-	-	-
	-	-	0-1	-	-	-	-
	-	-	0	0-max	0-7	0-3	25
6,7	-	-	0 (RMI	99 carr)	0-3	0-3	0-3,5-8 13-16,18-21
	-	-	0 (RMI	0-max carr)	0-7	0-3	0-3,5-8 13-16,18-21
	-	-	0 (Univ.	0-max carr)	0	0-3 or a-b	15-21
10	-	-	-	-	-	-	-
11	0-11	-	-	-	-	-	-
12	0-11	-	-	-	-	-	-
15	0-11	-	-	0-max	-	-	-
	-	-	0	0-max	0-7	0-3	25
16 17	-	-	0 (RMI	99 carr)	0-3	0-3	0-3,5-8 13-16,18-21
16,17	-		0 (RMI	0-max carr)	0-7	0-3	0-3,5-8 13-16,18-21
			0 (Univ.	0-max carr)	0	0-3 or a-b	15-21
18	-	-	-	-	-	-	-

Duplicated Common Control

If the system has a duplicated common control, it must be administered as such.

Procedure Usage

275 Word 1 Administers whether duplicated common control is installed on the system.

Field 10 Enter the desired assignment:

Unduplicated Common ControlDuplicated Common Control

Cache Memory

The cache memory is 16K words of high speed memory that stores a copy of the most recently accessed instructions or data words. This reduces the wait time when the system processor needs to access something from memory.

Procedure Usage

275 Word 1 Administers whether cache memory is installed on the system.

Field 18 Enter the desired assignment:

Not installed

O Disable cache memory

1 Enable cache memory

Combined Common Control/Time Multiplex Switch (CC/TMS) Cabinet

There is a configuration of the common control cabinet where the TMS carriers can be installed with the common control carriers. This administration enables that option in software.

Procedure Usage

275 Word 3 Administers whether the combined CC/TMS is used on the system.

Field 15 Enter the desired assignment:

0 No combined CC/TMS

1 Combined CC/TMS

Touch-Tone Receivers

In order for voice terminals to receive dial tone and for touch-tone phones to make calls, you must administer the touch-tone receivers. This is a critical assignment that is typically done at installation, but if more touch-tone receivers are added, this administration is required.

Procedure Usage

150 Word 1

Administers the equipment location for the touch-tone receivers to trunk group 17. All touch-tone receivers in the system must be assigned and you must use trunk group 17.

Four of the TN748's eight circuits (circuits 0-3) can be assigned as touch-tone receivers for universal or XE modules. A minimum of two TN748s are required for each universal or XE module. For universal module port carriers, TN748s are installed in the service slots (slot 0) of carriers C and D. Carrier E's service slot may also be used to house a third TN748. If more than three TN748s are required, additional TN748s are assigned to other slots, beginning with slot 1 in carrier E.

For XE modules, TN748s are assigned to slot 1 (the XE module has no service slots).

The SN251 is used for traditional modules. The SN251 has four circuits and is labeled as the Touch-Tone Receiver.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0 for universal modules, 1 for XE modules).
Field 5	Enter the circuit number (0-3).
Field 6	Enter trunk group 17. Touch-tone receivers are always assigned to trunk group 17.

Touch-Tone Senders

Touch-tone senders reduce the time necessary to set up calls to distant locations equipped to receive touch-tone calling signals. The collected digits are sent to the distant office via touch-tone service signaling. If a distant location is not equipped to receive touch-tone calling signals, the system generates and sends dial pulses.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 1	150 Word 1	150 Word 1
150 Word 1		100 Word 1

Procedure Usage

100 Word 1

Administers the trunk group translations. These translations include the dial access code/trunk ID, trunk type, dial access restrictions, and personal central office appearance.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).
Field 6	Enter the touch-tone trunk type: 55 Touch-Tone sender
Field 7	Enter a "1" to set dial access restriction.
Field 8	Enter a "0" since touch-tone senders cannot be used to access personal CO lines.

150 Word 1 Administers the trunk equipment location for the touch-tone sender trunk group assigned in Procedure 100 Word 1.

The SN252 is used for traditional modules, has four circuits, and is labeled "Touch-Tone Sender."

The TN768 Tone/Clock Generator provides touch-tones for universal and XE modules. For universal modules, the TN768 is assigned to slot 1 of carrier C. If an additional TN768 is required, it is assigned to slot 1 of carrier D. For XE modules, the TN768 is assigned to slot 2 of carrier C. If an additional TN768 is required, it is assigned to slot 2 of carrier D.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1 for universal modules, 2 for XE modules).
Field 5	Enter the circuit number (0-3 for traditional modules, not applicable for universal or XE modules).
Field 6	Enter the trunk group number (18-999).

Tone Plants

Tone plants provide call progress tones such as ringback, reorder, etc. There are two types of tone plants in the traditional modules: the standard tone plant (SN250) and the auxiliary tone plant (SN253). At least one standard tone plant and one auxiliary tone plant must be assigned for every traditional module. In the universal/XE module, one tone plant (TN768) provides both the standard tones and the auxiliary tones.

Procedure Sequence

ADD	CHANGE	REMOVE	
252 Word 1	252 Word 1	252 Word 2	
252 Word 2	252 Word 2	252 Word 1	

Procedure Usage

252 Word 1 Administers the location of the standard tone plants within a module. Fields 1-5 correspond to tone plant 0. Fields 6-10 correspond to tone plant 1.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules). The tone plant in a universal module is typically assigned in slot 1.
Field 5	Enter the circuit number (0-7 for traditional modules, 0 for universal and XE modules).
Field 6	Enter the module number (0-30).
Field 7	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $ \\$
Field 8	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 9	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules). The tone plant in a universal module is typically assigned in slot 1.

Field 10 Enter the circuit number (0-7 for traditional modules, 0 for universal and XE modules).

252 Word 2 Administers an auxiliary tone plant (SN253 for traditional modules) for use with CAS, AUTOVON, and data detection tones. The equipment type, the tone plant number, and the equipment location must be administered. For universal modules, the standard tone plant (TN768) provides the auxiliary tones, therefore no administration is required here.

Field 1	Enter the equipment type: 1 CAS, AUTOVON, and data detection only 2 CAS, AUTOVON, and data detection tone with code calling
Field 2	Enter the tone plant number (0-1).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7).
Field 5	Enter the port carrier number (0-3).
Field 6	Enter a "0" for the circuit number.

Dial Pulse Originating Records and Intercom Records

A sufficient number of dial pulse originating records and intercom records must be set up for the system. Having too few records will result in users not being able to place calls. The values for this are set at installation, but may need to be changed later if additional trunk and voice terminal facilities are added to the system.

Procedure Usage

254 Word 1 Administers the dial pulse originating records and intercom records including the record type and the number of records.

Field 1 Enter the record type:

1 Dial pulse originating register record
2 Intercom record

Field 2 Enter the number of records you want active (0-246 for dial pulse originating records, 0-9999 for intercom records).

Synchronization Clock (Stratum 3)

The Synchronization Clock system consists of an external Stratum 3 clock, an interface circuit pack, and the local clocks of the system. The SCS reference for all DS1 circuits must be disabled (Procedure 260 Word 1 fields 12 and 13 set to 0).

Procedure Sequence

ADD	CHANGE	REMOVE	
250 Word 1	250 Word 1	250 Word 1	
260 Word 1	260 Word 1	260 Word 1	

Procedure Usage

250 Word 1 This procedure disables the SCS equipped field (field 11) for the clock interface board (TN2131). Disabling field 11 is necessary for the external synchronization clock (Stratum 3) to operate correctly.

clock (Stra	atum 3)	to operate	correctly.
Field 1		Enter the	module number (0-30, 99).
Field 2			e cabinet number (0-3 for common control/TMS, 0-7 for al modules, 0 for universal and XE modules).
Field	3	Enter control/T modules)	MS/traditional modules, c-e for universal and XE
Field 4		Enter the	carrier type:
		2	Single module configuration (universal module), module control 0
		3	Single module configuration (universal module), module control 1 (duplicated module control only)
		4	Multimodule configuration, TMS control 0
		6	Single module configuration (traditional module), module control 0
		7	Single module configuration (traditional module), module control 1 (duplicated module control only)
		8	Multimodule configuration, TMS control 1 (duplicated TMS only)
Field 11	I	Enter a 0	to disable the internal system clock synchronizer (SCS)

Field 11 Enter a 0 to disable the internal system clock synchronizer (SCS).

260 Word 1 If a Synchronization Clock (Stratum 3) is used, make sure all DS1 circuit packs residing on this switch have fields 12 and 13 set to 0.

System Clock (Time of Day)

The system clock should be set after doing the initial system administration tasks. The clock should also be checked regularly to make sure it is still working accurately. WCR, CDR, and other features rely on the accuracy of the system clock.

Procedure Sequence

ADD	CHANGE	REMOVE
652 Test 3	652 Test 3	
284 Word 1	284 Word 1	

Procedure Usage

284 Word 1 This procedure sets and displays the software clock. The hour in field 1 uses 24-hour time (0-23). If you set the time using Procedure 652 Test 1, you do not need to set this clock.

Field 1	Enter the hour of the day (0-23) (24-hour clock i.e., 0=midnight, 12=noon, 13=1:00 PM, etc.):
Field 2	Enter the minutes (0-59).
Field 3	Enter the month (1-12).
Field 4	Enter the day (1-31).
Field 5	Enter the year (1978-1999).

Sets the hardware and software clocks. Use Test 3 to enter the time and date in fields 7-12. The hour in field 10 uses 24-hour time (0-23). Use CLEAR DATA-EXECUTE to set the clocks to the entered time.

Field I	Enter the test number (1-3).
Field 7	Enter the month (1-12).
Field 8	Enter the day (1-31).
Field 9	Enter the year for software clock:
	 Not used with hardware clock display
	1-99 Year for software clock time and date display

Field 10	Enter the hour of the day (0-23) (24-hour clock i.e., 0=midnight, 12=noon, 13=1:00 PM, etc.):
Field 11	Enter the minutes (1-59).
Field 12	Enter the seconds (1-59).

Dialing Plan

When administering the dialing plan for the system, there are two main areas for administration: 1) the first dialed digit, and 2) the extension number, feature dial access code, or trunk dial access code.

The first dialed digit really defines how the dialing plan in the system will work. There are 12 digits that can be used as a first digit: 0-9, * and #. Here are some general uses of the first dialed digits that are common to many sites:

- The 0 digit is usually used for dial access to the PBX attendant.
- Digits 1-7 are usually used as first-digits for extension numbers, trunk dial access codes, and
 feature dial access codes. You cannot use the same first digit for an extension and a trunk dial
 access code or an extension and a feature dial access code. You can, however, use the same first
 digit for a trunk dial access code and a feature dial access code.
- Digit 8 is often used to access a private telephone network.
- Digit 9 is usually used to access local central office trunks.
- The * symbol is often used for the first digit of feature dial access codes and trunk dial access codes. The * symbol cannot be used as the first digit of an extension number.
- The # symbol is often used for the first digit of feature dial access codes and trunk dial access codes. The # symbol cannot be used as the first digit of an extension number.

Extension numbers can be from three to five digits long. Feature dial access codes and trunk dial access codes can be from one to four digits long.

The dialing plan used on the system should be planned carefully so that it makes some sense but is also flexible. You must also take into account that the dialing plan at your system may also be tied into a dialing plan across a network of systems (DCS, for instance).

Dialing Plan — Extensions

Procedure Sequence

ADD	CHANGE	REMOVE
350 Word 1		354 Word 1
354 Word 1		350 Word 1

Procedure Usage

Administers each first digit of the dialing plan. Each first digit is administered in terms of call type and the number of digits the system expects to receive when that first digit is dialed. All extensions must have the same number of digits.

Use the display routine to determine if the first dialed digit of an extension has been administered.

Field 1 Enter the first digit of the extension:

0-9 11 or * 12 or #

Field 2 Enter the number of digits the system expects to receive when the

digit in field 1 is dialed (3-5).

Field 3 Enter a "1" for the extension call type.

354 Word 1 Administers the blocks of extension numbers for the dialing plan. For 4- and 5-digit dialing plans, this procedure is also used to identify the node where the extension number resides in a portability subnetwork.

Field 1 Enter the first extension number in the block (any 3-, 4-, or 5-digit number ending in 0).

Field 2 Enter the last extension number in the block (any 3-, 4-, or 5-digit number ending in 9). The last extension number (Field 2) must be larger than the first extension number (Field 1) and both numbers must have the same number of digits. It is recommended that you do not administer extension blocks larger than 100 at a time.

Field 3 For a 4- or 5-digit dialing plan, enter the extension number portability node (system) number where the extension numbers reside (1-999). For a 3-digit dialing plan, enter a dash to define blocks of extension numbers on the local system.

Dialing Plan — Features

Procedure Sequence

ADD	CHANGE	REMOVE
350 Word 1	350 Word 2	354 Word 2
350 Word 2	354 Word 2	350 Word 2
354 Word 2		350 Word 1

Procedure Usage

350 Word 1

Administers each first digit of the dialing plan. Each first digit is administered in terms of call type and the number of digits the system expects to receive when that first digit is dialed. All feature dial access codes (DACs) that use the same first digit must have the same number of digits.

Use the display routine to determine if the first dialed digit of a dial access code has already been administered.

Field 1 Enter the first digit of the feature DAC:

0-9

11 or *

12 or #

Field 2 Enter the number of digits the system expects to receive when the digit in field 1 is dialed (1-4).

Field 3 Enter a "2" for the feature dial access code call type.

350 Word 2 Administers the dial access codes for the system features.

Field 1	Enter the	e appropriate feature encode:
	1	Call Forwarding - Follow Me
	2	Call Forwarding - Busy and Don't Answer
	3	Call Forwarding - cancel
	4	Call Hold
	5	Call Pickup
	6	Call Waiting - answer hold
	7	Priority Calling
	8	Attendant DAC
	9	Cancel Automatic Callback/Queuing
	10	Demand printing
	11	Override
	13	Data Protection (temporary)
	14	Demand print access (for LWC)

- 16 Call Answer Any Voice Terminal (CAAVT) answer
- 17 Paging answer-back
- 18 Traditional Code Calling answer back
- 19 Automatic Callback
- 20 Attendant Control of Trunk Group Access activate
- 21 Attendant Control of Trunk Group Access cancel
- 22 Unattended Console Service clear all terminals
- 23 Unattended Console Service assign common terminal
- 24 Unattended Console Service override common terminal
- 25 Unattended Console Service assign terminal to trunk
- 26 Remote Access change barrier code
- 27 Attendant control of voice terminals single extension
- 28 Attendant control of voice terminals group of extensions
- 29 Attendant interposition calling and transfer
- 30 Extension to selected attendant
- 31 Attendant Release Loop (ARL) time change (timed reminder)
- WCR Network 1 toll-free access
- 33 WCR Network 1 toll access
- 36 Call Detail Recording account code
- 37 Call Detail Recording start
- 38 Call Detail Recording stop
- 40 Terminal test
- 42 Maintenance busy a trunk
- 43 Maintenance unbusy a trunk
- 44 TVT trunk test access from terminal
- 45 CAS control activate
- 46 CAS control of backup terminal
- 47 CAAVT activate for CAS backup
- 48 CAS attendant puts remote call in hold state
- 49 Call to CAS attendant
- 50 CAS branch lamp test
- 53 Specific modem pool reservation
- 55 Send All Calls activate
- 56 Send All Calls cancel
- 57 Burned-in code cancel/activate
- 58 Transfer calls into AUDIX
- 59 Last Number Dialed
- 60 WCR plan change
- 61 WCR Network 2 access
- 62 Automatic Circuit Assurance start
- 63 Automatic Circuit Assurance stop
- 64 CAS main lamp test

- 66 Leave Word Calling activate
- 67 Leave Word Calling cancel
- 68 Message retrieval lock
- 69 Message retrieval unlock
- 70 ACD auto in mode
- 71 ACD auxiliary work mode
- 72 ACD manual in mode
- 73 ACD staffed mode
- 74 ACD member add
- 75 ACD member delete
- 76 ACD announcement verify
- 77 ACD agent override
- 78 ACD agent override (tone)
- 79 ACD reload lamp out
- 80 Divert attendant calls to recorded announcement activate
- 81 Divert attendant calls to recorded announcement cancel
- 82 AUTOVON precedence calling
- 83 AUTOVON attendant assistance
- 84 ACD overload balance all
- 85 ACD overload overflow
- 86 ACD overload balance default
- 87 ACD overload balance cancel
- 88 ACD agent log in
- 89 ACD agent log out
- 90 Dial the system list touch-tone terminal
- 91 Dial list A touch-tone terminal
- 92 Dial list B touch-tone terminal
- 93 Program automatic dialing number or list
- 94 Dial the system list rotary terminal
- 95 Dial list A rotary terminal
- 96 Dial list B rotary terminal
- 97 Unattended Console Service activate
- 98 Unattended Console Service deactivate
- 99 Malicious Call Trace deactivate
- 100 Malicious Call Trace activate
- 101 Speaker verification request
- 102 Speaker verification fail
- 103 Unadministered authorization code entered
- 104 No authorization code entered
- 105 Universal Code Calling/Chime Paging access
- 106 Universal Code Calling/Chime Paging answer back
- 107 Agent Skill Entry
- 108 WCR Network 3 access

- 109 WCR Network 4 access 110 WCR Network 5 access 111 WCR Network 6 access 112 WCR Network 7 access Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9). Enter the fourth digit of the dial access code (0-9). Field 5
- 354 Word 2 Administers an extension number to a feature access code. Both numbers may be used to access the feature, but the extension number would generally be required for network applications.
 - Field 1 Enter the extension number or extension number steering code (000-99999).
 - Field 2 Enter the use:
 - 0 Not allocated (display only)
 - Single extension on local system (display only, Procedure 000 Word 1)
 - 2 Extension assigned to an RNX
 - 3 Extension assigned to an ENP node number
 - 4 Extension assigned to a trunk DAC
 - 5 VDN on local system (display and search only, Procedure 000 Word 1)
 - 6 Allocated, but unassigned (display and search only)
 - 7 Extension is recent disconnect (display only, Procedure 003 Word 1)
 - 8 Extension is an LDN (display only, Procedure 204 Word 1)
 - 9 DAC digits are specified and the entry is a trunk group
 - 10 DAC digits are specified and the entry is a feature
 - Field 3 Enter the first digit of the dial access/RNX code. RNX codes must be 220-299, 320-399, 420-499, 520-599, 620-699, 720-799, 820-899, 920-999.

0-9

11 or *

12 or #

2-9 RNX

Field 4 Enter the second digit of the dial access/RNX code (0-9).

Field 5	Enter the third digit of the dial access/RNX code (0-9).
Field 6	Enter the fourth digit of the dial access/RNX code (0-9).
Field 7	Enter the system number where the extension resides (1-999).

Dialing Plan — Trunks

Procedure Sequence

ADD	CHANGE	REMOVE
350 Word 1	100 Word 1	354 Word 2
100 Word 1	354 Word 2	100 Word 1
354 Word 2		350 Word 1

Procedure Usage

100 Word 1 Administers the trunk group translations. These translations include the Dial Access Code/Trunk ID, trunk type, dial access restrictions, and personal central office appearance.

Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9). Field 6 Enter the appropriate trunk type:	Enter the trunk group number (18-999).		
Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9).			
Field 5 Enter the fourth digit of the dial access code (0-9).	Enter the second digit of the dial access code (0-9).		
	Enter the third digit of the dial access code (0-9).		
Field 6 Enter the appropriate trunk type:	Enter the fourth digit of the dial access code (0-9).		
Unassigned Touch-tone digit register (0) Attendant Conference (0) Queuing (0) CCSA/APLT 2-way with dial tone out (9) CCSA/APLT 2-way with dial tone out (10) CCSA/APLT 2-way (8) CCSA/APLT 2-way (5) CCSA/APLT 2-way (5) CO 1-way in attendant completing (1) CO 1-way out DOD (1) CO 2-way attendant completing in/DOD out (1) CO 2-way with party test attendant completing in/D out (2) TX 1-way in attendant completing (1) TX 1-way out DOD (1)			

- FX 2-way attendant completing in/DOD out (1)
- 25 FX 2-way with party test attendant completing in/DOD out (2)
- WATS 1-way in attendant completing (1)
- WATS 1-way out DOD or toll terminal access for TSPS (1)
- 28 WATS 1-way out DOD with party test (2)
- 30 DID immediate start (30)
- 31 DID wink start (3)
- 32 TIE 1-way in dial repeating (4)
- 33 TIE 1-way out automatic (31)
- 34 TIE 1-way out dial repeating (4)
- 35 TIE 1-way in automatic (28)
- 36 TIE 2-way dial repeating in and out (4)
- 37 TIE 2-way dial repeating in/automatic out (31)
- 38 TIE 2-way automatic in/dial repeating out (28)
- 39 TIE 2-way automatic in and out (32)
- 40 TIE 1-way in dial repeating (8)
- 41 TIE ETN 2-way dial repeating (26)
- 42 TIE ETN 1-way in dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 44 TIE 2-way dial repeating (27)
- 45 TIE 2-way dial repeating in/automatic out (8)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)
- Remote Access 2-way (1)
- Telephone dictation interface (7)
- 52 Recorded Announcement interface (7)
- 53 Traditional Code Calling interface (Not for Universal Code Calling) (7)
- 54 Loudspeaker Paging interface (7)
- 55 Touch-Tone sender (0)
- 57 CAS release link trunk 1-way outgoing from branch (13)
- 58 ANI interface (6)
- 62 Music on Hold interface (0)
- 65 SN241 contact interface (0)
- 66 CAS release link trunk 1-way incoming at main (14)
- 67 Audio interface (0)
- 70 Main/Satellite 1-way in (15)
- 71 Main/Satellite 1-way out (15)
- 72 Main/Satellite 2-way (15)
- 73 Main/Satellite 1-way in (16)
- 74 Main/Satellite 1-way out (16)
- 75 Main/Satellite 2-way (16)

	76	Main/Satellite 1-way in (17)
	77	Main/Satellite 1-way out (17)
	78	Main/Satellite 2-way (17)
	90	ACD first announcement or Call Vectoring
		announcement (7)
	91	ACD second announcement (7)
	92	ACD origin announcement (7)
	93	Malicious Call Trace recorder (7)
	100	Data-tones tone detector (0)
	101	Analog data modem pool (27)
	102	Digital data modem pool (18)
	103	Host access PDM (18)
	104	Host access TDM (18)
	105	3B5 AP DCPI (18)
	106	EIA 4 Port (18)
	107	ISN/EIA port (18)
	108	DMI host terminating, dial repeating in/automatic out
		(5)
	109	DMI dial repeating in and out (11)
	120	ISDN dynamic (20)
Field 7	Enter the	e Dial Access Restriction assignment:
	0	Access to this trunk group is allowed using the DAC
	1	Access to this trunk group is allowed only for testing
		and for unattended night service using the trunk ID
		code
Field 8	Enter the	e Personal CO Line assignment:
	0	Trunk group is not used for Personal CO Line Pickup
	1	Trunk group is used for Personal CO Line Pickup

350 Word 1 Administers each first digit of the dialing plan. Each first digit is administered in terms of call type and the number of digits the system expects to receive when that first digit is dialed. All trunk dial access codes (DACs) using the same first digit must have the same number of digits.

Use the display routine to determine if the first dialed digit of a dial access code or extension number has already been administered.

Field 1	Enter the first digit of the trunk DAC: 0-9 11 or * 12 or #
Field 2	Enter the number of digits the system expects to receive when the digit in field 1 is dialed (1-4).
Field 3	Enter a "2" for the trunk dial access code call type.

Field 6

Field 7

354 Word 2 Administers an extension number to a trunk access code. Both numbers may be used to access the trunk, but the extension number would generally be required for network applications.

Field 1 Enter the extension number or extension number steering code (000-99999).Field 2 Enter the use: Not allocated (display only) 1 Single extension on local system (display only, Procedure 000 Word 1) 2 Extension assigned to an RNX 3 Extension assigned to an ENP node number Extension assigned to a trunk DAC 4 5 VDN on local system (display and search only, Procedure 000 Word 1) Allocated, but unassigned (display and search only) 7 Extension is recent disconnect (display only, Procedure 003 Word 1) Extension is an LDN (display only, Procedure 204 Word 1) DAC digits are specified and the entry is a trunk group 10 DAC digits are specified and the entry is a feature Field 3 Enter the first digit of the dial access/RNX code. RNX codes must be 220-299, 320-399, 420-499, 520-599, 620-699, 720-799, 820-899, 920-999. 0-9 11 or * 12 or # 2-9 **RNX** Field 4 Enter the second digit of the dial access/RNX code (0-9). Field 5 Enter the third digit of the dial access/RNX code (0-9).

Enter the fourth digit of the dial access/RNX code (0-9).

Enter the system number where the extension resides (1-999).

Class of Service

A class of service specifies the calling privileges, features, and restrictions associated with the system or a group of extensions.

Class of Service — System

For system-wide parameters, there are several procedures that contain system class of service translations. These are listed here for reference, but most will be set with their applicable task or feature.

Procedure Usage

275 Word 1

Field 1	AIOD status
Field 2	AIOD prefix digits
Field 3	AIOD delay timing
Field 4	AIOD auxiliary ANI trunk billing number
Field 5	Call Waiting
Field 6	Multiappearance terminals and data modules used in the system
Field 7	Paging/Code Calling
Field 9	DID/CCSA digits
Field 10	Duplicated common control
Field 11	Music on hold
Field 12	CDR status
Field 13	CDR account code length
Field 14	CDR recording of incoming calls
Field 15	Tandem tie trunk access
Field 16	Trunk-to-trunk calling
Field 17	DCIU status
Field 18	Cache memory

275 Word 2

	Field 1	Preselected call routing
	Field 2	CAAVT status
	Fields 3-7	CAAVT equipment location
	Field 8	Unattended Console Service default extension
	Field 9	Unattended Console Service common extension (display only)
	Field 10	Share Remote Access trunks with LDNs
	Field 11	Remote Access barrier code (display only)
255 W 2		
275 Word 3	Field 1	Dial 1 for toll calls
	Field 2	Home NPA
	Field 3	Call Coverage caller response interval
	Field 4	Call Coverage coverage point don't answer interval
	Field 5	Abbreviated Dialing system list size
	Field 6	Abbreviated Dialing system list access
	Field 7	Multi-machine node type
	Field 8	Multi-machine node local system number
	Field 9	Multi-machine node CAS main system number
	Field 10	Call control FRL
	Field 11	Demand print password active
	Field 12	CDR default variable timer
	Field 13	Terminal dial information
	Field 14	CDR calls blocked
	Field 15	Combined CC/TMS
	Field 16	Attendant Conference
275 Word 4		
	Field 1	Traditional Code Calling Access digits
	Field 2	Disable Remote Access
	Field 3	Trunk-to-trunk transfer
	Field 4	Attendant release loop status

	Field 5	Attendant release loop timed recall timer
	Field 6	Default recent disconnect interval
	Field 7	Maximum preemption level for all incoming calls
	Field 8	Maximum preemption level for outgoing terminal calls
	Field 9	Maximum preemption level for outgoing attendant calls
	Field 10	AUTOVON interface system number
	Field 11	ACD abandon call search
	Field 12	Vector hold
	Field 13	CMS status
	Field 14	ISDN status
	Field 15	Even port peripheral alarms
	Field 16	Trunk software alarms
	Field 17	Auxiliary software alarms
	Field 18	Local system number (display only)
285 Word 1		
	Field 1	Remote access code required
	Field 3	Interdigit timing interval length
	Field 4	ACA enable
	Field 5	Symmetrical routing depth
	Field 6	WCR route selection method for station/attendant originated calls
	Field 8	Extension for trunk verification
	Field 9	Remote maintenance extension
	Field 10	WCR authorization code enable
286 Word 1		
	Field 1	ACA Status
	Field 2	ACA referral destination
	Field 3	ACA referral console number
	Field 4	Alternate FRL status
	Field 5	Alternate FRL 0

Field 6	Alternate FRL 1
Field 7	Alternate FRL 2
Field 8	Alternate FRL 3
Field 9	Alternate FRL 4
Field 10	Alternate FRL 5
Field 11	Alternate FRL 6
Field 12	Alternate FRL 7
Field 13	Routing plan in effect
Field 14	Routing plan control mode
Field 15	Ineffective attempts recorded by CDR
Field 16	Remote Access to attendant

Class of Service — Extension

Every extension assigned to the system must be assigned a class of service (1-63). A class of service specifies the features a voice terminal user is allowed to access and the calling restrictions that apply to the voice terminal. Class of service 31 is reserved for Remote Access users. Extension classes of service are administered in Procedure 010 Words 1, 2, 3, and 4.

010 Word 1 Administers various features to a voice terminal class of service. The class of service for an extension is found in Field 7 of Procedure 000 Word 1.

Field 1	Enter the class of service (1-30, 32-63).		
Field 3	Enter the Automatic Callback assignment: 0 Disable 1 Enable		
Field 4	Enter the Call Forwarding — Busy Don't Answer or Call Forwarding — Don't Answer assignment: 0 Disable 1 Enable Call Forwarding — Busy Don't Answer 2 Enable Call Forwarding — Don't Answer		
Field 5	Enter the Call Forwarding — Follow Me assignment: 0 Disable 1 Enable		
Field 6	Enter the call hold assignment: 0 Disable 1 Enable		
Field 7	Enter the calling number display assignment: 0 Disable 1 Enable with calling number display unit 2 Enable with display unit integrated with the voice terminal		
Field 8	Enter the Priority Calling assignment: 0 Disable 1 Enable		
Field 9	Enter the Call Waiting assignment: 0 Disable 1 Enable		
Field 10	Enter the Override assignment: 0 Disable 1 Enable		
Field 13	Enter the priority paging assignment: 0 Disable		

1

Enable

	Field 4	Enter the Call Forwarding — Off Net assignment:
	Field 3	Enter the LWC terminating assignment: 0 Disable 1 Enable
	Field 2	Enter the LWC originating assignment: 0 Disable 1 Enable
	Field 1	Enter the class of service (1-30, 32-63).
010 Word 2	Administers vari	ous features to a voice terminal class of service.
	Field 23	Enter the Send All Calls assignment: 0 Disable 1 Enable
	Field 22	Enter the ACD agent override assignment: 0 Disable 1 Enable
	Field 21	Enter the stop hunt assignment: 0 Hunting 1 No hunting
	Field 20	Enter the ACD member assignment: 0 Disable 1 Enable
	Field 19	Enter the ACD queue display assignment: 0 Disable 1 Enable
	Field 17	Enter the ring ping immediate assignment: 0 Disable 1 Enable
	Field 16	Enter the timed recall exempt assignment: 0 Disable 1 Enable
	Field 15	Enter the Touch-Tone Dialing assignment: 0 Disable (rotary dialing only) 1 Enable (touch-tone and rotary dialing)
	Field 14	Enter the Conference Three Party/Transfer assignment: 0 Disable 1 Enable
		1 Ellable

		1 Enable
	Field 5	Enter the CDR account code assignment: 0 Disable 1 Enable
	Field 6	Enter the Malicious Call Trace control assignment: 0 Disable 1 Enable
010 Word 3	Administers vari	ious restrictions to a voice terminal class of service.
	Field 1	Enter the class of service (1-30, 32-63).
	Fields 2-10	Enter the miscellaneous trunk group restrictions: 0 Not restricted 1 Restricted
	Field 11	Enter the APLT off-net restrictions: 0 Not restricted 1 Restricted
	Field 12	Enter the code restriction level restrictions: 0 Least restrictive 1 Most restrictive 2 More restrictive 3 Restrictive
	Field 13	Enter the Data Protection restrictions: 0 Not restricted 1 Restricted
	Field 14	Enter the DID restrictions: 0 Not restricted 1 Restricted
	Field 15	Enter the terminal-to-terminal only restrictions: 0 Not restricted 1 Restricted
	Field 16	Enter the inward call completing restrictions: 0 Not restricted 1 Restricted
	Field 17	Enter the manual terminating line restrictions: 0 Not restricted 1 Restricted
	Field 18	Enter the call origination restrictions: 0 Not restricted

0

Disable

	1	Restricted
Field 19	Enter the	e outward call restrictions:
	0	Not restricted
	1	Restricted
Field 20	Enter the	e call termination restrictions:
	0	Not restricted
	1	Restricted
Field 21	Enter the	e toll restrictions:
	0	Not restricted
	1	Restricted
Field 22	Enter the	e WCR toll restrictions:
	0	Not restricted
	1	Restricted
Field 23	Enter the	e FRL (0-7).

010 Word 4 Administers ISDN access and routing to an extension class of service.

1 2

Field 1	Enter the	e class of service (1-30, 32-63).
Field 2	Enter the maximum precedence level:	
	-	Precedence calling not allowed
	0	Flash override
	1	Flash
	2	Immediate
	3	Priority
	4	Routine
Field 3	Enter the	e ISDN routing access:
	_	ISDN service is not supported
	0	Use any facility

Use ISDN exclusively

Use ISDN if available; if not, use any available facility

Intercept Treatment

Intercept treatment is somewhat related to the system class of service. Intercept treatment defines the type of intercept treatment callers will receive depending on where the call came from and where the call was intended to complete. See the "Intercept Treatment" feature for more information.

Names Database

The names database is a database which associates names to lines or trunk groups. This allows the calling and called party to be identified by name or by other identifiers such as extension number, department number, etc.

Procedure Sequence

ADD	CHANGE	REMOVE
012 Word 1	012 Word 1	012 Word 1
012 Word 2	012 Word 2	
012 Word 3	012 Word 3	

Procedure Usage

012 Word 1 Prepares an extension, vector directory number (VDN), or a trunk group so that a name can be assigned to either one.

name can be assig	ened to either one.
Field 1	Enter the extension, VDN, or trunk group number (000-99999 for extensions and VDNs, 18-999 for trunk groups).
Field 2	Enter the type: 0 Trunk group 1 Extension or VDN
Field 3	Enter where you want the first character to display on the 40-character alphanumeric display (1-30).
Field 4	Enter the outgoing trunk display: - An extension is entered in Field 1 0 A name is not displayed for an outgoing trunk 1 A name is displayed for an outgoing trunk
Field 5	Enter the copy mode: 0 Use Word 2 to enter, add or change 1 Share key to existing name 2 Create name by copy
Field 6	Enter the extension or trunk group used to copy or share an existing name (000-99999 or 18-999).

012 Word 2 Administers the name for the extension or trunk group prepared in Procedure 012 Word 1.

Field 1 Enter the segment:

- 1 Assign characters 1-10
- 2 Assign characters 11-20
- 3 Assign characters 21-30

Fields 2-11 correspond to Character 1-10, respectively. See the Names Database — Character Encodes table.

Fields 2-11 Enter the character encodes for Characters 1-10 (00-12, 14, 15, 17-96).

	CHARACTER ENCODES				
21 = A	11 = Q	44 = g	94 = w	18 = ?	58 = -
22 = B	72 = R	45 = h	95 = x	19 = ;	59 = +
23 = C	73 = S	46 = i	96 = y	20 = :	60 = *
31 = D	81 = T	54 = j	15 = z	27 = "	67 = {
32 = E	82 = U	55 = k	00 = 0	28 = '	68 = }
33 = F	83 = V	56 = 1	01 = 1	29 = '	69 =
41 = G	91 = W	64 = m	02 = 2	30 = ,	70 = \
42 = H	92 = X	65 = n	03 = 3	37 = (77 = <
43 = I	93 = Y	66 = 0	04 = 4	38 =)	78 = >
51 = J	12 = Z	74 = p	05 = 5	39 = _	79 = =
52 = K	24 = a	14 = q	06 = 6	40 = ~	80 = %
53 = L	25 = b	75 = r	07 = 7	47 = [87 = #
61 = M	26 = c	76 = s	08 = 8	48 =]	88 = &
62 = N	34 = d	84 = t	09 = 9	49 = ^	89 = @
63 = 0	35 = e	85 = u	10 = . (period)	50 = blank	90 = \$
71 = P	36 = f	86 = v	17 = !	57 = /	

012 Word 3 Compacts the Name Database software table to free as much memory space as possible to add additional names. Put a "1" in Field 1 and do a change routine.

Field 1 Enter the specification to compact database:

- 0 No compaction
- 1 Compact name database

Remote Carrier Group (RCG) Administration

There is some basic administration required before assigning voice terminals and trunks to RCGs. RCGs only apply to traditional modules.

Procedure Usage

260 Word 1 Administers the Remote Carrier Lines (RCL) circuit pack (ANN15B for traditional modules). Twenty-fourth channel signaling is required and slip count must be disabled. The RCL must not be used as a System Clock Synchronization (SCS) reference. Set the RCL as being connected to a T1 carrier or a fiber optic link.

٠.	rerence. Set the	the E as being connected to a 11 carrier of a neer optic min.
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7).
	Field 3	Enter the port carrier number (0-3).
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21).
	Field 5	Enter the alarm level encode: - Conventional 0 None 1 Warning (default) 2 Minor 3 Major
	Field 6	Enter the framing format encode: 0 D4 (superframe) 1 FE (extended superframe)
	Field 7	Enter a "0" for 23 B plus 1 D-channel signaling.
	Field 8	Enter a "0" to specify "24th channel signaling."
	Field 9	Enter the suppression encode: 0 Zero code suppression 1 Binary-8 zero code suppression
	Field 10	Enter a "0" to disable slip count.
	Field 11	Enter the external loop encode: 0 Disable 1 Enable
	Field 12	Enter a "0" to specify no equipment type.
	Field 13	Enter a "0" to specify there is no SCS reference.
	Field 16	Enter the transmission medium: - Not applicable

- Copper (T1) Fiber optics 0
- 1

Remote Carrier Group (RCG) Terminal Extension Line Service

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration")

Class of Service — Extensions (See Chapter 2, "System Administration")

Procedure Sequence

ADD	CHANGE	REMOVE
250 Word 1	000 Word 1	052 Word 1
000 Word 1	051 Word 1	051 Word 1
275 Word 1	052 Word 1	000 Word 1
051 Word 1		275 Word 1
052 Word 1		250 Word 1

Procedure Usage

000 Word 1

Administers an equipment location and a class of service to an extension number. The equipment locations of the Remote Carrier Lines (RCL) circuit pack (ANN15B for traditional modules) and its two virtual slots are used for the equipment locations of remote voice terminals. The RCL may be located in slots 0, 5, 13, or 18. The two virtual slots are the next two slot locations of the carrier. For example, if the RCL is in slot 5, slot 6 will be virtual board 1 and slot 7 will be virtual board 2. If the extension number is to be used on a multiappearance voice terminal, leave the equipment location blank; this assignment is made in Procedure 052 Word 1.

Field 1	Enter the extension (000-99999).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7).
Field 4	Enter the port carrier number (0-3).
Field 5	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21).
Field 6	Enter the circuit number (0-7).
Field 7	Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010.
Field 8	Enter the appropriate port type: - Extension is administered in Procedure 052

- 6 OPS with terminal balance
- 9 DS1 OPS line

Field 9 Enter the desired assignment for DS1 OPS lines:

- Non-DS1 OPS line
- O Signaling enable for DS1 OPS line
- 1 Signaling disable for DS1 OPS line

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in Field 11. Occurrences of this extension must be removed from the procedures displayed in Field 11 before being removed in this procedure (000 Word 1).

051 Word 1

Administers the port equipment location to a multiappearance voice terminal. The equipment locations of the Remote Carrier Lines (RCL) circuit pack (ANN15B for traditional modules) and its two virtual slots are used for the equipment locations of remote voice terminals. The RCL may be located in slots 0, 5, 13, or 18. The two virtual slots are the next two slot locations of the carrier. For example, if the RCL is in slot 5, slot 6 will be virtual board 1 and slot 7 will be virtual board 2.

250 Word 1 Administers a remote group carrier to a traditional module.

Field 1 Enter the module number (0-30, 99).

Field 2 Enter the cabinet number (0-7).

Field 3 Enter the port carrier number (0-3).

Field 4 Enter a "2" to specify DS1 port carrier type.

275 Word 1 Administers the use of multiappearance terminals in the system.

Field 6 Enter the multiappearance/data module assignment:

0 Disable

1 Enable

Remote Carrier Group (RCG) Trunks

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration")

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restrictions — Miscellaneous Trunk Restrictions

Route Advance

Attendant Direct Trunk Group Selection.

Procedure Sequence

ADD	CHANGE	REMOVE	
	100777		
100 Word 1	100 Word 1	116 Word 1	
101 Word 1	101 Word 1	103 Word 1	
101 Word 2	101 Word 2	101 Word 2	
103 Word 1	103 Word 1	101 Word 1	
116 Word 1		100 Word 1	

Procedure Usage

100 Word 1 Administers the trunk group translations. These translations include the Dial Access Code/Trunk ID, trunk type, dial access restrictions, and personal central office appearance.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

	Field 6	Enter the RCG trunk type: 103 Host access PDM 104 Host access TDM 105 3B5 AP DCPI 106 EIA 4 port 107 ISN/EIA port
	Field 7	Enter the Dial Access Restriction assignment: O Access to this trunk group is allowed using the DAC Access to this trunk group is allowed only for testing and for unattended night service using the trunk ID code
	Field 8	Enter the Personal CO Line assignment: O Trunk group is not used for Personal CO Line Pickup Trunk group is used for Personal CO Line Pickup
101 Word 1	Administers trunk	group characteristics.
	Field 1	Enter the trunk group number (18-999). DCS trunk groups are limited to $18\text{-}255$.
	Field 2	Enter the balance assignment: 0 Not provided 1 Provided
	Field 3	Enter the battery reversal assignment: 0 Not provided 1 Provided
	Field 4	Enter the incoming prefix digit assignment: - No additional digits required for DID trunks 0-9 Use this additional digit for DID trunks
	Field 5	Enter the DCS assignment: 0 DCS not provided 1 DCS provided
	Field 6	Enter the touch-tone in assignment: O Touch-tone signals are not used for incoming trunks Touch-tone signals are used for incoming trunks
	Field 7	Enter the touch-tone out assignment: 0 Touch-tone signals not used for outgoing trunks 1 Touch-tone signals used for outgoing trunks
	Field 8	Enter the CDR activation assignment: 0 This trunk group not recorded by CDR 1 This trunk group recorded by CDR 2 This trunk group recorded by CDR and account code required

Field 9	Enter the AIOD billing number (-, 0000-9999). This is the default number used by the CO to bill the system for miscellaneous calls. Include any leading zeros that may be on the service order.
Field 10	Enter the amount of time that elapses before a Timed Recall occurs on this trunk group (0-31 in minutes).
Field 11	Enter the desired threshold (0-7). Timed Recall will not occur until the number idle trunks in a trunk group reaches the level entered into this field.
Field 12	Enter the number of seconds before CDR begins recording call data on this trunk group (1-99). A dash (-) in this field relinquishes control of this timer to Procedure 275 Word 3 Field 12.
Field 13	Enter the pad group assignment: 1 ISL TIE 2 EIA TIE 3 ISL DCO 4 EIA DCO 5 DTO 6 ATO 7 N12A 8 N12B
Field 14	Enter the toll restriction assignment: 0 This trunk group not toll restricted 1 This trunk group toll restricted
Field 15	Enter the APLT features assignment: 0 APLT features not allowed on this trunk group (CCSA only) 1 APLT features allowed on this trunk group
Field 16	Enter the disconnect supervision assignment: 0 Disconnect supervision not given on this trunk group 1 Disconnect supervision given on this trunk group
Administers the	e redial delay timer, hybrid balance specifications, and tie type

101 Word 2 Administers the redial delay timer, hybrid balance specifications, and tie type capability for a trunk group.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the redial delay time (0-50 in 0.1-second increments).

Field 3 Enter the hybrid balance specifications:

Not applicable

0 RC coupling

Field 14

103 Word 1

1 600 ohm coupling Field 4 Enter the tie type capability: Not applicable 0 Type 1 format 1 Type 1 compatible 2 Type 5 format Administers network trunk group parameters. Field 1 Enter the trunk group number (18-999). Field 2 Enter the FRL (0-7). Field 3 Enter the desired Travelling Class Mark specification: Do not send or expect to receive any TCMs 1 Send and receive the FRL TCM 2 Send and receive the FRL and the conditional routing **TCMs** Field 4 Specify whether symmetrical routing is possible: 0 No 1 Yes Field 5 Specify whether incoming tie trunk and APLT trunk can access WCR 0 Disabled 1 Enabled (use only if the trunk group consists of tie trunks or APLT trunks) Field 6 Specify whether an authorization code is required (incoming calls only): 0 No 1 Yes Field 7 Specify whether bridge-on is allowed: No 1 Yes Field 8 Enter the number of trunks (0-15) in this trunk group that are reserved for "first preferences" in any network routing pattern. Field 9 Specify whether dial tone detect ignore is in effect: 0 Dial tone detection is active 1 Dial tone detection is not active (ignore dial tone) Field 12 Enter the WCR conditional routing specifications: 0 Is not a satellite facility 1 Is a satellite facility

Enter the digit collection specifications:

- 0 Overlap outpulsing
- 1 Collect digits before outpulsing
- Field 15 Specify whether dial tone is suppressed after a WCR DAC is dialed or inferred via Procedure 101 Word 3.
 - 0 Apply dial tone
 - 1 Suppress dial tone
- Administers the individual RCG trunks to trunk groups. The equipment locations of the Remote Carrier Lines (RCL) circuit pack (ANN15B for traditional modules) and its two virtual slots are used for the equipment locations of remote trunks. The RCL may be located in slots 0, 5, 13, or 18. The two virtual slots are the next two slot locations of the carrier. For example, if the RCL is in slot 5, slot 6 will be virtual board 1 and slot 7 will be virtual board 2.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7).
Field 3	Enter the port carrier number (0-3).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21).
Field 5	Enter the circuit number (0-7).
Field 6	Enter the trunk group number (18-999).
Field 8	Enter the signaling assignment:
	0 Disable
	1 Enable

Traffic

The traffic procedures give you the ability to analyze the usage of traffic-sensitive switch resources in order to make their use most efficient and to insure adequate provisioning. The DEFINITY Generic 2 system provides the user with a large array of traffic measurements from which to define a traffic study. The types of traffic data available for study are:

- Performance Summary Data
- Processor Measurements
- Module Measurements
- Network and Routing Measurements
- Attendant Measurements
- Automatic Call Distribution (ACD) Measurements
- Call Coverage Measurements
- Feature Measurements
- Special Time-Coincident Measurements

Interactions with DEFINITY Monitor I and AT&T Traffic Studies

DEFINITY Monitor I is a system that polls and analyzes traffic data from the Generic 2 system. Monitor I users must set up traffic studies with Monitor I and should not use the traffic procedures.

Customers who employ AT&T to do traffic studies should not use the traffic procedures without first consulting AT&T.

References

Detailed explanations of the procedures used to administer traffic studies and retrieve data are provided in *DEFINITY Communications System Generic 2 Administration Procedures* (555-105-506).

To fully understand and analyze your traffic data, you must use the following traffic documents.

- DEFINITY™ Communications System Generic 2 and System 85 Traffic Measurements (555-104-502)
- DEFINITY™ Communications System and System 75 and System 85 Traffic Tables (555-104-503)
- DEFINITY™ Communications System and System 75 and System 85 Traffic Theory (555-104-504).

How to Perform Traffic Studies with Manager II

The following sections describe how your system stores traffic data, what specific data can be collected, and the procedures used to define a traffic study and display and reset traffic data.

Two Independent Traffic Studies

Table 2-2 gives a brief description of the traffic procedures provided by Manager II. Generic 2 is capable of maintaining two independent traffic studies — one for AT&T services personnel and another for the customer's personnel. Two independent sets of traffic procedures are provided. The "410" series is usually reserved for AT&T services personnel; the "450" series is reserved for the customer's personnel. Reference to these procedures will be made as "Procedure 410/450 Word 1". This means Procedure 410 Word 1 or Procedure 450 Word 1.

Table 2-2. Traffic Procedures

PROCEDURE	USE
Procedure 410/450 Word 1	Display or change (410 only) Ringback and Off-Hook Queue peg timing. Display the traffic time-of-day clock. Change the offset minutes past the hour used to process traffic data. Copy peak and time-coincident register assignments between studies. Zero traffic study translations. Set the peak and time-coincident study size.
Procedure 411/451 Word 1	Activate or deactivate the load balance study. Specify trunk groups to be studied.
Procedure 411/451 Word 2	Activate or deactivate carrier usage studies. Specify modules and quarter carriers (traditional modules) or slots (universal/XE modules) to be studied.
Procedure 413/453 Word 1	Define trunk group combinations for traffic studies.
Procedure 413/453 Word 2	Specify WCR patterns for traffic measurement. Specify Call Coverage groups for traffic measurement. Specify VDNs for traffic measurement.
Procedure 413/453 Word 3	Define ISDN associations for traffic studies.
Procedure 413/453 Word 4	Display ISDN D-channel traffic encodes and equipment locations.
Procedure 414/454 Word 1	Assign traffic measurement items to peak registers. Display number of peak and time-coincident registers assigned.
Procedure 414/454 Word 2	Assign time-coincident register(s) to a peak register. Display number of peak and time-coincident registers assigned.
Procedure 415/455 Word 1	Assign a traffic satellite number to a Main/Satellite trunk group.
Procedure 421/461 Word 1	Display traffic data. Reset a single data item or an entire packet of data to zero.

PROCEDURE	USE
Procedure 421/461 Word 2	Display equipment locations for the data displayed in Word 1 for ring group blockage, carrier usage, and port usage categories.
Procedure 421/461 Word 3	Display the network channels for the DCIU data displayed in Word 1, category 20.
Procedure 420 Word 1	Display processor data.

Traffic Collection Hour

Traffic data is collected for one hour before it is available for retrieval. You can define the collection hour to start and end on the hour or on five-minute increments after the hour using Procedure 410/450. For example, you can collect traffic data for the hour starting and ending at 20 minutes past every hour.

Displaying and Resetting Data

Traffic data available for retrieval can be selectively displayed and reset to zero using Procedure 421/461 Words 1-3. All traffic data available for retrieval as well as the data collected thus far during the current collection hour can be reset to zero using Procedure 410/450.

Traffic measurements are expressed in the following ways:

- *Counts:* A count is the number of occurrences of a specified event. For example, each time a connection is made, the "connection count" is incremented by one.
- *Usage Measurements:* A usage measurement is an approximation of the amount of time a facility is in use during the hour. The system periodically scans facilities and increments the appropriate usage measurement by the number of facilities currently in use. The exact usage for a facility is not measured. Instead, an assumption is made during each usage scan that any facility currently in use was in use throughout the scanning interval. The scanning interval used is generally 100 seconds, although some facilities, such as attendant consoles, are scanned more frequently. See *DEFINITY*TM *Communications System Generic 2 and System 85 Traffic Measurements* (555-104-502) for the scanning interval used for the various usage measurements. Unless otherwise noted, Manager II reports usage measurements in units of hundred (centum) call seconds (CCS).
- *Percent Occupancy:* Occupancy measurements for a processor are expressed as a percentage of its full capacity.

Traffic Measurements

This section lists the traffic measurements by subject area as defined in *DEFINITY*TM *Communications System Generic 2 and System 85 Traffic Measurements* (555-104-502). The following information, if applicable, is given for each traffic measurement.

• Data Type

AC - Accumulated Data

Accumulated data accumulates hour after hour until it is reset using the traffic procedures.

PK - Peak Hour Data

Peak hour data reports the highest value reached during a single traffic hour since the data was reset using the traffic procedures.

TC - Time-Coincident Data

Time-coincident data is associated with peak hour data to capture more information about the peak hour. Time-coincident data is for the same hour as the associated peak hour data.

If the data type can be either peak or time-coincident, it is identified as PK/TC.

MR - Most Recent Hour Data

Most recent hour or most recent occurrences for ring group blockage and authorization code data.

- Category The category number used in Procedure 421/461 to display the traffic measurements.
- *Index 1-3* Up to three index entries used to display the traffic measurements in Procedure 421/461.
- Administration For some traffic measurements, you must define a study using one or more of the traffic procedures outlined in Table 2-2. In the following tables, only the "450" series of procedures is listed.

For Procedure 414/454, the type or type and item encode is shown in parentheses separated by a comma (25,2). If two type encodes are valid for a given measurement, they are shown separated by an ampersand (20 & 22).

Conversion — An asterisk (*) denotes multiplication and the slash (/) denotes division when an
algorithm must be applied to the value displayed in Procedure 421/461 to obtain the original
magnitude of the data or the percent occupancy.

Where HHMM is denoted, the data is interpreted as a time of day (e.g., 1605 is 4:05 pm).

Where a bit number is denoted, the data displayed must be converted to binary as shown below to determine if the given bit corresponding to a binary flag is set.

If, for example, the value displayed was 137, find the bits set as follows:

- Choose the next decimal number in the chart below 137 which is 128.Bit 7 is set for 128.
- Next 137 128 = 9 and the next number below 9 is 8.Bit 3 is set for 8.
- Next 9 8 = 1 and number 1 is on the table.

Bit 0 is set for 1.

Bits 0, 3, and 7 are set (equal to 1) for 137.

Binary Flag Information

Decimal Number	Binary Bit							
Number	15-14-13-12 11-10-9-8				7-6-5-4	3-2-1-0		
1	-000	-00-0	0-0-0-0	0-0-0-1				
2	-000	-00-0	0-0-0-0	0-0-1-0				
4	-000	-00-0	0-0-0-0	0-1-0-0				
8	-000	-00-0	0-0-0-0	1-0-0-0				
16	-000	-00-0	0-0-0-1	0-0-0-0				
32	-000	-00-0	0-0-1-0	0-0-0-0				
64	-000	-00-0	0-1-0-0	0-0-0-0				
128	-000	-00-0	1-0-0-0	0-0-0-0				
256	-000	-00-0-1	0-0-0-0	0-0-0-0				
8192	-0010	-00-0	0-0-0-0	0-0-0-0				
16384	-0100	-00-0	0-0-0-0	0-0-0-0				
32768	-100	-00-0	0-0-0-0	0-0-0-0				

Performance Summary Data

System Flags								
Flag Data Type Category Idx 1 Con								
Reload	AC	5	0	bit 0				
System translation change	AC	5	0-16	bit 2				
Alarms								
Major	AC	5	0	bit 3				
Minor	AC	5	0	bit 4				
Warning	AC	5	0	bit 8				
Cache memory	AC	5	0	bit 14				

Traffic Flags and Polling Data								
Flag	Data Type	Category	Idx 1	Conv				
Traffic studies change	AC	5	0-16	bit 1				
Data zeroed	AC	5	0-16	bit 5				
Data reinitialized	AC	5	0	bit 6				
Short hour	AC	5	0-16	bit 7				
D-channel data								
Data under	AC	5	6	bit 9				
Data over	AC	5	6	bit 10				
TN563 data	AC	5	10	bit 12				
Diagnostic processor data	AC	5	10	bit 13				
Packet polled	AC	5	1-16	bit 15				
Number of hours in poll	AC	5	17					
Time of poll	AC	5	18	ННММ				
Time of last hourly update	AC	5	19	ННММ				

System-Wide Blockage Data								
Measurement Data Type Category Idx 1 Idx 2 Con								
TSI memory word blockages	AC	6	1					
TDM time slot blockages	AC	6	4					
TMS mismatch blockages	AC	6	2					
DCIU message queue blockages	AC	6	3					

Ring group blockages	MR	7	1-16		
Module blockages					
FIFO blockages					
Blockage count	AC	8	0-31	2	
Blockage flags	AC	8	0-31	1	bits 0-15
Timer blockages	AC	8	0-30	3	
Global GPP retransmissions	AC	8	0-30	4	
Digit send queue blockages	AC	8	0-30	5	
Network queue blockages	AC	8	0-31	6	
GPP send queue blockages	AC	8	0-30	7	
TMS network difficulty	AC	8	31	7	

Peak Hour Call Count and Usage Data							
Measurement	Data Type	Category	Idx 1	Conv			
Peak call count	PK	9	16	*16			
Connection usage	TC	9	2	*16			
Connection count	TC	9	1	*16			
Connection compensation count	TC	9	17	*16			
Port usage	TC	9	14	*16			
Outgoing usage	TC	9	15	*16			
Intermodule usage	TC	9	5				
Intermodule connection count	TC	9	4	*16			
TSI memory word usage	TC	9	7	*16			
TSI memory word count	TC	9	6	*16			
TDM time slot usage	TC	9	20	*16			
TDM time slot count	TC	9	19	*16			
Dial tone measurements							
Dial tone measured	TC	9	8	*16			
Dial tone delays > 3 seconds	TC	9	9	*16			
Hour update time for peak	TC	9	3	ННММ			

Peak Hour Module and Processor Data								
Measurement Data Type Category Idx 1 Conv								
501CC occupancy	TC†	9	10	*1.024/36				

1				
System management occupancy	TC†	9	18	*1.024/36
501CC overflow	TC†	9	11	*100
501CC audit cycles	TC†	9	12	
DCIU occupancy	TC†	9	13	*16/36
Module processor occupancy	TC†	10	0-30	/10
TMS base level interrupt count	TC†	10	31	
Hour update time for peak	TC†	9	. 3	HHMM
† In relation to peak call count.				

Processor Measurements

•	Oc	си	pancy Mea	sur	ments					
Measurement	Data Type		Category	_	dx 1	Idx	2	A	dmin	Conv
501CC occupancy										
Overall occupancy	PK/TC		12,13	1	4000	1-59	98	45	4 (3,4)	*1.024/36
	or PK		16†	l	1					*1.024/36
100-second occupancy	TC‡		17†		-36					
System management	PK/TC		12,13	1	4000	1-59	98	454	(3,20)	*1.024/36
occupancy									-	
501CC overflow	PK/TC		12,13	1	4000	1-59	98	45	4 (3,5)	*100
501CC overload	AC		18		1					
Call processing stimuli	PK/TC		12,13	1	4000	1-59	98	45	4 (3,6)	*100
DCP stimuli	PK/TC		12,13	1	4000	1-59	98	45	4 (3,7)	*100
Audit cycles	PK/TC		12,13	1	4000	1-59	98	454	(3,12)	
† Based on AT&T study l	nour administer	ed	in Procedu	ıre 4	10.					

[†] Based on AT&T study hour administered in I ‡ In relation to category 16 overall occupancy.

Call Count Measurements								
Measurement	Data Type	Category	Idx 1	Idx 2	Admin	Conv		
Call count	PK/TC	12,13	1-4000	1-5998	454 (3,15)	*16		
Connection usage	PK/TC	12,13	1-4000	1-5998	454 (3,13)	*16		
Connection count	PK/TC	12,13	1-4000	1-5998	454 (3,10)	*16		
Outgoing usage	PK/TC	12,13	1-4000	1-5998	454 (3,1)	*16		
Tandem usage	PK/TC	12,13	1-4000	1-5998	454 (3,2)			
Intermodule usage	PK/TC	12,13	1-4000	1-5998	454 (3,11)			
Dial tone measurements								
Dial tone measured	PK/TC	12,13	1-4000	1-5998	454 (3,9)	*16		
Dial tone delays > 3 seconds	PK/TC	12,13	1-4000	1-5998	454 (3,8)	*16		
WCR Network 0 calls	PK/TC	12,13	1-4000	1-5998	454 (3,26)			
WCR Network 1 calls	PK/TC	12,13	1-4000	1-5998	454 (3,17)			
WCR Network 2 calls	PK/TC	12,13	1-4000	1-5998	454 (3,16)			
WCR Network 3 calls	PK/TC	12,13	1-4000	1-5998	454 (3,21)			
WCR Network 4 calls	PK/TC	12,13	1-4000	1-5998	454 (3,22)			
WCR Network 5 calls	PK/TC	12,13	1-4000	1-5998	454 (3,23)			
WCR Network 6 calls	PK/TC	12,13	1-4000	1-5998	454 (3,24)			
WCR Network 7 calls	PK/TC	12,13	1-4000	1-5998	454 (3,25)			
Terminal dialed calls	AC	18	57					
Incoming calls								
DID calls encountering busy	AC	18	2					
DID calls abandoned	AC	18	3					
Incoming call queue calls	AC	18	4					
abandoned								
CDR measurements								
CDR usage	PK/TC	12,13	1-4000	1-5998	454 (3,19)	*16		
CDR records	PK/TC	12,13	1-4000	1-5998	454 (3,18)			
CDR record blockage	AC	18	9-10					
Tone detector timeout	PK/TC	12,13	1-4000	1-5998	454 (3,14)			

DCIU Measurements								
Measurement	Data Type	Category	Idx 1	Idx 2				
Byte count								
Bytes received	MR	19	1	1-8				
Bytes transmitted	MR	19	2	1-8				
Frame count								

Frames received	MR	19	3	1-8
Frames transmitted	MR	19	4	1-8
Frames retransmitted	MR	19	5	1-8
Packet count				
Data packets received	MR	20	1	1-128
Data packets transmitted	MR	20	2	1-128
Data packets retransmitted	MR	20	3	1-128
Transmission error counts				
SABM resets	MR	19	6	1-8
Logical channel resets	MR	20	4	1-128
Port blocked counters	MR	21	1-64	
Internal DCIU NMI error counter	MR	22	6	
501CC interface NMI error counter	MR	22	7	
Messages blocked	MR	23	1	1-64
DCIU Occupancy				
Queue usage	MR	23	2	1-64
Free DCIU message buffer count	MR	22	1	
Interject level occupancy counter	MR	22	2	
Base level occupancy counter	MR	22	3	
Interject level interrupts	MR	22	4	
Base level interrupts	MR	22	5	

Module Measurements

Module Processor Occupancy

See the table *Peak Hour Module and Processor Data (categories 9-10)* in the section on Performance Summary Data.

Module Usage Measurements									
Measurement	Data Type	Category	Idx 1	Idx 2	Admin				
TSI memory word usage	PK/TC	12,13	1-4000	1-5998	454 (12)				
TDM time slot usage	PK/TC	12,13	1-4000	1-5998	454 (17)				
Intermodule usage	PK/TC	12,13	1-4000	1-5998	454 (3,11)				

Module Counts										
Measurement	Idx 2	Admin								
Module counts										
TSI memory word count	PK/TC	12,13	1-4000	1-5998	454 (11)					
TDM time slot count	PK/TC	12,13	1-4000	1-5998	454 (16)					
Intermodule call count	PK/TC	12,13	1-4000	1-5998	454 (14)					

Module Blockage Measurements										
Measurement Data Type Category Idx 1 Idx 2 Ad										
Module blockages										
TSI memory word blockage	PK/TC	12,13	1-4000	1-5998	454 (10)					
TDM time slot blockage	PK/TC	12,13	1-4000	1-5998	454 (15)					
Mismatch blockage	PK/TC	12,13	1-4000	1-5998	454 (13)					

Load Balance Intramodule Measurements									
Measurement	Data Type Category Idx 1 Idx 2 A								
Intramodule usage	PK	1	0-30	1	451w1				
Intercom usage	TC	1	0-30	2	451w1				
Trunk to line usage	TC	1	0-30	3	451w1				

L					
Line to trunk usage	TC	1	0-30	4	451w1
Incoming tandem usage	TC	1	0-30	5	451w1
Outgoing tandem usage	TC	1	0-30	6	451w1

Load Balance Intermodule Measurements										
Measurement	Data Type	Category	Idx 1	Idx 2	Idx 3	Admin				
Intermodule usage	PK	2	0-29	1-30	1	451w1				
Intercom usage (module 1-2)	TC	2	0-29	1-30	2	451w1				
Intercom usage (module 2-1)	TC	2	0-29	1-30	3	451w1				
Trunk to line usage (module 1-2)	TC	2	0-29	1-30	4	451w1				
Trunk to line usage (module 2-1)	TC	2	0-29	1-30	5	451w1				
Line to trunk usage (module 1-2)	TC	2	0-29	1-30	7	451w1				
Line to trunk usage (module 2-1)	TC	2	0-29	1-30	6	451w1				
Incoming tandem usage (module 1-2)	TC	2	0-29	1-30	8	451w1				
Incoming tandem usage (module 2-1)	TC	2	0-29	1-30	9	451w1				
Outgoing tandem usage (module 1-2)	TC	2	0-29	1-30	10	451w1				
Outgoing tandem usage (module 2-1)	TC	2	0-29	1-30	11	451w1				

Carrier and Port Usage Measurements								
Measurement Data Type Category Add								
Carrier usage	MR	3	451w2					
Port usage	MR	4	451w2					

Network and Routing Measurements

	Trunk Group Measurements								
Measurement	Data Type	Category	Idx 1	Idx 2	Admin				
Usage									
Total usage	PK/TC	12,13	1-4000	1-5998	454 (5)				
Data usage	PK/TC	12,13	1-4000	1-5998	454 (65)				
Incoming usage	PK/TC	12,13	1-4000	1-5998	454 (8)				
Incoming data usage	PK/TC	12,13	1-4000	1-5998	454 (68)				
Busy usage									
Maintenance busy usage	PK/TC	12,13	1-4000	1-5998	454 (70)				
All trunks busy usage	PK/TC	12,13	1-4000	1-5998	454 (74)				
(in seconds)									
Call counts									
Total calls	PK/TC	12,13	1-4000	1-5998	454 (6)				
Data calls	PK/TC	12,13	1-4000	1-5998	454 (66)				
Incoming calls	PK/TC	12,13	1-4000	1-5998	454 (9)				
Incoming data calls	PK/TC	12,13	1-4000	1-5998	454 (69)				
Overflow	PK/TC	12,13	1-4000	1-5998	454 (7)				
Queuing measurements									
Usage	PK/TC	12,13	1-4000	1-5998	454 (30 & 40)				
Queued call count	PK/TC	12,13	1-4000	1-5998	454 (31 & 41)				
Overflow	PK/TC	12,13	1-4000	1-5998	454 (32 & 42)				
Calls abandoned	PK/TC	12,13	1-4000	1-5998	454 (33 & 43)				
Timeout	PK/TC	12,13	1-4000	1-5998	454 (34 & 44)				
Trunk group combinations									
Total usage	PK/TC	12,13	1-4000	1-5998	453w1, 454 (1)				
Incoming usage	PK/TC	12,13	1-4000	1-5998	453w1, 454 (1)				
Outgoing usage	PK/TC	12,13	1-4000	1-5998	453w1, 454 (1)				
Glare measurements									
Glare count	PK/TC	12,13	1-4000	1-5998	454 (71)				
Glare retry attempts	PK/TC	12,13	1-4000	1-5998	454 (72)				
Glare retry failures	PK/TC	12,13	1-4000	1-5998	454 (73)				

World Class Routing Measurements										
Measurement	Data Type	Category	Idx 1	Idx 2	Idx 3	Admin				
Total WCR calls										
WCR Network 0 calls	PK/TC	12,13	1-4000	1-5998	454 (3,26)					
WCR Network 1 calls	PK/TC	12,13	1-4000	1-5998	454 (3,17)					

1						. 1
WCR Network 2 calls	PK/TC	12,13	1-4000	1-5998	454 (3,16)	<u> </u>
WCR Network 3 calls	PK/TC	12,13	1-4000	1-5998	454 (3,21)	
WCR Network 4 calls	PK/TC	12,13	1-4000	1-5998	454 (3,22)	
WCR Network 5 calls	PK/TC	12,13	1-4000	1-5998	454 (3,23)	
WCR Network 6 calls	PK/TC	12,13	1-4000	1-5998	454 (3,24)	
WCR Network 7 calls	PK/TC	12,13	1-4000	1-5998	454 (3,25)	
WCR calls by pattern	AC	15	1-640	1-16		453w2
and preference						

Main/Satellite Measurements									
Measurement Data Type Category Idx 1 Idx 2 Admin									
DID to main	PK/TC	12,13	1-4000	1-5998	455w1, 454 (50)				
DID to satellite	PK/TC	12,13	1-4000	1-5998	455w1, 454 (51)				
Attendant recall from satellite	PK/TC	12,13	1-4000	1-5998	455w1, 454 (52)				

	ISD	N Measureme	ents			
Measurement	Data Type	Category	Idx 1	Idx 2	Admin	Conv
ISDN PRI Traffic						
Associations						
Total usage	PK/TC	12,13	1-4000	1-5998	454 (75)	
Incoming usage	PK/TC	12,13	1-4000	1-5998	454 (78)	
Total calls	PK/TC	12,13	1-4000	1-5998	454 (76)	
Incoming calls	PK/TC	12,13	1-4000	1-5998	454 (79)	
Overflow	PK/TC	12,13	1-4000	1-5998	454 (77)	
D-Channel Message						
Measurements						
I-field bytes	PK/TC	12,13	1-4000	1-5998	454 (80)	*32
I-field frames	PK/TC	12,13	1-4000	1-5998	454 (81)	
Call Record Measurements						
Total seizures	PK/TC	12,13	1-4000	1-5998	454 (99,1)	*16
Total releases	PK/TC	12,13	1-4000	1-5998	454 (99,2)	*16
Blocked seizures	PK/TC	12,13	1-4000	1-5998	454 (99,3)	
Parking lot seizures	PK/TC	12,13	1-4000	1-5998	454 (99,4)	
Copy standby to regular	PK/TC	12,13	1-4000	1-5998	454 (99,5)	
queue						

Attendant Measurements

Incoming Call Queue Measurements								
Measurement	Data Type	Category	Idx 1	Idx 2	Admin			
Queued call usage	PK/TC	12,13	1-4000	1-5998	454 (20,4)			
Queued call count	PK/TC	12,13	1-4000	1-5998	454 (20,5)			
Calls abandoned	PK/TC	12,13	1-4000	1-5998	454 (20,6)			
	or AC	18	4					

Console Measurements							
Measurement	Data Type	Category	Idx 1	Idx 2	Admin		
Attended usage	PK/TC	12,13	1-4000	1-5998	454 (20,2 & 22)		
Worked usage	PK/TC	12,13	1-4000	1-5998	454 (20,1 & 22)		
Worked count	PK/TC	12,13	1-4000	1-5998	454 (20,3 & 22)		

Attendant Calls and Features							
Measurement	Data Type	Category	Idx 1	Idx 2	Admin		
LDN calls answered	PK/TC	12,13	1-4000	1-5998	454 (20,7)		
Non-LDN calls answered	PK/TC	12,13	1-4000	1-5998	454 (20,8)		
Attendant recall calls	PK/TC	12,13	1-4000	1-5998	454 (20,9)		
Conference calls	AC	18	34				
Call waiting	AC	18	11				
Control of trunk groups Activate trunk group control Deactivate trunk group control	AC AC	18 18	32 33				
Malicious call trace	AC	18	60				
Attendant transferred calls abandoned	AC	18	59				
Invalid authorization code used by attendant	AC	18	44		-		
Attendant originated calls	PK/TC or AC	12,13 18	1-4000 35	1-5998	454 (20,10)		
CAS measurements Usage Call count	PK/TC PK/TC	12,13 12,13	1-4000 1-4000	1-5998 1-5998	454 (60,1) 454 (60,2)		

Abandoned calls RLT calls answered by attendant	PK/TC PK/TC	12,13 12,13	1-4000 1-4000	1-5998 1-5998	454 (60,3) 454 (60,4)
Unattended Console Service					
Measurements					
CAAVT calls	AC	18	5		
CAAVT calls abandoned	AC	18	6		

Automatic Call Distribution (ACD) Measurements

ACD Split Measurements							
Measurement	Data Type	Category	Idx 1	Idx 2	Admin		
Answered call usage	AC	26	1-60	2			
Answered call count	AC	26	1-60	1			
Queue usage	AC	26	1-60	4			
Queued calls	AC	26	1-60	3			
Calls Intraflowing to the Split from Another Split							
Total calls	AC	26	1-60	7			
External calls	AC	26	1-60	8			
Longest time in queue (in seconds)	PK	26	1-60	19			
Highest number of calls in queue	PK	26	1-60	20			
Queue threshold count	PK/TC	12,13	1-4000	1-5998	454 (61)		
Abandoned Call Counts Total calls	AC	26	1-60	5			
External calls	AC	26	1-60	6			
Calls Intraflowing from the Split to Another Split							
Total calls	AC	26	1-60	9			
External calls	AC	26	1-60	10			
Calls Flowing to Non-ACD Destinations Total calls External calls	AC AC	26 26	1-60 1-60	11 12			
Calls Intraflowing to a VDN Total calls External calls	AC AC	26 26	1-60 1-60	13 14			
ACD Calls Receiving Forced Disconnect Total calls External calls	AC AC	26 26	1-60 1-60	15 16			
ACD Calls Receiving Forced Busy Total calls External calls	AC AC	26 26	1-60 1-60	17 18			

A	CD Member M	easurements			
Measurement	Data Type	Category	Idx 1	Idx 2	Idx 3

Answered call usage	AC	25	1-60	0-1023	3
Answered call count	AC	25	1-60	0-1023	1
External answered call count	AC	25	1-60	0-1023	2

Call Redirection Measurements							
Measurement	Data Type	Category	Idx 1	Idx 2	Admin		
Message Center Calls							
Calls directed to Message Center	PK/TC	12,13	1-4000	1-5998	454 (62)		
	or AC	27	2	3			
Calls redirected to Message Center	PK/TC	12,13	1-4000	1-5998	454 (63)		
Calls redirected by Call Coverage	AC	27	2	1			
Calls redirected by Call Forwarding	AC	27	2	2			
AUDIX Calls							
Calls directed to AUDIX	AC	27	3	3			
Calls redirected by Call Coverage	AC	27	3	1			
Calls redirected by Call Forwarding	AC	27	3	2			
Other ACD Calls							
Calls directed to other ACD splits	AC	27	1	3			
Calls redirected by Call Coverage	AC	27	1	1			
Calls redirected by Call Forwarding	AC	27	1	2			

Call Vectoring Measurements							
Measurement	Data Type	Category	Idx 1	Idx 2	Admin		
Call Vector Measurements							
ACD usage for the vector	AC	28	1-128	3			
ACD calls using the vector	AC	28	1-128	1			
ACD calls abandoned out of the vector	AC	28	1-128	2			
VDN Measurements							
Total calls directed or redirected	AC	29	VDN	1	453w2		
to the VDN							
External calls directed or redirected	AC	29	VDN	2	453w2		
to the VDN							

Call Coverage Measurements

Also see ACD Measurements.

Call Coverage Group Measurements							
	Data						
Measurement	Type	Category	Idx 1	Idx 2	Idx 3	Admin	
Calls Offered to Principals							
Total calls	AC	24	1-25	1	1	453w2	
External calls	AC	24	1-25	1	2	453w2	
Calls overflowing to coverage							
Total calls	AC	24	1-25	2	1	453w2	
External calls	AC	24	1-25	2	2	453w2	
Calls offered to each coverage point							
Total calls	AC	24	1-25	3-5	1	453w2	
External calls	AC	24	1-25	3-5	2	453w2	
Calls overflowing from a coverage point							
Total calls	AC	24	1-25	6-7	1	453w2	
External calls	AC	24	1-25	6-7	2	453w2	
Calls abandoned at each coverage point							
Total calls	AC	24	1-25	8-10	1	453w2	
External calls	AC	24	1-25	8-10	2	453w2	

Call Redirection Measurements							
Measurement	Data Type	Category	Idx 1				
Calls Forwarded							
Total calls forwarded due to coverage criteria	AC	18	16				
Calls forwarded due to busy or don't answer coverage criteria	AC	18	17				
Send All Calls (SAC) Invoked							
Through a dial access code	AC	18	31				
Through a SAC group of extension button	AC	18	41				
Through a SAC single extension button	AC	18	61				

	Message Measurem	ents		
Measurement	Data Type	Category	Idx 1	Conv

Callback Messages Generated				
By calling party	AC	18	12	
By coverage personnel	AC	18	13	
Messages Retrieved				
By principals	AC	18	14	
By coverage personnel	AC	18	15	
LWC Message slots available	AC	18	48	†
LWC Message Overflow				
For the system	AC	18	49	
For an extension	AC	18	50	
Scrolling Measurements				
Messages received	AC	18	51	
Messages displayed	AC	18	. 52	
† Multiply this number by 16 ar	d then divide b	y the numbe	er	
of hours in the poll to determine	e the average i	umber of slo	ots	
available per hour.				
		•		-
	1	1	1	I

Feature Measurements

System Features				
Measurement	Data Type	Category	Idx 1	
Remote Port Measurements				
OSS Port Measurements				
Successful remote port access	AC	18	66,69	
Failed remote port access	AC	18	67,70	
Remote port timeout	AC	18	68,71	
RMATS Port Measurements				
Successful remote port access	AC	18	46	
Failed remote port access	AC	18	47	
Remote port timeout	AC	18	64	
Port Contention Measurements				
Incorrect remote agent code	AC	18	53	
Successful mode changes	AC	18	54	
Blocked mode changes	AC	18	55	
Traffic mode blockages	AC	18	56	
Remote Access Measurements				
Successful remote access	AC	18	7	
Failed remote access attempt	AC	18	8	
Incorrect speaker verification given				
Total failures	AC	18	65	
Ten most recent Authorization Codes	MR	30	1-10	
Invalid Authorization Code used on Remote Access trunk	AC	18	45	
Authorization Code Measurements				
Invalid code used at terminal	AC	18	42	
Invalid code used on tie trunk	AC	18	43	
Invalid code used by attendant	AC	18	44	
Invalid code used on Remote Access trunk	AC	18	45	

Dial-Activated Features					
Measurement	Data Type	Category	Idx 1		
Abbreviated Dialing	AC	18	26		
Automatic Callback	AC	18	18		
Automatic Callback - Cancel	AC	18	30		
Call Forwarding Follow Me	AC	18	23		

Busy/Don't Answer	AC	18	24
Cancel	AC	18	25
Call Pickup	AC	18	20
Call Waiting - Answer Hold	AC	18	22
Code Calling	AC	18	27
Hold	AC	18	19
Last Number Dialed	AC	18	73
Loudspeaker Paging			
Call	AC	18	28
Answer	AC	18	29
Malicious Call Trace	AC	18	58
Priority Calling	AC	18	21
Queuing - Cancel	AC	18	30
Send All Calls	AC	18	31

Button-Activated Features						
Measurement	Data Type	Category	Idx 1			
Abbreviated Dialing	AC	18	63			
Automatic Callback	AC	18	36			
Call Forwarding						
Follow Me	AC	18	39			
Busy/Don't Answer	AC	18	40			
Call Pickup	AC	18	37			
Last Number Dialed	AC	18	72			
Malicious Call Trace	AC	18	62			
Priority Calling	AC	18	38			
Send All Calls						
Group of extensions	AC	18	41			
Single extension	AC	18	61			

Special Time-Coincident Measurements

Measurement	Data Type	Category	Idx 1	Idx 2	Admin	Conv
Time of day	TC	12,13	1-4000	1-5998	454w2 (2,1)	ННММ
WCR plan in effect	TC	12,13	1-4000	1-5998	454w2 (2,2)	

Alarms and Failures

For information about alarms and how to clear those alarms, see *DEFINITY*TM *Communications System Generic 2 Maintenance Procedures* (555-104-117) and *DEFINITY*TM *Communications System Generic 2 Maintenance Repair Strategies* (555-104-118).

Administering the ISDN Advantage

The ISDN Advantage is a new capability involving a DCP voice and data connection between the switch and an ACD agent's workstation. ACD agents access telemarketing accounts through an AT&T 6538 or 6539 workstations. Voice capabilities are provided by the terminals listed in Procedure 052 Word 1. An ISDN/PRI link between the switch and a 6544 Controller provides agent access to a host computer running customer-provided application software. This capability provides the ACD agent with the calling party's account (on the data terminal) at the moment the agent answers the call (depending on the access time of the customer's application software).

Prerequisite Administration

Before administering multiappearance voice terminals and data modules, make sure the following are administered.

Automatic Call Distribution

The ISDN advantage user must be an ACD agent in order to get "Start of Call" and "End of Call" messages (i.e. calling and called party numbers).

Dialing Plan and Dialing Plan — Extensions (See "System Administration" in this chapter.)

Class of Service — Extensions (See "System Administration" in this chapter.)

Procedure 275 Word 1 Field 6 must be set to "1".

Related Administration

Although the following administration is not required for this feature or task, it is recommended to enhance operation:

Call Vectoring

Distributed Communications System

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 1	052 Word 1	052 Word 1
051 Word 1	051 Word 1	051 Word 1
052 Word 1	000 Word 1	000 Word 1
260 Word 1	260 Word 1	116 Word 1

100 Word 1	100 Word 1	100 Word 3
100 Word 3	100 Word 3	100 Word 1
101 Word 1	101 Word 1	262 Word 1
101 Word 2	101 Word 2	260 Word 1
116 Word 1	116 Word 1	
103 Word 1	103 Word 1	

Procedure Usage

000 Word 1 Administers a class of service to an extension.

Field 1 Enter the extension (000-99999).
 Fields 2-6 Enter dashes.
 Field 7 Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in Field 11. Occurrences of this extension must be removed from the procedures displayed in Field 11 before being removed in this procedure (000 Word 1).

051 Word 1 Administers the multiappearance voice terminal and data module translations, including the association between a terminal or data module and an equipment location.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-3 for traditional modules, 0-7 for universal and XE modules).

The following table is the allowed values for fields 6-17 for each AT&T multiappearance terminal administered as a ISDN Advantage.

	FIELD										
6 Terminal Type	7 Optn	8 Data	9 Disp	10 Orig Pref	11 Term Pref	12 Lock Unlck	13 Kybd Dial	14 LWC Retr	15 Term Alrm	16 BRI TEI	17 Adv
41= 7401D	10	2	-,1	0-3	0-2	-	1	-,0,1	-,0,1	-	1
46= 7406D	10	2	1	0-3	0-2	-,0,1	1	-,0,1	-,0,1	-	1
62=Call- Master	10	2	0	0-3	0-2	-,0,1	1	-,0,1	-,0,1	-	1

052 Word 1 Administers one or more images of a line appearance to an assigned multiappearance voice terminal or data module. This procedure is also used to administer line type, ringing type, home terminal, originate only, and Send All Calls (SAC) group.

> Field 1 Enter the module number (0-30). Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules). Field 5 Enter the circuit number (0-3 for traditional modules, 0-7 for universal and XE modules). Field 6 Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP Field 7 Enter the member (button) number (0-62). This is the number of the button to which you want to assign a line appearance or feature. Refer to "Button Numbering Scheme" for button numbering information. Field 8 Enter the extension (000-99999).

Fields 10-14 apply to the line appearance specified in Field 9.

Field 10	Enter tl	he line type:
	0	No prime line
	1	Prime line
	2	Auto appearance
Field 11	Enter tl	he ringing type:
	0	No ringing

Field 9

1 Ringing

2 Delayed ringing

Abbreviated ringing

Enter the line appearance number (1-12).

A ringing type must be specified for each assignment, including each image of a line appearance. Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.

Field 12

	Tield 12	0 Is not home terminal 1 Is home terminal
	Field 13	Enter the originating only assignment: 0 Not originating 1 Originating
	Field 14	Enter the SAC group assignment. Setting this field to 1 marks the extension in Field 8 as being part of a group of extensions used with the Send All Calls attribute of Call Coverage. O Not a member or SAC group Member of SAC group
100 Word 1		trunk group translations. These translations include the Dial nk ID, trunk type, dial access restrictions, and personal central .
	Field 1	Enter the trunk group number (18-999). DCS trunk groups are limited to 18-255.
	Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
	Field 3	Enter the second digit of the dial access code (0-9).
	Field 4	Enter the third digit of the dial access code (0-9).
	Field 5	Enter the fourth digit of the dial access code (0-9).
	Field 6	Enter trunk type 108 DMI host terminating, dial repeating in/automatic out (5). Signaling type must be changed to 20 in Procedure 100 Word 3.
	Field 7	Enter a 0 to allow DAC access to trunk group.
	Field 8	Enter a 0 to specify that trunk group is not used for CO line appearance.
100 Word 3	Administers the tr	runk group signaling type and other trunk group characteristics.
	Field 1	Enter the trunk group number (18-999).
	Field 2	Enter signaling type 20 (Digital Multiplexed Interface ISDN MOS).
	Field 3	Enter a 0 to treat glare as a single error (both ends redial).
	Field 4	Enter a 0 to disable retry.
	Field 5	Enter a 0 to disable outgoing MBO seizure.

Enter the home terminal assignment:

Field 6	Enter a 0 to disable incoming permanent seizure.
Field 7	Enter a 0 to take trunk out of service after a single failure.
Field 8	Enter a 0 to include data in the ISDN message.
Field 9	Enter the Network service value administered in Procedure 279 Word 1.
Administers trunk	k group characteristics.
Field 1	Enter the trunk group number (18-999).

101 Word 1

Field 1	Enter the trunk group number (18-999).
Field 2	Enter a 0 to disable balance.
Field 3	Enter a 0 to disable battery reversal.
Field 4	 Enter the incoming prefix digit for DID. No additional digit for DID. 0-9 Additional digit for DID.
Field 5	Enter a 0 to disable DCS.
Field 6	Enter a 1 to enable touch-tone in.
Field 7	Enter a 1 to disable touch-tone out.
Field 8	Enter a 0 to disable CDR.
Field 9	Enter the AIOD billing number (-,0000-9999).
Field 10	Enter a 0 to disable time for timed recall.
Field 13	Enter a 0 to determine pad group in Procedure 100 Word 1.
Field 14	Enter a 0 to disable toll restriction.
Field 15	Enter a 0 to disable APLT features.
Field 16	Enter a 0 to disable disconnect supervision.

101 Word 2 Administers the redial delay timer, hybrid balance specifications, and tie type capability for a trunk group.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter 0 for the redial delay time.
Field 3	Enter the hybrid balance specifications: Not applicable RC coupling 600 ohm coupling
Field 4	Enter the tie type capability: - Not applicable

- 0 Type 1 format
- 1 Type 1 compatible
- 2 Type 5 format

103 Word 1 Administers network trunk group parameters.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter an FRL of 0.
Field 3	Enter a 1 to specify network trunk.
Field 4	Enter a 0 to specify non-Main/Tandem.
Field 5	Enter a 1 to enable Incoming Tie to AAR/ARS or APLT.
Field 6	Enter a 0 for authorization codes not required.
Field 7	Enter a 0 for Bridge-on not allowed
Field 8	Enter a 0 to specify the number of trunks in the trunk reservation limit.
Field 10	Enter a 0 to disable data protection.
Field 11	Enter a 0 to specify dial tone for the remote access echo suppressor.
Field 12	Enter a 0 to specify that this is not a satellite facility for AAR conditional routing.
Field 13	Enter a 0 to disable the second TCM.
Field 14	Enter a 1 to collect digits before outpulsing.

116 Word 1

Administers digital (DS1 and ISDN/PRI) trunks to a trunk group. If you're assigning analog trunks to a trunk group, use Procedure 150 Word 1. When assigning the DS1 circuit pack, the slot to the right of the pack must be left unequipped or used only for packet adjunct ISDN applications.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules).
Field 5	Enter the circuit number (0-23).
Field 6	Enter the trunk group number (18-999).

	Field 8	Enter the signaling assignment: - ISDN signaling 0 Disable (for DSC) 1 Enable (for robbed-bit signaling)
	Field 9	Enter the AIOD equipment number (0000-9999).
	Field 10	Enter a 1 for host computer as the interface endpoint.
260 Word 1	Administers the parameters.	DS1 and ISDN Interface circuits with signaling and SCS
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, θ for universal modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).
	Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules).
	Field 5	Enter the alarm level encode: - Conventional 0 None 1 Warning (default) 2 Minor 3 Major
	Field 6	Enter a 1 to specify extended superframe as the framing format.
	Field 7	Enter a 0 to specify 23 B plus 1 D-channel signaling.
	Field 8	Enter a 0 to specify 24th channel signaling.
	Field 9	Enter a 1 to specify bipolar-8 zero substitution (unrestricted).
	Field 10	Enter a 1 to turn the slip count off.
	Field 11	Enter a 0 disable the external loop.
	Field 12	Enter a 0 to specify none as the equipment type.
	Field 13	Enter a 0 to specify none as the SCS reference.
	Field 14	Enter a 5 to specify ISDN/PRI as the application type.
	Field 15	Enter a 1 to specify no bit inversion.
	Field 16	Enter a 0 to specify copper.
	Field 19	Enter a - to specify not applicable.

262 Word 1 Administers the ISDN/PRI board parameters.

	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).
	Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules).
	Field 5	Enter a dash (-).
	Field 6	Enter the interface type: 0 For user side (to CO to other PBX) 1 For network side (to other PBX)
		Make sure this field is coordinated with the administration on the other end of the link. This field must remain dashed for NFAS B-channel administration.
	Field 7	Enter a 1 for the level 2 ISDN facility test type:
	Field 8	Enter a 0 for the assigned terminal endpoint identifier for use with Procedure 648.
	Field 9	Enter the timer delay in seconds (30).
	Field 10	Enter the timer delay in tenths-of-seconds (10).
	Field 11	Enter the number of retransmissions allowed (3).
	Field 12	Enter the maximum number of outstanding data packets to be transmitted (7).
	Field 13	Enter the NFAS (PRI) interface identifier (0-31).
290 Word 1	Displays DS1 truinformation.	ank interface and SCS circuit equipment locations and identification
	Field 1	Enter the port type: 25 ISDN Real 26 ISDN Virtual
290 Word 2	Displays the circ	uit pack identification of installed circuit packs.
	Field 1	Enter the module number (0-30, 99).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4 Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-18 for XE modules).

ATTENDANT CONSOLE ADMINISTRATION

General Information

This section is provided if you add new consoles. In most cases, the attendant console will already be administered. Administration of several console control buttons is found in the individual feature chapters.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Auto-Manual Splitting

Attendant Call Waiting

Attendant Control of Trunk Group Access

Attendant Direct Extension Selection With Busy Lamp field

Attendant Direct Trunk Group Selection

Attendant Display

Attendant Interposition Calling and Transfer

Attendant Recall

Attendant Release Loop Operation

Attendant Console Button Numbering Scheme

This section contains the button numbering information for the attendant console. The button numbering scheme for the bottom half of the console is shown in Figure 3-1.

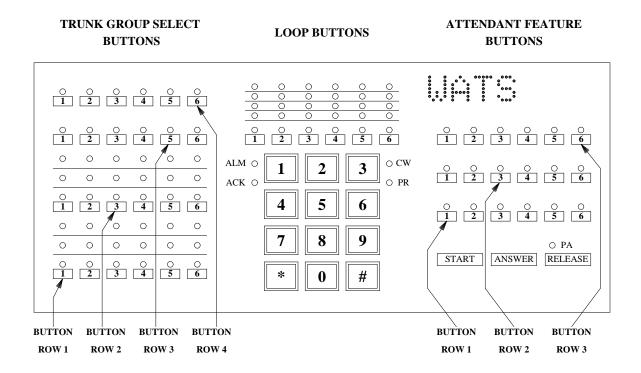


Figure 3-1. Attendant Console (Bottom Half)

The button numbering scheme for the top half of the DXS/BLF console is shown in Figure 3-2. Some consoles do not have the DXS/BLF feature.

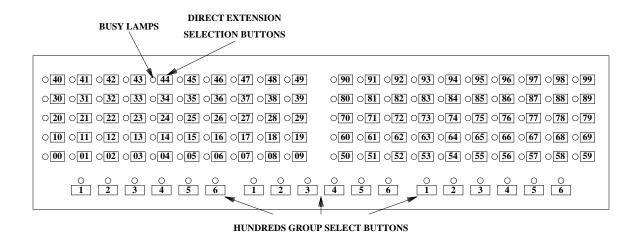


Figure 3-2. DXS/BLF Console (Top Half)

Administering the Attendant Console

The attendant console requires some basic administration to begin operations. After completing this basic administration, other console-related feature translations can be done. These features are found later in this document.

The attendant console is automatically assigned Bearer Capability Class of Service 0.

Procedure Sequence

ADD	CHANGE	REMOVE
210 Word 1	210 Word 1	210 Word 1
200 Word 1	200 Word 1	200 Word 1
203 Word 1	203 Word 1	203 Word 1

Procedure Usage

200 Word 1 Administers the specified features associated with the attendant console.

Field 1	Enter the console type:	
	30	No DXS/BLF buttons; 8 character display
	33	6 DXS group buttons; 8 character display (not currently
		sold, but may be in use)
	34	18 DXS group buttons; 8 character display

The following fields are attendant console related assignments. Most of the console assignments are done in the individual features listed.

Field 2	Class of Service Display — See the Attendant Display feature.
Field 3	Direct Trunk Group Select — See the Attendant Direct Trunk Group Selection and the Trunk Group Busy/Warning Indicators To Attendant features.
Field 4	Don't Answer Timing — See the Automatic Callback and Call Forwarding — Busy and Don't Answer feature.
Field 5	Interposition Calling — See the Attendant Interposition Calling and Transfer feature and the Dial Access to Attendant feature.
Field 6	Lockout — See the Privacy — Attendant Lockout feature.
Field 7	Privacy — See the Privacy — Attendant Lockout feature.
Field 8	Trunk Test — See the Trunk Verification — Attendant feature.
Field 9	Two-Party Hold — See the Serial Calls feature.

Field 10 Extended DXS — See the Attendant Direct Extension Selection With Busy Lamp field feature.

Field 11	Enter the number of calls that can be waiting for processing at the console before the CW lamp lights (1-99). This acts as a warning to the attendant that the call waiting queue may be getting large.
Field 12	Facility Restriction Level (FRL) — See the Facilities Restriction Level feature.
Field 13	Display Trunk Group ICI — See the Attendant Display feature.

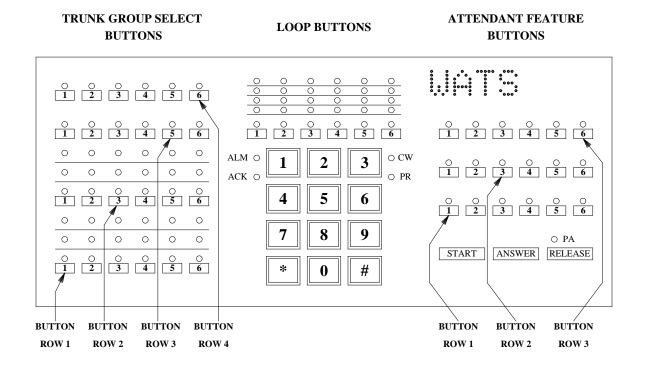
203 Word 1 Administers the various control buttons to the attendant console(s). The buttons used for these features are found on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter the button types in the desired location:

- 3 Position Busy (shuts off console temporarily)
- 5 Hold (used for 2-party hold on console)
- 6 Cancel (used to cancel outgoing call attempts)
- 8 Audible Signal (shuts off the ringing/beeping at the console)

Buttons are assigned for other attendant features found later in this document.



210 Word 1 Administers the equipment locations for the attendant interface (SN233 for traditional modules, TN760 for universal modules) and the data channel (TN403) associated with each attendant console. Fields 2-6 specify the equipment locations for the attendant console interface. Fields 7-9 specify the equipment locations for the data channel associated with the attendant console.

Field 1	Enter the attendant console number (1-40).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules.) $ \\$
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules.)
Field 5	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules.)
Field 6	Enter the circuit number (0-3).
Field 7	Enter a "0" to represent the common control carrier.
Field 8	Enter the slot number (23-26).
Field 9	Enter the circuit number (0-15).

VOICE TERMINAL AND DATA MODULE ADMINISTRATION

General Information

AT&T Multiappearance Voice Terminals and Data Modules

Processor Data Module (PDM)	7410D Series
Trunk Data Module (TDM)	7403D
Dual Port Data	7404D
ADFTC/MTCP	7405D
EIA	7406D Series
Straight Line Set (SLS)	7407D Series
10-Button MET	CallMaster TM
20-Button MET	510BCT
30-Button MET	515BCT
7203H	PC/PBX
7205H	7500BRI
7303S	7505BRI
7305S	7506BRI
7434D	7507BRI
7401D Series	7400A/B Data Module
	7444D

Button Numbering Scheme

This section contains button numbering information for several AT&T multiappearance voice terminals. Button numbers 1 and 2 are the Hold button and the Automatic Message Waiting (AMW) lamp. The Hold button is automatically assigned to button number one and the assignment cannot be changed. Data modules and straight line sets are not shown since they do not have multiple buttons.

R

10-BUTTON MET

				7
				6
				5
				4
				3
1	2	3	AMW _	2
4	5	6	HOLD _	1
7	8	9	XFER	
*	0	#	CONF	
7			DROP	
_				

20-BUTTON MET

				7	17
				6	16
				5	15
				4	14
				3	13
1	2	3	AMW	2	12
4	5	6	HOLD	1	11
7	8	9	XFER		10
*	0	#	CONF		9
			DROP		8

R

R

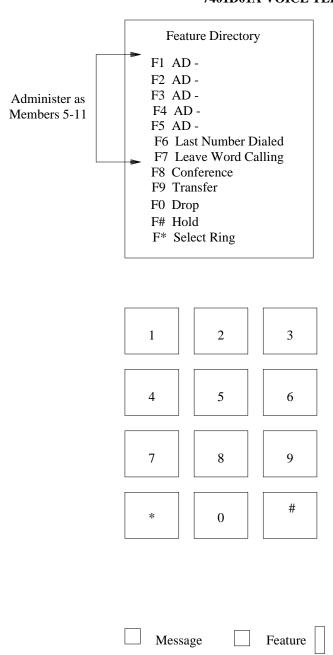
30-BUTTON MET

				7	17	27
				6	16	26
				5	15	25
				4	14	24
				3	13	23
1	2	3	AMW	2	12	22
4	5	6	HOLD		11	21
7	8	9	XFER		10	20
*	0	#	CONF		9	19
			DROP		8	18

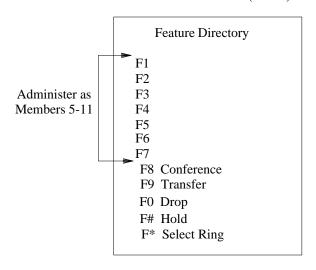
7205H, 7305S, OR 7405D VOICE TERMINALS

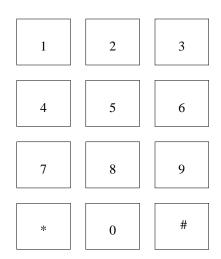
3		8	13	25
4		9	14	26
5		10	15	27
6		11	13	
7		12	16	28
]		17	29
Conference]	Transfer	18	30
Drop		Hold		
			19	31
1	2	3	20	32
4	5	6	21	33
7	8	9	22	34
*	0	#	23	35
Message	Recall	Disconnect or Speaker	24	36

7401D01A VOICE TERMINAL



7401D02A (PLUS) VOICE TERMINAL





Message Feature

7404D VOICE TERMINAL

3		6	
4		7	
5		8	
Message		Data C in Pro	Call gres
Conference		Transfe	•
Drop		Hold	
1	2	3	
4	5	6	
7	8	9	
*	0	#	

7406D VOICE TERMINAL (without Speakerphone)

3			6			14
4			7			15
5			Select Ring			16
Message			Shift			24 17
Conference			Transfer		25 18	
Drop		Hold				26 19
				[27
1	2		3			20
						28
4	5		6		21	
						29
7	8		9	[22
,	0					30 23
*	0		#			Speaker

7406D-05A/06A (BIS) VOICE TERMINAL

3		6	Speakerphone On/Off
4		7	Mute
5		Select Ring 13	16
Message		Shift	24 17
Conference		Transfer	25 18
Drop		Hold	26 19
			27
1	2	3	20
			28
4	5	6	21
·			29
7	8	9	22
/	0	9	30
			23
*	0	#	Speaker Volume

7406D-07A/08A (PLUS) VOICE TERMINAL

2 X 24 Display (7406D07A only)							
3		6		Speaker			
4		7		Mute			
5		14		16 15			
Messaş	ge 🗌	Select		24 17			
Conferenc Ring	e	Transfer		25			
Drop Test		Hold		26 19			
1	2	3		27 20			
4	5	6		28 21			
7	8	9		29 22			
				23			
*	0	#	V	olume			

7410D01A VOICE TERMINAL

□ 3		8
4		9
□ 5		10
6		11
7		12
Conference		Transfer
Drop		Hold
1	2	3
4	5	6
7	8	9
*	0	#
Message		Select Ring

7410D02A (PLUS) VOICE TERMINAL 3 8 9 4 5 10 6 11 12 7 Select Message Conference Transfer Ring Drop Hold Test 1 2 3 5 4 6 7 8 9 # 0 Speaker Volume

7407D-01A/01B VOICE TERMINALS

			2 X 40 Di (7407D01I	splay B only)			
	3	8	Conference Ring	,	Γransfer	15	26
	4	9	Drop Test		Hold	16	27
	5	10				17	28
	7	11				18	29
	<u> </u>			2	3	19	30
			4	5	6	20	31
ĺ			7	8	9	21	32
	13	14		0	#	22	33
	2*	5*				23	34
	3*	6*	Display		Cal-Sr	24	35
	Message	7*	Speaker		Mike	25	36

^{*} These buttons can only be used for display features.

7407D02C VOICE TERMINAL

Display Area A									
Display Area B									
3	8	Conference	Γransfer	15	26				
4	9	Drop	Hold	16	27				
5	10			17	28				
7	11			18	29				
			3	19	30				
		4 5	6	20	31				
				21	32				
13	14	7 8	9	22	33				
1*	5*	* 0	#	23	34				
2*	6*		Select	24	35				
3*	7*	Message L	Ring						
4*	Volume	Speaker	Mute	25	36				

^{*} These buttons can only be used for display features.

7407D02D (PLUS) VOICE TERMINAL

				2 X 40 (7407D0				
	3		8	Conference Ring	Ti	ransfer	15	26
	4		9	Drop Test	I	Hold	16	27
	5		10				17	28
	7		11 12				18	29
				1	2	3	19	30
				4	5	6	20	31
[21	32
	*		14	7	8	9	22	33
	1* 2*		5 * 6 *	*	0	#	23	34
	3*		7 *	Messag	ge 🔲	Select	24	35
	4*	Vo	olume	Speaker Reset S	spkr	Mute	25	36

^{*} These buttons can only be used for display features.

7434D VOICE TERMINAL

	3		8	13	<u>></u> 25
	4		9	14	<u>></u> 26
	5		10	15	<u>27</u>
\supset	6		11	16	
	7		12	16	28
				17	> 29
	Conference		Transfer	18	30
	Drop		Hold		
				19	31
	1	2	3	20	◯ 32
	4	5	6	21	>□ 33
	7	8	9	22	> □ 34
	*	0	#	23	>□ 35
	Message		Select Ring	24	> □ 36

7444D VOICE TERMINAL

	2 X 40 Display									
	3		erence ng	Transfer	15	26				
	4	Te	rop	Hold	16	27				
	5				17	28				
	7	12			18	29				
	8		2	3	19	30				
		4	5	6	20	31				
		7	8	9	21	32				
[*	0	#	22	33				
	2*	5* 6*			23	34				
	3*		essage	Select	24	35				
	4*	Volume Sp	eaker eset Spkr	Mute	25	36				

^{*} These buttons can only be used for display features.

$\textbf{CALLMASTER}^{\text{\tiny{TM}}} \ \ \textbf{DIGITAL VOICE TERMINAL}$

3 4	5	6	7
8 9	10	11	12
Conference	□ 13 □	<u> </u>	<u>25</u>
Drop Hold		<u> </u>	☐ 26 ☐
		<u> </u>	□ 27
1 2 3		☐ 22 ☐	☐ 28 ☐
7 8 9	<u> </u>	□ 23 □ □	<u> </u>
☐ Msg	<u> </u>	□ 24	□ 30 □

7505 BRI BMT OR 7506 BRI MDT VOICE TERMINAL

3		6	10
4		7	11
5		8	12
Message		Data */ Send/Off	16
Conference Ring		Transfer Clock	17 14
Drop Test		Hold	18 15
			Redial
1	2	3	Shift Select
4	5	6	Mute
7	8	9	Speaker
*	0	#	∇ Volume Δ

^{*} The data button is button number 9.

7507 BRI MIDT VOICE TERMINAL

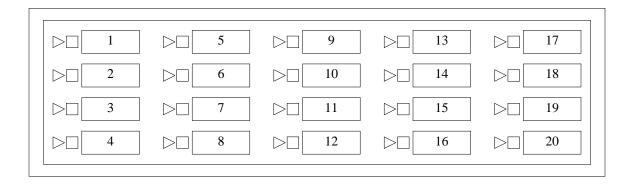
3	8	Conference Ring Clock		<u> </u>	<u>22</u>
4	9	Drop Test Hold		<u> </u>	<u>23</u>
5	10			<u> </u>	_ 24
6		$\begin{bmatrix} 1 & 2 \end{bmatrix}$	3	<u> </u>	<u></u>
7	<u> </u>	4 5	6	<u> </u>	<u> </u>
		4 5		<u> </u>	<u> </u>
34	<u> </u>	7 8	9	<u> </u>	<u>28</u>
35	<u> </u>	* 0	#	<u> </u>	<u> </u>
36	<u> </u>			<u> </u>	<u> </u>
37	<u> </u>	Message Se	elect	Redial	<u> </u>
38	∇ Volume Δ	Speaker M	Iute	Data *	<u>32</u>

^{*} The data button is button number 33.

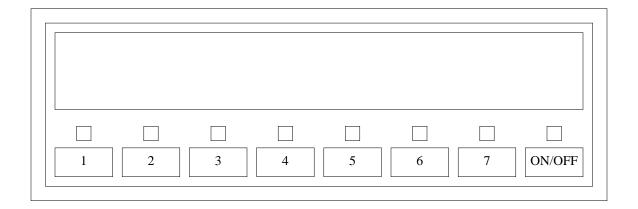
FEATURE MODULE

1	13	
2	14	
3	15	
4	16	
5	17	
6	18	
7	19	
8	20	
9	21	
10	22	
11	23	

COVERAGE MODULE



DISPLAY MODULE



Finding an Available Equipment Location

Before assigning a voice terminal, use Procedure 290 Word 1 to find an available (unassigned) equipment location.

Administering Analog On-Premises and Off-Premises Voice Terminals

Only one image of a line appearance can be assigned to an analog voice terminal. Consequently, analog voice terminals are also known as single-appearance voice terminals. The 2500 Series, 7101A, 7102A, and 7103A are analog voice terminals.

Prerequisite Administration

Before administering analog voice terminals, make sure the following are administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration.")

Class of Service — Extensions (See Chapter 2, "System Administration.")

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 1	000 Word 1	350 Word 3
350 Word 3	350 Word 3	000 Word 1

Procedure Usage

000 Word 1 Administers an equipment location and a class of service to an extension.

Field 1	Enter the extension (000-99999).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules.) $ \\$
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules.)
Field 5	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules.)
Field 6	Enter the circuit number (0-7 for traditional modules, 0-15 for universal and XE modules.)
Field 7	Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.
Field 8	Enter the appropriate port type:

- 1 On-premises extension
- 2 Off-premises extension (OPS)

Field 9 Leave blank.

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in field 11. Occurrences of this extension must be removed from the procedures displayed in field 11 before being removed in Procedure 000 Word 1.

For the 7103A fixed feature and programmable voice terminals, use this procedure to administer the feature encodes that are assigned to the buttons on the voice terminals. The features for these terminals are assigned on a system-wide basis. For the 7103A programmable voice terminal, the user must assign a feature to a particular button at the voice terminal.

The following are the feature button encodes for fields 1-8 (buttons 1-8).

- 0 Unassigned
- 1 Call Forwarding Follow Me
- 2 Call Forwarding Busy and Don't Answer
- 3 Call Forwarding cancel
- 4 Hold
- 5 Call Pickup
- 6 Call Waiting answer or hold
- 7 Priority Calling
- 8 Attendant dial access code
- 9 Automatic Callback or Queuing cancel
- 10 Demand Printing
- 11 Override
- 13 Data Protection temporary
- 16 CAAVT code
- 17 Loudspeaker Paging answer
- 18 Traditional Code Calling Access answer
- 19 Automatic Callback activate
- 30 Voice terminal to selected attendant
- 32 WCR Network 1 Toll-free route
- 33 WCR Network 1 Toll route
- 36 CDR account code
- 55 Send All Calls activate
- 56 Send All Calls cancel
- 57 Burned-in code cancel feature
- 61 WCR Network 2 Access
- 66 Leave Word Calling activate
- 67 Leave Word Calling cancel
- 90 Abbreviated Dialing access system list
- 91 Abbreviated Dialing access list A
- 92 Abbreviated Dialing access list B
- 93 Program an automatic dialing button
- 105 Universal Code Calling/Chime Paging access

- 106 Universal Code Calling/Chime Paging answer back
- 108 WCR Network 3 access
- 109 WCR Network 4 access
- 110 WCR Network 5 access
- 111 WCR Network 6 access
- 112 WCR Network 7 access

Administering AT&T Multiappearance Voice Terminals and Data Modules

AT&T multiappearance voice terminals and data modules include all the terminal and data module types that are listed in Procedure 051 Word 1 field 6. Multiappearance terminals have several line appearance buttons for the same extension number. This allows the user to handle more than one call.

Because the administration is somewhat different from multiappearance voice terminals and data modules, BRI terminals and data modules, the Data Line Circuit (DLC), and other vendor and undefined AT&T terminals and data modules (types 100-200) are described later in this section.

The Modular Data Module (MDM) is administered as either a PDM or TDM, depending on how it is used.



You cannot administer both line and trunk data modules on the same digital circuit pack.

Prerequisite Administration

Before administering multiappearance voice terminals and data modules, make sure the following are administered.

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration.")

Class of Service — Extensions (See Chapter 2, "System Administration.")

Procedure 275 Word 1 field 6 must be set to "1".

Procedure Sequence

CHANGE	REMOVE
052 Word 1	052 Word 1
051 Word 1	051 Word 1
000 Word 1	000 Word 1
	051 Word 1

Procedure Usage

O00 Word 1 Administers a class of service to an extension. When assigning an Analog/Digital Facility Test Circuit (ADFTC) or Maintenance Test Circuit Pack (MTCP) for testing, you must assign two different extensions.

Field 1	Enter the extension (000-99999).
Fields 2-6	Enter dashes.
Field 7	Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.
Field 8	Leave blank for anything but an ADFTC or MTCP extension. Enter a "3" for an ADFTC or MTCP extension.
Field 9	Leave blank.

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in field 11. Occurrences of this extension must be removed from the procedures displayed in field 11 before being removed from this procedure (000 Word 1).

051 Word 1 Administers the multiappearance voice terminal and data module translations, including the association between a terminal or data module and an equipment location.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules.)
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules.)
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules.)
Field 5	Enter the circuit number (0-3 for traditional modules, 0-7 for universal and XE modules.)

There are four circuits available on the MTCP:

- Circuit 0 is the analog port used by the ATMS feature.
- Circuit 1 is the digital port for ISDN call testing, modem pool testing, and digital facility testing.
- Circuit 2 is a second digital port that is required for some modem pool testing.
- Circuit 3 is not used with Generic 2.

The following tables list the allowed values for fields 6-16 for each AT&T multiappearance terminal and data module type.

	FIELD										
6 Terminal Type	7 Optn	8 Data	9 Disp	10 Orig Pref	11 Term Pref	12 Lock Unlck	13 Kybd Dial	14 LWC Retr	15 Term Alrm	16 BRI TEI	17 Adv
1=PDM or 7400A/B*	0	1,2	_	2	0	-	-,0,1	-	-,0,1	-	-
2=TDM or 7400A*	0	1,2	-	2	0	-	-,0,1	-	-,0,1	-	-
3=Dual Port Data	0	1,2	-	2	0	-	-,0,1	-	-,0,1	-	-
5=ADFTC	0	1	-	2	0	-	-,0,1	-	-	-	-
7=EIA	0	1	-	2	0	-	-,0,1	-	-	-	
8=MTCP ATMS	0	1	-	2	0	-	-,0,1	-	-	-	-
9=MTCP DCP	0	1	-	2	0	-	-,0,1	-	-	-	-
10=SLS	1	-	-	2	0	_	_	_	-	-	-
15=10- Button MET	1	-	-	0-3	0-2	-	-	-	-	-	-
16=20- Button MET	1	-	-	0-3	0-2	-	-	-	-	-	-
17=30- Button MET	1	-	-	0-3	0-2	-	-	-	-	-	-
21= 7401 PLUS 02A	1,6,10	-,2	-	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	_	0,1
22= 7410 PLUS 02A	1,6	-,2	-	0-3	0-2	-	-,0,1	-	-,0,1	-	-
23= 7203H	1	-	-	0-3	0-2	-	-	-	-	-	-
24= 7407 PLUS 02D	5,10	-,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
25= 7205H	1-4	-	-	0-3	0-2	-	-	-	-	-	-

	FIELD										
6	7	8	9	10	11	12	13	14	15	16	17
Terminal Type	Optn	Data	Disp	Orig Pref	Term Pref	Lock Unlck	Kybd Dial	LWC Retr	Term Alrm	BRI TEI	Adv
26=				1101		Cinci	2141	11001	1111111		
7406 BIS 05A	5,10	-,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
27= 7406 BIS 06A	1,6,10	-,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-,0,1	0,1
28= 7406D 07A	5,10	-,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	_	-
29= 7406D 08A	1,6,10	-,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	0,1
33= 7303S	1	-	-	0-3	0-2	-	-	-	-	-	-
35= 7305S	1	-	-	0-3	0-2	-	-	-	-	-	_
40= 7434D	1,3,5, 6,9,10	-,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
41= 7401D	1,6,10	-,2	-,1	0-3	0-2	-	-,0,1	-,0,1	-,0,1	-	-
42= 7410D	1,6	-,2	-	0-3	0-2	-	-,0,1	-,0,1	-,0,1	-	-
43= 7403D	1,6	-,1,2	-	0-3	0-2	-	-,0,1	-	-,0,1	-	-
44= 7404D	6,8-12	1	1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
45= 7405D	1-12	-,1,2	1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
46= 7406D 01A/03A	1,5, 10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-

^{*} Depending on the desired configuration, a hardware change is required for the 7400 data module. See the data module users guide.

					FIEL	, D					
6 Terminal Type	7 Optn	8 Data	9 Disp	10 Orig Pref	11 Term Pref	12 Lock Unlck	13 Kybd Dial	14 LWC Retr	15 Term Alrm	16 BRI TEI	17 Adv
47= 7407D 01A 01B 01C	5,10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	_	-
48= 7444D 01A	5,10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
62=Call- Master	5,10	-,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-,0,1
64= 7406D	1,6, 10	-,1,2	1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-,0,1
91= 510BCT	10	1	1	2	2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
95= 515BCT	10	1	1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-	-
99= PC/PBX	10,12	1	1	2	2	-,0,1	-,0,1	-,0,1	-,0,1	-	-

Assigns one or more images of a line appearance to a multiappearance voice terminal or data module. It also specifies line type, ringing type, home terminal, originate only, and Send All Calls (SAC) group.

originate only, and	d Send All Calls (SAC) group.			
Field 1	Enter the module number (0-30).			
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules.)			
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules.)			
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules.)			
Field 5	Enter the circuit number (0-3 for traditional modules, 0-7 for universal and XE modules.)			
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module			
	1 🗸			

Field 7 Enter the member (button) number (0-62). This is the number of the button to which you want to assign a line appearance or feature. Refer to "Button Numbering Scheme" for button numbering information.

ADFTC/MTCP

4

Field 8 Enter the extension (000-99999).

Field 9 Enter the line appearance number (1-12).

Fields 10-14 apply to the line appearance specified in field 9.

Field 10 Enter the line type:

- 0 No prime line
- 1 Prime line
- 2 Auto appearance
- 3 Prime data line
- 4 Data appearance

Use encodes 3 and 4 for data appearances on BRI terminals. The primary data line should be assigned with encode 3 and a secondary data line should be assigned with encode 4 (and cannot be assigned to a home terminal). Only one prime data line can be assigned, and it must be assigned to an appearance on a home terminal (Field 12).

Field 11 Enter the ringing type:

- 0 No ringing
- 1 Ringing
- 2 Delayed ringing
- 3 Abbreviated ringing

A ringing type must be specified for each assignment, including each image of a line appearance. Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.

Field 12 Enter the home terminal assignment:

- 0 Is not home terminal
- 1 Is home terminal

Field 13 Enter the originating only assignment:

- 0 Not originating
- 1 Originating

Field 14 Enter the SAC group assignment. Setting this field to 1 marks the extension in field 8 as being part of a group of extensions used with the Send All Calls attribute of Call Coverage.

- 0 Not a member or SAC group
- 1 Member of SAC group

Administering AT&T BRI Terminals and Data Modules

The 7505, 7506, and 7507 are BRI terminals. The only BRI data module is the 7500 data module.

The BRI Asynchronous Data Module (ADM) terminals have fixed data button locations. For the 7505 and 7506, it is button 9. For the 7507, it is button 33. Even if you don't currently use the data options, do not assign these buttons as anything but data buttons.



The ISDN/BRI feature must be administered along with BRI terminals to obtain the ISDN/BRI capabilities.

Prerequisite Administration

Before administering BRI terminals and data modules, make sure the following are administered.

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration.")

Class of Service — Extensions (See Chapter 2, "System Administration.")

Procedure 275 Word 1 field 6 must be set to "1".

Procedure 275 Word 4 field 14 must be set to "1".

Procedure Sequence

ADD	CHANGE	REMOVE		
000 Word 1	052 Word 1	052 Word 1		
000 Word 3	051 Word 2	051 Word 2		
051 Word 1	051 Word 1	051 Word 1		
051 Word 2	000 Word 1	000 Word 1		
052 Word 1	000 Word 3	000 Word 3		

Procedure Usage

000 Word 1 Administers a class of service to an extension.

Field 1	Enter the extension (000-99999).
Fields 2-6	Enter dashes.
Field 7	Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.
Fields 8-9	Enter dashes.

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in field 11. Occurrences of this extension must be removed from the procedures displayed in field 11 before being removed in this procedure (000 Word 1).

Administers a bearer capability class of service (BCCOS) to an extension. When an extension is assigned a class of service (Procedure 000 Word 1), the BCCOS defaults to zero—a BCCOS of zero supports only voice applications. For a BRI terminal with data capabilities, the BCCOS should be changed to something other than zero. Use BCCOS 2 or use Procedure 014 Words 1 and 2 to define an appropriate BCCOS.

Field 1 Enter the extension number (000-99999).

Field 5 Enter the bearer capability class of service (0-255).

051 Word 1 Administers the multiappearance voice terminal and data module translations, including the association between a terminal or data module and an equipment location.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0).

Field 3 Enter the port carrier number (c-e).

Field 4 Enter the slot number in the port carrier (1-20).

Field 5 Enter the circuit number $(0, 2, 4, 6, \dots 22)$.

The following tables list the allowed values for fields 6-17 for each AT&T BRI terminal and data module type.

					FIEI	D					
6 Terminal Type	7 Optn	8 Data	9 Disp	10 Orig Pref	11 Term Pref	12 Lock Unlck	13 Kybd Dial	14 LWC Retr	15 Term Alrm	16 BRI TEI	17 Adv
50= 7500BRI	6	1	-	2	0	-	-,0,1	-	-,0,1	0-63, 128	-
55= 7505BRI	1,6	-,1	-	0-3	0-2	-	-,0,1	-	-,0,1	0-63, 128	-
56= 7506BRI	5,10	-,1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	0-63, 128	_
57= 7507BRI	5,10	-,1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	0-63, 128	-

O51 Word 2 Administers the ISDN Service Profile Identifiers (SPIDs) to an assigned BRI voice terminal. The SPID must also be assigned at the voice terminal. See the voice terminal installation instructions on how to assign the SPID at the voice terminal.

A specific pattern should be used to select the SPID. This pattern includes: the primary extension of the terminal plus a 2-digit code that represents the shared (bridged) appearance of that extension number. You can have up to 16 shared appearances of an extension. If you number those 16 appearances from 00-15, you now have the 2-digit code.

For example, extension 34552 is the primary extension on a voice terminal and that appearance is the only one on any voice terminal. This makes a SPID of 34552+00 or 3455200. If extension 4223 is the primary extension on a voice terminal but it is shared appearance number five (in our 2-digit code 04), this makes a SPID of 4223+04 or 422304.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0).
Field 3	Enter the port carrier number (c-e).
Field 4	Enter the slot number in the port carrier (1-20).
Field 5	Enter the circuit number (0, 2, 4, 6, 22).
Field 6	Enter an ISDN SPID (0-999999999). An ISDN SPID must be unique system wide. Embedded and trailing blanks are not allowed in a SPID. Leading blanks are allowed.
Field 7	Enter a 1 to add, change, remove, or display the service SPID. Setting this field to 1 administers the ISDN SPID in field 6 as the system service SPID. The service SPID in field 6 can then be used to test any BRI terminal. Activate the service SPID in Procedure 275 Word 3.

052 Word 1 Administers one or more images of a line appearance to an assigned BRI voice terminal or data module. This procedure is also used to administer line type, ringing type, home terminal, originate only, and Send All Calls (SAC) group.

1 '	, ,		•			,		, 0
Field 1	Enter the	mod	ule nun	nber (0	-30).			
Field 2	Enter the	cabii	net num	iber (0).			
Field 3	Enter the	port	carrier	numbe	er (c-e)).		
Field 4	Enter the	slot	number	in the	port c	arriei	(0	-20).
Field 5	Enter the	circu	iit numl	ber (0,	2, 4, 6	ó,	22)).
Field 6	Enter the 0 1	Basi Feat	c set ure mo	dule				
	2 3 4	Disp	erage molay mo FTC/M	dule				

Field 7 Enter the member (button) number (0-62). This is the number of the button to which you want to assign a line appearance or feature. Refer to "Button Numbering Scheme" for button

numbering information.

Field 8 Enter the extension (000-99999).

Field 9 Enter the line appearance number (1-12).

Fields 10-14 apply to the line appearance specified in field 9.

Field 10 Enter the line type:

- 0 No prime line
- 1 Prime line
- 2 Auto appearance
- 3 Prime Data Line
- 4 Data appearance

Field 11 Enter the ringing type:

- 0 No ringing
- 1 Ringing
- 2 Delayed ringing
- 3 Abbreviated ringing

A ringing type must be specified for each assignment, including each image of a line appearance. Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.

Field 12 Enter the home terminal assignment:

- 0 Is not home terminal
- 1 Is home terminal

Field 13 Enter the originating only assignment:

- 0 Not originating
- 1 Originating
- Field 14 Enter the SAC group assignment. Setting this field to 1 marks the extension in field 8 as being part of a group of extensions used with the Send All Calls attribute of Call Coverage.
 - 0 Not a member or SAC group
 - 1 Member of SAC group

Administering a Data Line Circuit (DLC)

The DLC board (TN726) is similar to the EIA board (SN238). The most significant differences are:

- The EIA board has four ports, the DLC board has eight ports.
- The DLC board has more administrable port characteristics than the EIA board.
- The EIA board has on-board switches that are used to set or change the port characteristics. The DLC board is given a set of default port characteristics when it is assigned (Procedure 051 Word 1).
- The DLC is only available on the universal module.

Prerequisite Administration

Before administering a data line circuit, make sure the following are administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration.")

Class of Service — Extensions (See Chapter 2, "System Administration.")

Procedure 275 Word 1 field 6 must be set to "1".

Procedure Sequence

ADD	CHANGE	REMOVE		
000 Word 1	000 Word 1	052 Word 1		
051 Word 1	051 Word 1	051 Word 3		
051 Word 3	051 Word 3	051 Word 1		
052 Word 1	052 Word 2	000 Word 1		

Procedure Usage

000 Word 1 Administers a class of service to an extension.

Field 1	Enter the extension (000-99999).
Fields 2-6	Enter dashes.
Field 7	Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.
Fields 8-9	Enter dashes.

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in field 11. Occurrences of this extension must be removed from the procedures displayed in field 11 before being removed in this procedure.

051 Word 1 Administers the multiappearance terminal and data module translations, including the association between a terminal or data module and an equipment location.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0).

Field 3 Enter the port carrier number (c-e).

Field 4 Enter the slot number in the port carrier (1-20).

Field 5 Enter the circuit number (0-7).

The following table lists the allowed values for fields 6-17 for a DLC.

	FIELD										
6 Type	7 Optn	8 Data Type	9 Disp Type	10 Orig Pref		12 Lock Unlck	13 Kybd Dial	14 LWC Retr	15 Term Alrm	16 BRI TEI	17 Adv
7=DLC	0	1	-	2	0	-	-,0,1	-	0,1	-	-

Administers the characteristics of a line port on a Data Line Circuit (DLC). A DLC line port is given a set of default port characteristics when it is assigned using Procedure 051 Word 1. The following table lists the default line port characteristics.

Option	Value	Option	Value
Keyboard Dialing	1	Parity	2 (even)
Configuration	1	19200 bps data rate	1
Auto adjust	1	9600 bps data rate	1
Permit mismatch	0	4800 bps data rate	1
Dial echo	1	2400 bps data rate	1
Answer text	1	1200 bps data rate	1
Disconnect sequence	1	300 bps data rate	1
Connected Indication	0	Low data rate	0

The default line port characteristics can be changed using Procedure 051 Word 3.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0).

Field 3 Enter the port carrier number (c-e).

Field 4 Enter the slot number in the port carrier (1-20).

Field 5 Enter the circuit number (0-7).

For fields 6-11, the encodes are:

0	Disable
1	Enable

- Field 6 Enter the keyboard dialing assignment (0-1).
- Field 7 Enter the configuration assignment (0-1).
- Field 8 Enter the auto adjust assignment (0-1).
- Field 9 Enter the permit mismatch assignment (0-1).
- Field 10 Enter the dial echo assignment (0-1).
- Field 11 Enter the answer text assignment (0-1).
- Field 12 Enter the disconnect sequence assignment:
 - 0 Longbreak
 - 1 Shortbreak
- Field 13 Enter the connected indication assignment:
 - 0 "CONNECTED" not sent to DTE
 1 "CONNECTED" sent to DTE
- Field 14 Enter the parity assignment:
 - 0 Space
 - 1 Mark
 - 2 Even
 - 2 Ever
 - 3 Odd

For fields 15-21, the encodes are:

- 0 Disable1 Enable
- Field 15 Enter the data rate as 19200 Bps (0-1).
- Field 16 Enter the data rate as 9600 Bps (0-1).
- Field 17 Enter the data rate as 4800 Bps (0-1).
- Field 18 Enter the data rate as 2400 Bps (0-1).
- Field 19 Enter the data rate as 1200 Bps (0-1).
- Field 20 Enter the data rate as 300 Bps (0-1).
- Field 21 Enter the data rate as low speed (0-1).

052 Word 1

Administers one or more images of a line appearance to an assigned multiappearance voice terminal or data module. This procedure is also used to administer line type, ringing type, home terminal, originate only, and Send All Calls (SAC) group.

- Field 1 Enter the module number (0-30).
- Field 2 Enter the cabinet number (0).
- Field 3 Enter the port carrier number (c-e).
- Field 4 Enter the slot number in the port carrier (1-20).

- Field 5 Enter the circuit number (0-7).
- Field 6 Enter the device type:
 - 0 Basic set
 - 1 Feature module
 - 2 Coverage module
 - 3 Display module
 - 4 ADFTC/MTCP
- Field 7 Enter the member (button) number (0-62). This is the number of the button to which you want to assign a line appearance or feature. Refer to "Button Numbering Scheme" for button numbering information.
- Field 8 Enter the extension (000-99999).
- Field 9 Enter the line appearance (1-12).

Fields 10-14 apply to the line appearance specified in field 9.

- Field 10 Enter the line type:
 - 0 No prime line
 - 1 Prime line
 - 2 Automatic line appearance
- Field 11 Enter the ringing type:
 - 0 No ringing
 - 1 Ringing
 - 2 Delayed ringing
 - 3 Abbreviated ringing

A ringing type must be specified for each assignment, including each image of a line appearance. Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.

- Field 12 Enter the home terminal assignment:
 - 0 Is not home terminal
 - 1 Is home terminal
- Field 13 Enter the originating only assignment:
 - 0 Not originating
 - 1 Originating
- Field 14 Enter the SAC group assignment. Setting this field to 1 marks the extension in field 8 as being part of a group of extensions used with the Send All Calls attribute of Call Coverage.
 - 0 Not a member or SAC group
 - 1 Member of SAC group

Administering Undefined AT&T and Other Vendor Terminals and Data Modules

These procedures should be used when defining new AT&T voice terminals or voice terminals from other vendors. Typically, the voice terminals from other vendors will be ISDN/BRI voice terminals.

Prerequisite Administration

Before administering undefined AT&T multiappearance voice terminals and data modules or BRI terminals made by other vendors, make sure the following are administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration.")

Class of Service — Extensions (See Chapter 2, "System Administration.")

Procedure 275 Word 1 field 6 must be set to "1".

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 1	000 Word 1	052 Word 1
050 Word 1	050 Word 1	051 Word 1
050 Word 2	050 Word 2	050 Word 2
051 Word 1	051 Word 1	050 Word 1
051 Word 2	051 Word 2	000 Word 1
052 Word 1	052 Word 1	

Procedure Usage

000 Word 1 Administers a class of service to an extension.

Enter dashes.

Fields 8-9

Field 1	Enter the extension (000-99999).
Fields 2-6	Enter dashes.
Field 7	Enter the class of service (1-30 or 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.

When removing an extension, Special Error Code 85 may appear and procedure numbers may be displayed in field 11. Occurrences of this extension must be removed from the procedures displayed in field 11 before being removed in this procedure (000 Word 1).

Administers a multiappearance terminal or data module definition. Terminal types 1-99 are predefined AT&T multiappearance terminals and data modules. Terminal types 100-200 can be used to define AT&T terminals and data modules that are not already defined and for terminals and data modules made by other vendors.

Field 1 Enter the terminal type (100-200).

Field 2 Enter the option assignment:

- 0 Data only
- 1 Voice only
- 2 Terminal, feature module
- 3 Terminal, coverage module
- 4 Terminal, feature module, coverage module
- 5 Terminal, display module
- 6 Terminal, data
- 7 Terminal, feature module, display module
- 8 Terminal, feature module, data
- 9 Terminal, coverage module, data
- 10 Terminal, display module, data
- 11 Terminal, feature module, coverage module, data
- 12 Terminal, feature module, display module, data

Field 3 Enter the equipment type:

- 0 Unequipped
- 1 Analog boards (SN228, SN229, TN742, TN746)
- 2 MFET/MET boards (SN224)
- 3 MFAT boards (ANN17, TN762)
- 4 MFDT boards (SN270, TN754) DCP voice terminals
- 5 BRI board (TN556)
- 6 MFDT boards (SN270, TN754) DCP data modules
- 7 ADFTC board (SN261)
- 8 EIA board (SN238, TN726)
- 9 MET only board (TN735)
- 10 MTCP ATMS board (TN771B)
- 11 MTCP DCP board (TN771B)

Field 4 Enter the data type:

- 0 No data
- Optional data
- 2 Integrated data
- 3 Data module
- 4 Dual port data
- 5 BRI data
- 6 ADFTC data
- 7 MTCP data

Field 5 Enter the display type:

- 0 No display
- 1 Display type 1 one display for both call appearance and feature information
- 2 Display type 2 one call appearance display and one feature display
- 3 Display type 3 four call appearance displays and one feature display
- 4 Display type 4 ten call appearance displays and one feature display
- 5 Display type 5 one display for both call appearance and feature information (BRI only)
- 6 Display type 6 four call appearance displays and one feature display (BRI only)

Field 6 Enter the ISDN Management Information Message (MIM) assignment (used only for BRI voice terminals). The MIM is part of the AT&T ISDN Management and Maintenance specification.

- No MIMs are supported (this limits BRI usage to point-to-point connections and maintenance audits from the switch are not possible)
- 1 MIMs are not supported, terminal requires initialization (this option is not used at this time)
- 2 Synchronous MIMs, terminal does not require initialization
- 3 Synchronous MIMs, terminal requires initialization (this encode works for most AT&T BRI voice terminals)
- 4 Asynchronous MIMs, terminal does not require initialization
- 5 Asynchronous MIMs, terminal requires initialization

The value assigned in this field depends on the characteristics of the individual BRI voice terminals. Check with the terminal vendor to see if the terminal can recognize AT&T ISDN MIMs.

If field 6 = 0, a Service Profile Identifier (SPID) is not required. If field 6 = 3 or 5, a SPID must be assigned to the voice terminal using Procedure 051 Word 2. Encode "0" is usually used for non-AT&T BRI voice terminals. Encodes "2-5" are usually used for AT&T BRI voice terminals.

- Field 7 Enter the number of buttons on the basic terminal (0-62).
- Field 8 Enter the number of display module buttons (0-7).
- Field 9 Enter the number of feature module buttons (1-24).
- Field 10 Enter the number of coverage module buttons (1-20).

Administers a button template for terminals types 100-200 (other vendor and undefined AT&T terminals and data modules). A button template defines the number of lamps associated with each button and button usage.

Field 1	Enter the terminal type (100-200).		
Field 2	Enter the device type:		
	0	Basic set	
	1	Feature module	
	2	Coverage module	
	3	Display module	
Field 3	Enter the	button number (1-62).	
Field 4	Enter the	number of lamps:	
Field 4	Enter the 0	number of lamps: No lamps	
Field 4	_		
Field 4	0	No lamps	
Field 4	0 1 2	No lamps One lamp	
	0 1 2	No lamps One lamp Two lamps	
	0 1 2 Enter the	No lamps One lamp Two lamps button usage:	

051 Word 1 Administers the multiappearance voice terminal and data module translations, including the association between a terminal or data module and an equipment location.

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11 12

cation.	association between a terminal or data module and an equipment			
Field 1	Enter the module number (0-30).			
Field 2	Enter the cabinet number $(0-7)$ for traditional modules, 0 for universal modules).			
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).			
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules).			
Field 5	Enter the circuit number (0-3 for DCP terminals on traditional modules, 0-7 for DCP terminals on universal modules, 0, 2, 4, 6, 22 for BRI terminals on universal modules).			
Field 6	Enter the terminal type (100-200).			
Field 7	Enter the option: 0 Data only 1 Voice only 2 Terminal, feature module 3 Terminal, coverage module 4 Terminal, feature module, coverage module 5 Terminal, display module			
	6 Terminal, data			

Terminal, feature module, display module

Terminal, feature module, coverage module, data

Terminal, feature module, display module, data

Terminal, feature module, data

Terminal, coverage module, data

Terminal, display module, data

Field 8	Enter the data type: - Not assigned 1 DTDM, data stand, or ADM-T (BRI terminals) 2 7400 data module
Field 9	Enter the display type: - Not assigned 0 Integrated display 1 Display module
Field 10	Enter the origination preference assignment: 0 No line 1 Idle line 2 Prime line 3 Last line
Field 11	Enter the termination (answering) preference assignment: 0 None 1 Calling line 2 Ringing line
Field 12	Enter the lock/unlock available assignment: 0 Not available 1 Available
Field 13	Enter the keyboard dialing assignment: Not applicable No keyboard dialing Keyboard dialing
Field 14	Enter the LWC global retrieval assignment: Not applicable LWC global retrieval not allowed LWC global retrieval allowed
Field 15	Enter the terminal alarming assignment: 0 Disable 1 Enable
Field 16	Enter the BRI TEI (0-63, 128).

Administers the ISDN Service Profile Identifiers (SPIDs) to an assigned BRI voice terminal that requires a SPID (not all BRI voice terminals require SPIDs). The SPID must also be assigned at the voice terminal. See the voice terminal installation instructions on how to assign the SPID at the voice terminal.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0).
Field 3	Enter the port carrier number (c-e).
Field 4	Enter the slot number in the port carrier (1-20).
Field 5	Enter the circuit number $(0, 2, 4, 6, \dots 22)$.

Field 6 Enter an ISDN SPID (0-999999999). An ISDN SPID must be unique system wide. Embedded and trailing blanks are not allowed in a SPID. Leading blanks are allowed.

Field 7 Enter the Service SPID flag specification (-,1). If this field is enabled, the SPID in field 6 is the service SPID for the entire switch.

052 Word 1

Administers one or more images of a line appearance to an assigned multiappearance voice terminal or data module. This procedure is also used to administer line type, ringing type, home terminal, originate only, and Send All Calls (SAC) group.

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal modules).

Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).

Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE

modules).

Field 5 Enter the circuit number (0-7 for DCP terminals on traditional modules, 0-7 for DCP terminals on universal modules, 0, 2, 4, 6, 22 for BRI terminals on universal modules, 0, 2, 4, 6, 18

for XE modules).

Field 6 Enter the device type:

0 Basic set

1 Feature module

2 Coverage module

3 Display module

4 ADFTC/MTCP

Field 7 Enter the member (button) number (0-62). This is the number of the button to which you want to assign a line appearance or feature. Refer to "Button Numbering Scheme" for button numbering information.

Field 8 Enter the extension (000-99999).

Field 9 Enter the line appearance (1-12).

Fields 10-14 apply to the line appearance specified in field 9.

Field 10 Enter the line type:

0 No prime line

1 Prime line

2 Auto appearance

Field 11 Enter the ringing type:

0 No ringing

1 Ringing

- 2 Delayed ringing
- 3 Abbreviated ringing

A ringing type must be specified for each assignment, including each image of a line appearance. Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.

- Field 12 Enter the home terminal assignment:
 - 0 Is not home terminal
 - 1 Is home terminal
- Field 13 Enter the originating only assignment:
 - 0 Not originating
 - 1 Originating
- Field 14 Enter the SAC group assignment. Setting this field to 1 marks the extension in field 8 as being part of a group of extensions used with the Send All Calls attribute of Call Coverage.
 - 0 Not a member or SAC group
 - 1 Member of SAC group

Swapping Voice Terminal Translations

Using the Terminal Swap procedure, you can move the appearance and feature button translations from voice terminal A to voice terminal B, and vice versa. The terminals that can swap translations are shown in the following table.

		Compa	tibility of	Terminal T	ypes		
TYPE	72xxH	73xxS	74xxD	510/515	SVT	MET	75xxBRI
72xxH	yes	yes†	yes*	no	no	yes	no
73xxS	yes†	yes	yes†	no	no	yes†	no
74xxD	yes*	yes†	yes	yes	no	yes*	no
510/515	no	no	yes	yes	no	no	no
SVT	no	no	no	no	no	no	no
MET	yes	yes†	yes*	no	no	yes	no
75xxBRI	no	no	no	no	no	no	yes‡

^{*} Compatible if neither terminal has a display module or data.

Swaps the translations between two assigned voice terminals. Enter the equipment location of one voice terminal in fields 1-5 and then the equipment location of the other voice terminal in fields 8-12. Do a display routine on this information, and then do a change routine.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal modules).
Field 8	Enter the module number (0-30).
Field 9	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules).
Field 10	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules).

[†] Compatible if neither terminal has a display module, feature module, coverage module, or data.

[‡] Compatible if terminal endpoint identifiers (TEI)s remain unique.

SVT = Single-appearance voice terminal.

Field 11	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21
	for traditional modules, 1-20 for universal modules).

Field 12 Enter the circuit number (0-7 for traditional modules, 0-23 for universal modules).

Administering Voice Terminals and Data Modules with Task Mode

Task mode provides a "task oriented" presentation of voice terminal and data module administration transactions for Generic 2. This interface allows the user to complete an entire task (such as adding a station) in a few screens that are accessed using only one command instead of many procedures. It is intended to simplify administration by providing an easier, less complex interface than using administration procedures.

With task mode, you can display, add, change, or remove station assignments (extension and terminal) for all currently-available AT&T voice terminals. These commands use a series of "fill in the blank" screens that are sensitive to the type of station you are administering. For example, if you are administering a simple analog voice terminal, you only fill in two screens at most. If you are administering a larger station with data or display options, you might have to fill in up to seven screens.

In the following sections, each of these screens will be shown and each field will be defined. The examples shown here are based on using the "add station" command. After learning how to add a station, displaying, changing, or removing a station will be easy.

Entering Task Mode

To execute task mode, first connect to the switch. After doing this, type **task** Return. This displays the task mode "signature" screen. You can either display, add, change, or remove a station. For these examples, add a new station with extension *12345*. To begin, type **add station 12345** Return. At any time during task mode, ask for help using the 5 Help key. This help command gives information about commands and data fields.

Basic Station and Feature Options Screen

		`
add station 12345	Page 1	l of X
STATION		
Extension: 12345		
Type: 7403d	Origination:	prime
Equip Loc:/_// COS:	Termination:	none
Name:		
FEATURE OPTIONS		
LWC Destination:	Call Coverage Group:	0
AP Number: 0	Coverage Msg Retrieval?	n
AUDIX Machine Number: 0	Call Pickup Group:	0
Auxiliary ANI? n	Hunt-To Extension:	
Automatic Msg Waiting? n	Bearer Capability COS:	0
Audible Auto Msg Waiting? n		
Attd Cont Rest Group: 0_		
	NPA-NXX:	
enter command:		
1 Cancel 2 Refrsh 3 Submit 4 Clear 5 Help	7 NextPg 8	PrevPg

The screen shown is the basic screen for all stations. Fields that are mandatory for particular station types must be filled in. fields that are not mandatory can be skipped and a default will be entered. Remember to press 5 Help for field help at any time.

- Extension This field is populated from the extension you gave on the command line and can't be changed here.
- Type This is the station type. The following station types are administrable in task mode:

10met	7404d	callmaster
20met	7405d	adftc (analog/digital facility test circuit)
30met	7406db	analog (2500, 7201, 7202)
510	7406dc	dpd (dual port data)
515	7407d	eia
7203h	7410d	ext (Extension only, i.e., no terminal)
7205h	7434d	pc/pbx
7303s	7500	pdm (processor data module)
7305s	7505b	sls (straight line set)
7401d	7506b	tdm (trunk data module)
7403d	7507b	mtcp (maintenance test circuit pack)

Once a station type is selected, the data fields will change based on the station type selected. The data fields may also be rearranged on some station types. Even though not all of the following data fields are used for all station types, all entries are given here for completeness.

• Equip Loc — This is the module/cabinet/carrier/slot/circuit where the station interfaces to the system. Remember, the circuit pack must be compatible with the station type. The limits are:

0 - 30Module Cabinet 0-7 for traditional modules, 0 for universal and XE modules Carrier 0-3 for traditional modules, c-e for universal and XE modules Slot 0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules Circuit 0-7 for traditional modules, 0-23 for universal and XE modules (0, 2, 4, 6, ... 22 for BRI terminals)

- COS This is the class of service being assigned to this station. Class of service features and restrictions are found in Procedure 010 Words 1-4. The limit is 1-30 and 32-63.
- Port Type (not shown) This defines the type of port used for that station. The options are:

on-prem On-premises extension off-pre Off-premises extension test li Test line

OPS with terminal balance ops wit

ds1-ops DS1 OPS line

- Hot Line (not shown) This defines if this station is set up for Hot Line service. The options are y or n.
- Disable Signaling (not shown) This indicates if you want signaling disabled for DS1 OPS lines. The options are y or n.
- Origination This defines how line appearances will be selected automatically when originating calls. The options are:

no line prime last idle

 Termination — This defines how line appearances will be selected automatically when answering calls. The options are:

none call ring

 Name — This is where you enter the name of the station user or the station location (e.g., Purchasing). The name can be up to 30 characters long.

Feature Options

LWC Destination — This defines where LWC messages will be stored for this station user. The
options are:

blank Unassigned switch Switch ap AP audix AUDIX

- AP Number This defines the AP that is used for Message Center coverage for this station user.
 The limits are 0-7 (0 means unassigned).
- AUDIX Machine Number This defines the AUDIX machine where messages are stored for this station user. The limits are 0-8 (0 means unassigned).
- Auxiliary ANI This defines whether the station's extension will be used for central office billing or if a common number administered in Procedure 275 Word 1 will be used for central office billing. The options are y (to use the common number) or n (to use its own extension number).
- Automatic Msg Waiting This enables automatic message waiting for this station. The options
 are y or n.
- Audible Auto Msg Waiting This enables audible automatic message waiting for this station. The options are y or n.
- Attd Cont Rest Group This assigns a station to an attendant controlled restriction group. The limits are 0-63 (0 means unassigned).
- Call Coverage Group This assigns the station to a Call Coverage group that is administered in Procedure 011 Word 1. The limit for single-path coverage groups is 1-1999. The limit for dualpath coverage groups is 2000-4094 (even numbers only). A 0 means unassigned.
- Coverage Msg Retrieval This enables a station defined as a covering user (a point in a coverage path) to retrieve messages for a principal covered by that path. The options are y and n. This is displayed only if a coverage group is assigned.
- Call Pickup Group This assigns this station to a Call Pickup group. The limits are 0-999 (0 means unassigned).
- Hunt-To Extension If this station is busy, incoming calls will hunt to the extension in this field. The limits are 000-99999.
- Bearer Capability COS This assigns a Bearer Capability COS (BCCOS) to this station.
 Extensions get a default BCCOS of 0. DCP data modules and the 7500 BRI data module should be assigned to BCCOS 1. BCCOS is administered in Procedure 014 Words 1-2. The limits are 0-255.
- NPA-NXX This assigns the area code and office code for the station.

After completing this screen, press 7 NextPg to move to the next page.

Terminal Options and Abbreviated Dialing Screen

add station 12345	Page	2 of	х
STATION			
TERMINAL OPTIONS			
Data Module? y Type: 1 Terminal Alarming? n			
Display Module? y Type: 0 Terminal Endpoint ID: 128			
Coverage Module? n Service Profile ID:			
Feature Module? n			
ABBREVIATED DIALING A List Type: List Size:			
B List Type: _ Group No.: Controller? n			
System List Access? n			
enter command:			
1 Cancel 2 Refrsh 3 Submit 4 Clear 5 Help 7 Ne	extPg	B PrevP	g
			/

This screen is used for every station type to define terminal options and Abbreviated Dialing lists. If you are assigning analog stations, the terminal options fields are not used. Some of the terminal options have fixed assignments that you cannot change for some station types, and not all of these options appear for every station type. Only the applicable modules are displayed.

- Data Module indicates whether the station has an associated data module. If you answer yes, this will bring up a data module screen later. The options are y and n. If you answer y, a "Type:" field pops up. The options are 1 (DTDM or data stand) and 2 (7400).
- Display Module indicates whether the station has an associated display module. If you answer yes, this will bring up a display module screen later. The options are y and n. If you answer y, a "Type:" field pops up. The options are 0 (integrated display) and 1 (display module). You cannot have both a display module and a coverage module.
- Coverage Module indicates whether the station has an associated coverage module. If you
 answer yes, this will bring up a coverage module screen later. The options are y and n. You
 cannot have both a coverage module and a display module.
- Feature Module indicates whether the station has an associated feature module. If you answer yes, this will bring up a feature module screen later. The options are y and n.

- Terminal Alarming indicates whether the station is able to provide alarms to the switch software. The options are y and n. This is displayed only if Procedure 275 Word 4 field 15 = 2 (even-port peripheral alarms, terminal alarming enabled).
- Terminal Endpoint ID specifies the endpoint for a BRI station (7500, 7505b, 7506b, 7507b).
 The values are 0-63 and 128.
- Service Profile ID corresponds to a number that was entered at the BRI station during station installation (7500, 7505b, 7506b, 7507b). The values are 0-9999999999.
- Terminal Dialing (not shown) indicates whether keyboard dialing is enabled for this station. The options are y and n. This only applies to data modules.
- Default Terminal Dialing (not shown) indicates whether this station is administered for default terminal dialing as defined in the Abbreviated Dialing feature. The options are y and n. This only applies to data modules.
- Second Port Data Extension (not shown) enables you to assign a second data port for dpd, adftc, mtcp, or 7500 use. The options are y and n. If you answer yes, a second port data extension screen becomes active. This screen includes a subset of the same data fields that are on the basic station and feature options screen.

Abbreviated Dialing

For Abbreviated Dialing list assignments, the data fields on the screen vary depending if you assign list A and B as personal or group lists. First you assign them as a group or personal list:

- A or B List Type Specifies type for list A or B:
 - p personal
 - g group

If you assign them as personal lists, the following field pops up:

• List Size — The limits are 5-95 (in increments of 5).

If you assign them as group lists, the following fields pop up:

- Group No. The limits are 1-9999.
- Controller Identifies this station as the controller of this group list. The options are y and n.

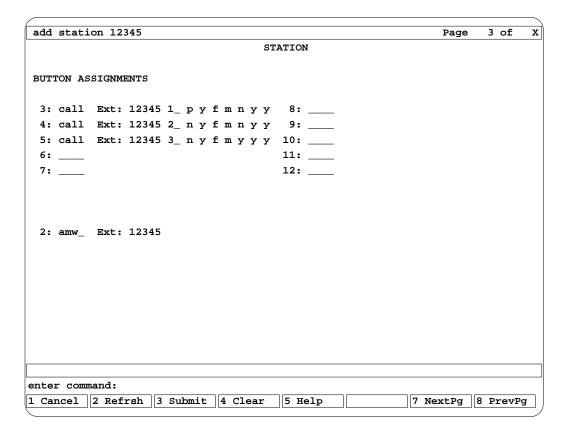
The system list access is separate from the personal or group lists. You can administer system list access and not administer a personal or group list.

System List Access — This defines if this station has access to the system list. The options are y
and n.

The list items within any lists cannot be assigned in task mode. Use Procedure 059 Word 2 or assign them from a station using the Abbreviated Dialing feature access codes.

The next screen defines the call appearances and feature buttons on basic multiappearance stations. Press $\boxed{7 \, \text{NextPg}}$ to continue.

Basic Station Button Assignments Screen



This screen is used by the following station types:

10met	7305s	7410d
20met	7401d	7434d
30met	7403d	7505b
510	7404d	7506b
515	7405d	7507b
7203h	7406db	callmaster
7205h	7406dc	pc/pbx
7303s	7407d	

This screen defines call appearances and feature buttons on the basic station. The button numbering shown is the actual numbering for the station type as defined by the administration procedures. See the button layouts earlier in this chapter. Remember that button 1 is always the Hold button and button 2 is always the Automatic Message Waiting button. Buttons 3-5 default as the primary line appearances for all stations and the rest of the buttons are free for other call appearances or features.

The exact number of buttons displayed on this screen depends on the station. Twelve buttons is the maximum.

When defining a call appearance, several numbers and characters are displayed to the right of the extension number. Those numbers represent options for that call appearance. See the section at the end of this chapter for a definition of the call appearance options.

That section also contains the definitions of the available station feature button abbreviations. These feature buttons are used on this screen and several other station screens. Use stell to list all the button types.

Depending on the station type used in the first screen, there are six more screens that may be used. These are the feature button screens, the feature module button screen, the coverage module button screen, the display module button screen, and the data module screen. Press 7 NextPg to continue.

Feature Button Assignments Screen

add station 12345	Page	X of	х
STATION			
FEATURE BUTTON ASSIGNMENTS			
13:			
14:			
15:			
16:			
17:			
18:			
19:			
20:			
21:			
22: 34:			
23:			
24:			
			_
enter command:			
1 Cancel 2 Refrsh 3 Submit 4 Clear 5 Help	7 NextPg	8 PrevP	3

This screen is used with the following station types:

20met	7405d	7505b
30met	7406db	7506b
510	7406dc	7507b
7205h	7407d	callmaster
7305s	7434d	pc/pbx

These station types have feature buttons that are integrated with the basic set (as opposed to a feature module).

Feature Button Assignments Screen (Continued)

add station 12345	Page	X of X
STATION		
FEATURE BUTTON ASSIGNMENTS CONTINUED		
FEATURE BUILDN ASSIGNMENTS CONTINUED		
37:		
38:		
39:		
40:		
41:		
42:		
12.		
enter command:		
1 Cancel 2 Refrsh 3 Submit 4 Clear 5 Help 7 No	extPg	8 PrevPg

This screen is only used with the 7507b station type. This station type has feature buttons that are integrated with the basic set (as opposed to a feature module) and this screen is just a continuation of the previous page.

Feature Module Button Assignments Screen

add station 12345		Page	X of	Х
	STATION			
FEATURE MODULE BUTTON ASSIGNMENTS				
1:	13:			
2:	14:			
3:	15:			
4:	16:			
5:	17:			
6:	18:			
7:	19:			
8:	20:			
9:	21:			
10:	22:			
11:	23:			
12:	24:			
enter command:				
. Cancel 2 Refrsh 3 Submit 4 Clea	r 5 Help	7 NextPg	8 PrevP	g

This screen is used by the following station types:

7205h	7405d
7404d	pc/pbx

These station types have feature buttons that are located on a separate feature module (as opposed to feature buttons on the basic set).

Coverage Module Button Assignments Screen

COVERAGE MODULE BUTTON ASSIGNMENTS 1:	add station 12345			Page	X of	<u> x</u>
1:		STATION		- 5		
1:						
2:	COVERAGE MODULE BUTTON ASSIGNMENTS	5				
2:						
3:						
4:	2:	12:				
5:						
6:	4:					
7:						
8:		16:				
9: 19: 20: enter command:	7:	17:				
10: 20:	8:	18:				
enter command:	9:	19:				
	10:	20:				
1 Cancel 2 Refrsh 3 Submit 4 Clear 5 Help 7 NextPg 8 PrevPg	enter command:					
	1 Cancel 2 Refrsh 3 Submit 4 Cl	ear 5 Help	7 Ne	xtPg 8	PrevP	g

This screen is used by the following station types:

7205h	7405d
7404d	7434d

These station types can have a coverage module attached to the basic set. The coverage module is used primarily for call appearances of principals by covering users (often secretaries) but you can assign features to these buttons.

Display Module Feature Options and Button Assignments Screen

add station 12345	Page	X of X
STATION		
DISPLAY MODULE FEATURE OPTIONS		
Lock Messages? n		
LWC Global Retrieval? n		
DISPLAY MODULE BUTTON ASSIGNMENTS		
DISTINI NODULE BUTTON ADDIGNIENTS		
1: norm		
2: insp		
3: date		
4: timr		
5: rmsg		
6: next		
7: del_		
enter command:		
1 Cancel 2 Refrsh 3 Submit 4 Clear 5 Help 7	NextPg	8 PrevPg

This screen is used by the following station types:

510	7406db	7506b
515	7406dc	7507b
7404d	7407d	callmaster
7405d	7434d	pc/pbx

These station types can have a display module either attached to the basic set, as part of the basic set, or displayed on an attached data terminal (CRT/video display). There are two options you can set for display module use:

- Lock Messages This defines if the station user can lock their station so that other users cannot access this user's messages. The options are y and n.
- LWC Global Retrieval This defines if this user can access LWC messages for anyone on the switch. The options are y and n.

Display Module Button Assignments

A set of default display buttons are assigned in this screen. You may rearrange these buttons as desired. The following stations have displays but the display buttons are assigned on the basic set feature buttons: 7406dc, 7506b, 7507b, callmaster.

Data Module and Feature Options Screen

add station 12345	Page	X of	x
STATION	1 age	7. OI	41
SIAIION			
DATA MODULE			
Extension: COS:			
Name:			
FEATURE OPTIONS			
Terminal Dialing? n			
Default Terminal Dialing? n			
Auxiliary ANI? n			
Attd Cont Rest Group: 0_			
Hunt-To Extension:			
Bearer Capability COS: 0			
NPA-NXX:			
enter command:		71-	1
1 Cancel	NextPg	8 Prev	Pg /

This screen is used by the following station types:

510	7406db	7506b
515	7406dc	7507b
7401d	7407d	callmaster
7403d	7410d	pc/pbx
7404d	7434d	
7405d	7505b	

These station types can have a data module associated with the basic set. The following items can be administered for a data module (not all data modules require all fields):

- Extension This is the data extension for the data module (000-99999).
- COS This is the extension class of service associated with the data module. COS features and restrictions are administered in Procedure 010 Words 1-4. The limits are 1-30 and 32-63.

• Name — Defines a name display for the data module. This name can be up to 30 characters.

Feature Options

- Terminal Dialing Defines if the attached data terminal (video display) can be used to do keyboard dialing. Options are y and n.
- Default Terminal Dialing Defines if this data module is administered to automatically dial a predefined destination. Options are y and n.
- Auxiliary ANI This defines whether the station's extension will be used for central office billing or if a common number administered in Procedure 275 Word 1 will be used for central office billing. The options are y (to use the common number) or n (to use its own extension number).
- Attd Cont Rest Group This assigns a station to an attendant controlled restriction group. The limits are 0-63 (0 means unassigned).
- Hunt-To Extension If this station is busy, incoming calls will hunt to the extension in this field. The limits are 000-99999.
- Bearer Capability COS This assigns a Bearer Capability COS (BCCOS) to this station.
 Extensions get a default BCCOS of 0. DCP data modules and the 7500 BRI data module should be assigned to BCCOS 1. BCCOS is administered in Procedure 014 Words 1-2. The limits are 0-255.
- NPA-NXX This assigns the area code and office code for the station.

Submitting Additions

After completing the appropriate screens, you should take time to go through each screen using 7 NextPg and 8 PrevPg to see that all entries are correct. When satisfied that the entries are correct, press 3 Submit . Task mode now checks the data you have entered for validity. If it finds that some input is invalid, the screen with the error is displayed and you can correct the data. Use 5 Help to get a listing of the valid data. Press 3 Submit again. If there are any other data errors, correct and resubmit. When all field entries are within range, the task mode now starts submit validation and then accessing the administration procedures to make the requested changes. On the message line, a tabulation of requests to the switch is displayed:

Sending Request 1 to Switch, Sending Request 2 to Switch, etc.

When completed, the message

Command successfully completed

is displayed on the message line and the screen blanks out.

To verify that your addition was made, use the **display station 12345** command to display what you just added.

Other Operations

With task mode, you can also display, change, and remove stations. These operations are done basically like you would do an add.

To display a station, type **display station 12345** \bigcirc Return. This sends requests to the switch to display information about a station that has already been administered. You can cancel this request using $\boxed{1 \, \text{Cancel}}$.

To change a station, type **change station 12345** (Return). This sends requests to the switch to display information about a station that has already been administered. You can now move through the screens and change data in the screens. After making your changes, you press 3 Submit to request the change or 1 Cancel to cancel the change. Note that you can save time by using the change operation, instead of a display operation followed by a change operation, if you think you might have to make a change on a station.

To remove a station, type **remove station 12345** Return. This sends requests to the switch to display the station information first. If you want to continue and remove this station, press 3 Submit. Otherwise, press 1 Cancel.

To leave task mode, you can use enh (enhanced mode), bas (basic mode), or quit.

Error Recovery

The following table summarizes error recovery:

Types of Errors	Corrective Action When Error Occurs	
Command Error	Correct and resubmit command. Use 5 Help for the valid commands.	
Field Error	Correct and re-enter field data. Use 5 Help for the valid entries.	
Submit Error	Correct field and resubmit screen. Use 5 Help for the valid entries.	
Operation Error (display, add, change, or remove)	Correct field and resubmit screen. Us add or change, you may cancel the command, remove the station and state over. If doing a remove, you may have to correct the error by going to enhance mode and removing the extension from related administration, such as Ca Coverage path assignments. It may be necessary to go to the station and remove LWC messages before you care move the station. Then go back to tast mode and try to remove the station again.	

Station Button Abbreviations

Each call appearance or feature and feature parameter is assigned to a button by means of an abbreviation in task mode. You will need to know these abbreviations to assign call appearances and features or to interpret existing assignments. The following section gives abbreviations assignable to a button followed by the name of the feature, and (where appropriate) by any parameters that can be assigned to the feature or call appearance. Parameters are shown as bullet items in this list and are subordinated to the call appearance or feature abbreviation.

On the screen, parameters are shown to the right of the button field and input is required to complete the button assignment.

Call Appearance Button Abbreviations

aicm Intercom — Automatic

• Grp: — The number of the intercom group accessed by this button (1-300).

call Call appearance

- Ext: The number of the extension whose incoming calls are to be picked up via this button. Valid entry is 000-99999. Note the following:
 - If the "originate only" parameter is changed for a home station, it will be changed for all bridged appearances of that extension and will affect the function of call appearance buttons.
 - Bridging of call appearances on multiappearance voice stations is not recommended.
 Call coverage provides more effective service.
 - An extension number can have a maximum of 12 appearances on one station and 16 bridged appearances on all other stations combined.
 - Multiple appearances of lines can be assigned only to multiappearance voice stations. Therefore, bridged calling is used mainly with multiappearance voice stations, although the analog voice stations may be used as a bridged appearance when assigned the same extension number as one of the extensions on a multiappearance voice station. Only one appearance of that extension can be bridged on by an analog voice station.

The following parameters are shown to the right of the extension and don't have any labeling associated with their values. You must count over each entry to find the values of this data. Remember to use 5 Help to get help on each of these items.

- Line appearance No. The line appearance number for the extension whose calls this button will pick up.
- Line type:
 - n No prime line
 - p Prime line

- a Automatic line appearance
- pd Prime data line
- nd Data appearance

Only one line appearance can be designated as prime.

- Ring type:
 - n No ring
 - y Ring
 - d Delayed ring
 - a Abbreviated ring
- Ring Transfer This defines what the ringing type is at this station when the ringing transfer button is operated for this extension. Valid entries are:
 - f No ring transfer
 - r Ring when operated
 - n No ring when operated

All images of an appearance have the same ring type, so changing one image may affect all images.

- Abbreviated/Delayed Ringing type This defines the method by which ringing (on a call to the extension being picked up) is to be transferred to this station. Valid entries are:
 - a Automatic
 - m Manual

All images of an appearance have the same ring type, so changing one image affects all images.

- Originate only This defines if this extension can only originate calls or if it can also receive calls. The options are y and n. (If you change this parameter, it will be changed for all bridged appearances of the associated extension.)
- Home terminal This defines if the extension an this call appearance is the main extension for this station. The options are y and n.
- SAC Group This defines if this extension is a member of a Send All Calls group. The options are y and n.

dicm Intercom — Dial

- Grp: The number of the intercom group to be accessed by this button (1-280).
- DC (dial code): The index number of this station in the dial intercom group. At least two stations must be assigned to each group in this way (0-99).

micm Intercom - Manual

• Grp: — The number of the intercom group to be accessed by this button (1-300).

pco Personal CO Line

- Trk: The equipment location of the trunk to the central office (module/cabinet/carrier/slot/circuit).
- Ring? Defines if incoming calls on this line ring or not. Options are y and n.

Feature Button Abbreviations

acb Automatic Callback

ad Automatic dialing (for Abbreviated Dialing)

adx Abbreviated/Delayed Ringing Transfer

• Ext: — The extension that is to use Abbreviated/Delayed Ringing.

ain ACD - auto in

• Ext: — The extension that is to automatically receive distributed calls.

aitm Abbreviated Dialing - list A member select

• Mbr: — The index number of a member of your Abbreviated Dialing list A. This is the member to be dialed automatically when the current button is pressed (1-95).

alst Abbreviated Dialing - list A access button

amw Message Waiting - Automatic

• Ext: — When there are messages for the extension whose number is entered here, this Message Waiting lamp will be lit.

auxw ACD - aux work

• Ext: — Enables this extension to bypass distributed calls.

bitm Abbreviated Dialing - list B member select

• Mbr: — The index number of a member of your Abbreviated Dialing list B. This is the member to be dialed automatically when the current button is pressed (1-95).

blst Abbreviated Dialing - list B access button

busy Station busy

• Loc: — The equipment location defined for the station whose busy status is to be indicated (module/cabinet/carrier/slot/circuit).

cfbd Call Forwarding — Busy and Don't Answer

cffm Call Forwarding — Follow Me

city ACD - repeat city-of-origin announcement

cmsg Display module - coverage message retrieval

cmss ACD - stroke count

• Cnt: — stroke count 0-9.

cons Consult

cpu Call Pickup

cvcb Coverage callback

data Data call setup

- Loc: The location of the data module to be used (module/cabinet/carrier/slot/circuit).
- RTV? This activates return-to-voice after this button is pressed. The options are y and n.
- date Display module display date and time
- del Display module delete displayed message
- excl Manual Exclusion
 - Ext: The extension that will not allow bridging when Manual Exclusion is used.
- func Abbreviated Dialing special function entry
- insp Display module inspection mode
- lnd Last Number Dialed
- lwc Leave Word Calling activate
- lwcc Leave Word Calling cancel
- mark Abbreviated Dialing special function mark
- mct Malicious Call Trace
- mdgt Abbreviated Dialing special function manual digit entry
- min ACD manual in
 - Ext: Enables this extension to receive distributed calls upon demand.

mmwr Message Waiting - Manual (signaled station)

- Loc: The equipment location of the signaled station (module/cabinet/carrier/slot/circuit).
- DT (device type): Defines the device type of the signaled station. Valid entries are:
 - b Basic set
 - f Feature module
 - c Coverage
 - d Display module
- Btn: The button number on the signaled station (0-42).

mmws Message Waiting — Manual (signaling station)

- Loc: The equipment location of the signaling station (module/cabinet/carrier/slot/circuit).
- DT (device type): Defines the device type of the signaling station. Valid entries are:
 - b Basic set
 - f Feature module
 - c Coverage

- d Display module
- Btn: The button number on the signaling station (0-42).

msig Manual Signaling

• Loc: — The equipment location of the station to be signaled by this button (module/cabinet/carrier/slot/circuit).

next Display module - display next message

norm display module - normal mode

over Override

paus Abbreviated Dialing - special function pause

pc Priority Calling

prog Abbreviated Dialing - program select

rcll Recall

rcut Ringing Cutoff

rls ACD - release

rmsg Display module - message retrieval mode

rtrf Ringing Transfer

• Ext: — The extension where the ringing signal is to be transferred.

rtrn Display module - return displayed call

sac Send All Calls — Applies to extensions that have been specified as members of a SAC group when their appearances were assigned to a *call* button on this station.

sace Send All Calls to an extension

• Ext: — The extension from which calls are redirected when this button is pushed.

scrl Display module - scroll message display

sitm Abbreviated Dialing - system list

• Mbr: — this button will automatically dial the extension corresponding to the index number (from the Abbreviated Dialing system list) entered here (1-9999).

slst Abbreviated Dialing - system list access button

staf ACD - staffed

• Ext: — The number of the extension to have this feature. Enables this extension to receive or not receive distributed calls.

supp Abbreviated Dialing - suppress display

svco ACD - service observing

timr Display module - elapsed timer on

wait Abbreviated Dialing - special function wait

wfpr Wait for Principal (used with PC/PBX)

TRUNK ADMINISTRATION

General Information

An alphabetical list of system features and their associated trunk types are located in this chapter. Locate the feature you are going to administer from the alphabetical feature list. Below each feature is a list of compatible trunk types. Select a suitable trunk type.

If you are administering an analog trunk, use the "Analog Trunks" section in this chapter. If you are administering a digital trunk, use the "Digital Trunks" section in this chapter.

The reason the other trunk procedures (100 Word 2, 115 Word 1, etc.) are not included in this section is because they are not always required for all types of trunk administration. For example, an ACD trunk does not necessarily require administration in Procedure 100 Word 2, but it does require administration in Procedure 115 Word 1. On the other hand, Modem Pooling requires administration in Procedure 100 Word 2, but does not require administration in Procedure 115 Word 1. Any additional trunk administration that is required and not mentioned here is in the specific feature write-up.

Prerequisite Administration

Before administering trunk groups, make sure the following is administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Names Database (See Chapter 2, "System Administration")

You can assign names to trunk groups to help identify certain facilities to users that have display terminals.

290 Word 2

Field 3

Field 4

Searching for Available Equipment Locations

290 Word 1 Displays status of assigned port circuit packs. You can search by port type (Field 1), equipment location (Fields 2-5), or both.

((
Field 1	Enter the trunk port type:		
	3 Analog CO trunk		
	4 Analog DID trunk		
	5 Analog tie trunk/attendant interface		
	6 Analog auxiliary trunk		
	9		
	11	TT receiver/tone detector	
	12	TT sender/tone detector	
	14	Attendant conference	
	16	Data port/analog line	
	17	Contact interface/analog line	
	20	ADFTC/MTCP	
	21	DS1 real	
	22	DS1 virtual	
	23	EIA trunk and line/DLC	
	24	GPP used as a data trunk/digital line	
	25	ISDN real	
	26	ISDN virtual	
	27	ISDN BRI interface	
Field 2	Enter the	e module number (0-30).	
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).		
Field 5	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).		
Displays installed	d circuit pa	ack identification.	
Field 1	Enter the	e module number (0-30).	
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		

Enter the port carrier number (0-3 for traditional modules, c-e for

Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE

universal and XE modules).

modules).

Analog Trunks

Basic analog trunk translations are done in Procedure 100 Word 1 and Procedure 150 Word 1. Additional trunk characteristics may be assigned, as needed, in Procedure 101 Words 1 and 2 and Procedure 103 Word 1.

If the default signaling type is unacceptable for any reason, see the "Trunk Signaling Types" section in this chapter.

After completing the translations in this section, return to the feature you want to administer and continue.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 1	100 Word 1	150 Word 1
101 Word 1	101 Word 1	100 Word 1
101 Word 2	101 Word 2	
103 Word 1	103 Word 1	
150 Word 1	150 Word 1	

Procedure Usage

100 Word 1

Administers the trunk group translations. These translations include the Dial Access Code/Trunk ID, trunk type, dial access restrictions, and personal central office appearance.

Field 1	Enter the trunk group number (18-999). DCS trunk groups are limited to 18-255.
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

Field 6 Enter the appropriate trunk type. The trunk types associated with each feature are listed at the end of this section.

The default signaling types are shown in parenthesis. When possible, the trunk types are also identified for whether they can be administered as analog only (A), or both analog or digital (B).

- 2 Touch-tone digit register $(0)^A$
- 5 Attendant Conference $(0)^A$
- 6 Queuing $(0)^A$
- 12 CCSA/APLT 2-way with dial tone out $(9)^{B}$
- 13 CCSA/APLT 2-way with dial tone out (10)^B
- 14 CCSA/APLT 2-way (8)^B
- 15 CCSA/APLT 2-way $(5)^{B}$
- 16 CO 1-way in attendant completing $(1)^{B}$
- 17 CO 1-way out DOD $(1)^B$
- 18 CO 1-way out DOD with party test $(2)^{B}$
- 19 CO 2-way attendant completing in/DOD out $(1)^{B}$
- 20 CO 2-way with party test attendant completing in/DOD out $(2)^A$
- FX 1-way in attendant completing $(1)^B$
- FX 1-way out DOD $(1)^B$
- 23 FX 1-way out DOD with party test (2)^A
- 24 FX 2-way attendant completing in/DOD out (1)^B
- 25 FX 2-way with party test attendant completing in/DOD out (1)^A
- 26 WATS 1-way in attendant completing (1)^B
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)^B
- 28 WATS 1-way out DOD with party test (2)^A
- 30 DID immediate start $(30)^{B}$
- 31 DID wink start (3)^B
- 32 TIE 1-way in dial repeating $(4)^{B}$
- 33 TIE 1-way out automatic $(31)^{B}$
- 34 TIE 1-way out dial repeating $(4)^{B}$
- 35 TIE 1-way in automatic $(28)^{B}$
- 36 TIE 2-way dial repeating in and out $(4)^{B}$
- 37 TIE 2-way dial repeating in/automatic out (31)^B
- 38 TIE 2-way automatic in/dial repeating out (28)^B
- 39 TIE 2-way automatic in and out $(32)^{B}$
- 40 TIE 1-way in dial repeating, delay dial (8)^B
- 41 TIE ETN 2-way dial repeating (26)^B
- 42 TIE ETN 1-way in dial repeating $(26)^{B}$
- 43 TIE ETN 1-way out dial repeating (26)^B
- 44 TIE 2-way dial repeating $(27)^{B}$
- 45 TIE 2-way dial repeating in/immediate out (8)^B

- 46 TIE ETN 2-way dial repeating/delay dial in (24)^B
- 47 TIE ETN 2-way dial repeating $(24)^{B}$
- 50 Remote Access 2-way (1)^B
- Telephone dictation interface $(7)^A$
- 52 Recorded Announcement interface (7)^A
- 53 Traditional Code Calling interface (Not for Universal Code Calling) (7)^A
- 54 Loudspeaker Paging interface (7)^A
- Touch-Tone sender $(0)^A$
- 57 CAS RLT 1-way outgoing from branch (13) B
- 58 ANI interface (6)^A
- 62 Music on Hold interface (0)^A
- 65 SN241 contact interface (0)^A
- 66 CAS release link trunk 1-way incoming at main (14)^B
- 67 Audio interface (0)^A
- 70 Main/Satellite 1-way in $(15)^{B}$
- 71 Main/Satellite 1-way out (15)^B
- 72 Main/Satellite 2-way (15)^B
- 73 Main/Satellite 1-way in (16)^B
- 74 Main/Satellite 1-way out (16)^B
- 75 Main/Satellite 2-way (16)^B
- 76 Main/Satellite 1-way in (17)^B
- 77 Main/Satellite 1-way out (17)^B
- 78 Main/Satellite 2-way (17)^B
- 90 ACD first announcement or Call Vectoring announcement (7)^A
- 91 ACD second announcement (7)^A
- 92 ACD origin announcement (7)^A
- 93 Malicious Call Trace recorder (7)^A
- 100 Data-tones tone detector $(0)^A$
- 101 Analog data modem pool (27)^A
- 102 Digital data modem pool (18)^A
- Host access PDM (18)^A
- 104 Host access TDM (18)^A
- 105 3B5 AP DCPI (18)^A
- 106 EIA 4 Port (18)^A
- 107 ISN/EIA port (18)^A
- Field 7 Specify dial access restriction. This field is ignored when using the Conference Attendant Six Party feature.
 - O Access to this trunk group is allowed using the DAC
 - Access to this trunk group is allowed only for testing and for unattended night service using the trunk ID code

Field 8 Enter the Personal CO Line assignment:

- 0 Trunk group is not used for Personal CO Line Pickup
- 1 Trunk group is used for Personal CO Line Pickup

- Field 1 Enter the trunk group number (18-999).
- Field 2 Enter the balance assignment. When this field is set to "1", the system inserts an extra 2 db of loss to each trunk-to-trunk connection involving an analog CO, FX, WATS, or DID trunk. This field is set to reduce reflections on CO connections.
 - 0 Disable
 - 1 Enable
- Field 3 Enter the battery reversal assignment. Battery reversal is sent from the CO to inform the system of toll calls.
 - 0 Disable
 - 1 Enable
- Field 4 Enter the incoming prefix digit assignment:
 - No additional digits are required for DID trunks
 - 0-9 Use this additional digit for DID trunks
- Field 5 Enter the DCS assignment. Any trunk groups used for DCS should have this field enabled.
 - 0 Disable
 - 1 Enable
- Field 6 Enter the touch-tone in assignment:
 - O Touch-tone signals are not used for incoming trunks
 - 1 Touch-tone signals are used for incoming trunks

For ACCUNET Service Interface, set this assignment to "0".

- Field 7 Enter the touch-tone out assignment:
 - O Touch-tone signals are not used for outgoing trunks
 - 1 Touch-tone signals are used for outgoing trunks

For ACCUNET Service Interface, set this assignment to "0".

- Field 8 Enter the CDR activation assignment:
 - 0 This trunk group not recorded by CDR
 - 1 This trunk group recorded by CDR
 - This trunk group recorded by CDR and an account code is required
- Field 9 Enter the AIOD billing number (-, 0000-9999). This is the default number used by the CO to bill the system for miscellaneous calls. Include any leading zeros that may be on the service order.
- Field 10 Enter the amount of time that elapses before a timed recall occurs on this trunk group (0-31 in minutes).
- Field 11 Enter the desired threshold (0-7). Timed recall will not occur until the number idle trunks in a trunk group reaches the level

entered into this field.

- Field 12 Enter the number of seconds before CDR begins recording call data on this trunk group (1-99). A dash (-) in this field relinquishes control of this timer to Procedure 275 Word 3 field 12.
- Field 13 Enter the pad group assignment:
 - O Determined by the trunk type assigned in Procedure 100 Word 1
 - 1 ISL TIE (S/DTT or S/ATT)
 - 2 EIA TIE (D/TT)
 - 3 ISL DCO (D/CO option -3/3)
 - 4 EIA DCO (D/CO option 0/6)
 - 5 DTO (D/TO)
 - 6 ATO (A/TO)
 - 7 N12A
 - 8 N12B
 - **S/DTT** Digital trunk interface to digital satellite PBX tie trunk.
 - **S/ATT** Analog trunk interface to analog satellite PBX tie trunk.
 - **D/TT** Digital trunk interface to a digital tie trunk, combination tie trunk, or any other tie trunk with a digital termination at a PBX that uses the mu-law interfaces.
 - **D/CO** Digital trunk interface to digital CO trunk, combination CO trunk, or any other CO trunk with a digital termination at a PBX that uses the mu-law interfaces.
 - **D/TO** Digital trunk interface to digital toll office trunk, combination toll office trunk, or any other toll office trunk with a digital termination at a PBX that uses the mu-law interfaces.
 - **A/TO** Analog trunk interface to an analog toll office trunk. Due to potential problems with feedback, the A/TO padgroup type should also be assigned to loudspeaker paging trunk groups that provide "all-zones" paging to three or more zones.
- Field 14 Enter the tie trunk toll restriction assignment:
 - O This trunk group not toll restricted
 - 1 This trunk group toll restricted
- Field 15 Enter the APLT features allowed assignment:
 - O APLT features are not active on this trunk group (CCSA features only)

APLT features are active on this trunk group

Field 16 Enter the disconnect supervision assignment:

- O Disconnect supervision not given on this trunk group
- 1 Disconnect supervision given on this trunk group
- 101 Word 2 Administers the redial delay timer, hybrid balance specifications, and tie type capability for a trunk group.
 - Field 1 Enter the trunk group number (18-999).
 - Field 2 Enter the redial delay time in tenths-of-seconds (0-50).
 - Field 3 Enter the hybrid balance specifications:
 - Not applicable
 - 0 RC coupling
 - 1 600 ohm coupling
 - Field 4 Enter the tie type capability:
 - Not applicable
 - 0 Type 1 format
 - 1 Type 1 compatible
 - 2 Type 5 format
- **103 Word 1** Administers network trunk group parameters.
 - Field 1 Enter the trunk group number (18-999).
 - Field 2 Enter the FRL (0-7).
 - Field 3 Enter the desired Travelling Class Mark specification:
 - O Do not send or expect to receive any TCMs
 - 1 Send and receive the FRL TCM
 - 2 Send and receive the FRL and the conditional routing TCMs
 - Field 4 Specify whether symmetrical routing is possible:
 - 0 No
 - 1 Yes
 - Field 5 Specify whether incoming tie trunk and APLT trunk can access WCR
 - 0 Disabled
 - Enabled (use only if the trunk group consists of tie trunks or APLT trunks)
 - Field 6 Specify whether an authorization code is required (incoming calls only):
 - 0 No
 - 1 Yes

	Field 7	Specify whether bridge-on is allowed: 0 No 1 Yes
	Field 8	Enter the number of trunks (0-15) in this trunk group that are reserved for "first preferences" in any network routing pattern.
	Field 9	Specify whether dial tone detect ignore is in effect: 0 Dial tone detection is active 1 Dial tone detection is not active (ignore dial tone)
	Field 12	Enter the WCR conditional routing specifications: 0
	Field 14	Enter the digit collection specifications: 0 Overlap outpulsing 1 Collect digits before outpulsing
	Field 15	Specify whether dial tone is suppressed after a WCR DAC is dialed or inferred via Procedure 101 Word 3.
		0 Apply dial tone1 Suppress dial tone
150 Word 1	Administers anal	log trunks to a trunk group.
150 Word 1	Administers anal	log trunks to a trunk group. Enter the module number (0-30).
150 Word 1		
150 Word 1	Field 1	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for
150 Word 1	Field 1 Field 2	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for
150 Word 1	Field 1 Field 2 Field 3	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules). Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE
150 Word 1	Field 1 Field 2 Field 3 Field 4	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules). Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
150 Word 1	Field 1 Field 2 Field 3 Field 4 Field 5	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules). Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules). Enter the circuit number (0-7).
150 Word 1	Field 1 Field 2 Field 3 Field 4 Field 5 Field 6	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules). Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules). Enter the circuit number (0-7). Enter the trunk group number (17-999).
150 Word 1	Field 1 Field 2 Field 3 Field 4 Field 5 Field 6 Field 7	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules). Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules). Enter the circuit number (0-7). Enter the trunk group number (17-999). Enter the night terminal extension (000-99999).
150 Word 1	Field 1 Field 2 Field 3 Field 4 Field 5 Field 6 Field 7 Field 8	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules). Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules). Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules). Enter the circuit number (0-7). Enter the trunk group number (17-999). Enter the night terminal extension (000-99999). Enter the AIOD equipment number (0000-99999).

0 Disable

1 Enable

Digital Trunks

Digital trunks (ACCUNET, DS1, DMI, ISDN/PRI, etc.) require administration in Procedure 260 Word 1 first. The trunk groups can then be administered in Procedure 100 Word 1 unless you are administering NFAS. Additional trunk characteristics may be assigned, as needed, in Procedure 101 Words 1 and 2 and Procedure 103 Word 1.

If an NFAS arrangement is desired, an interface identifier must be administered in Procedure 262 Word 1, and a primary D-channel must be administered in Procedure 262 Word 2 before going on to Procedure 100 Word 1. See the following "Procedure Sequence" section.

If the default signaling type is unacceptable for any reason, see the "Trunk Signaling Types" section in this chapter.

After completing the translations in this section, return to the feature you want to administer and continue.

Procedure Sequence

ADD	CHANGE	REMOVE	
260 Word 1	260 Word 1	116 Word 1	
262 Word 1 (NFAS only)	262 Word 1 (NFAS only)	100 Word 1	
262 Word 2 (NFAS only)	262 Word 2 (NFAS only)	262 Word 2 (NFAS only)	
100 Word 1	100 Word 1	262 Word 1 (NFAS only)	
101 Word 1	101 Word 1	260 Word 1	
101 Word 2	101 Word 2		
103 Word 1	103 Word 1		
116 Word 1	116 Word 1		

Procedure Usage

100 Word 1

Administers the trunk group translations. These translations include the Dial Access Code/Trunk ID, trunk type, dial access restrictions, and personal central office appearance.

Field 1	Enter the trunk group number (18-999). DCS trunk groups are
	limited to 18-255.
Field 2	Enter the first digit of the dial access code:

0-9 11 or * 12 or #

- Field 3 Enter the second digit of the dial access code (0-9).
- Field 4 Enter the third digit of the dial access code (0-9).
- Field 5 Enter the fourth digit of the dial access code (0-9).
- Field 6 Enter the appropriate trunk type. The trunk types associated with each feature are listed at the end of this section.

The default signaling types are shown in parentheses. When possible, the trunk types are also identified for whether they can be administered as digital only (D), or both digital or analog (B).

- 12 CCSA/APLT 2-way with dial tone out $(9)^{B}$
- 13 CCSA/APLT 2-way with dial tone out (10)^B
- 14 CCSA/APLT 2-way (8)^B
- 15 CCSA/APLT 2-way $(5)^{B}$
- 16 CO 1-way in attendant completing $(1)^{B}$
- 17 CO 1-way out DOD $(1)^{B}$
- 18 CO 1-way out DOD with party test $(2)^{B}$
- 19 CO 2-way attendant completing in/DOD out $(1)^{B}$
- 21 FX 1-way in attendant completing $(1)^{B}$
- FX 1-way out DOD $(1)^B$
- 24 FX 2-way attendant completing in/DOD out (1)^B
- 26 WATS 1-way in attendant completing (1)^B
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)^B
- 30 DID immediate start (30)^B
- 31 DID wink start $(3)^{B}$
- 32 TIE 1-way in dial repeating $(4)^B$
- 33 TIE 1-way out automatic (31)^B
- 34 TIE 1-way out dial repeating $(4)^{B}$
- 35 TIE 1-way in automatic $(28)^{B}$
- 36 TIE 2-way dial repeating in and out $(4)^B$
- 37 TIE 2-way dial repeating in/automatic out $(31)^{B}$
- 38 TIE 2-way automatic in/dial repeating out (28)^B
- 39 TIE 2-way automatic in and out $(32)^{B}$
- 40 TIE 1-way in dial repeating, delay dial (8)^B
- 41 TIE ETN 2-way dial repeating $(26)^{B}$
- 42 TIE ETN 1-way in dial repeating $(26)^{B}$
- 43 TIE ETN 1-way out dial repeating (26)^B
- 44 TIE 2-way dial repeating $(27)^{B}$
- 45 TIE 2-way dial repeating in/immediate out (8)^B
- 46 TIE ETN 2-way dial repeating/delay dial in (24)^B
- 47 TIE ETN 2-way dial repeating $(24)^{B}$
- Remote Access 2-way $(1)^{B}$
- 57 CAS release link trunk 1-way outgoing from branch $(13)^{B}$

CAS release link trunk 1-way incoming at main (14)^B 66 70 Main/Satellite 1-way in (15)^B 71 Main/Satellite 1-way out (15)^B 72 Main/Satellite 2-way (15)^B Main/Satellite 1-way in (16)^B 73 74 Main/Satellite 1-way out (16)^B Main/Satellite 2-way (16)^B 75 76 Main/Satellite 1-way in (17)^B 77 Main/Satellite 1-way out (17)^B Main/Satellite 2-way (17)^B 78 DMI host terminating, dial repeating in/automatic out 108 $(5)^{D}$ 109 DMI dial repeating in and out $(11)^D$ 120 ISDN dynamic (20)^D Enter the Dial Access Restriction assignment: Access to this trunk group is allowed using the DAC 1 Access to this trunk group is allowed only for testing and for unattended night service using the trunk ID code Enter the Personal CO Line assignment: Trunk group is not used for Personal CO Line Pickup 1 Trunk group is used for Personal CO Line Pickup Administers trunk group characteristics. Enter the trunk group number (18-999). Enter the balance assignment. When this field is set to "1", the system inserts an extra 2 db of loss to each trunk-to-trunk connection involving an analog CO, FX, WATS, or DID trunk. This field is set to reduce reflections on CO connections. 0 Disable 1 Enable Enter the battery reversal assignment. Battery reversal is sent from the CO to inform the system of toll calls. 0 Disable 1 Enable Enter the incoming prefix digit assignment: No additional digits are required for DID trunks 0-9Use this additional digit for DID trunks Enter the DCS assignment. Any trunk groups used for DCS

Field 7

Field 8

Field 1

Field 2

Field 3

Field 4

Field 5

should have this field enabled.

Disable

0

101 Word 1

1	Enal	_1	_
	сна	ווו	-

- Field 6 Enter the touch-tone in assignment:
 - O Touch-tone signals are not used for incoming trunks
 - 1 Touch-tone signals are used for incoming trunks
- Field 7 Enter the touch-tone out assignment:
 - O Touch-tone signals are not used for outgoing trunks
 - 1 Touch-tone signals are used for outgoing trunks
- Field 8 Enter the CDR activation assignment:
 - 0 This trunk group is not recorded by CDR
 - 1 This trunk group is recorded by CDR
 - 2 This trunk group is recorded by CDR and an account code is required
- Field 9 Enter the AIOD billing number (-, 0000-9999). This is the default number used by the CO to bill the system for miscellaneous calls. Include any leading zeros that may be on the service order.
- Field 10 Enter the amount of time that elapses before a timed recall occurs on this trunk group (0-31 in minutes).
- Field 11 Enter the desired threshold (0-7). Timed recall will not occur until the number idle trunks in a trunk group reaches the level entered into this field.
- Field 12 Enter the number of seconds before CDR begins recording call data on this trunk group (1-99). A dash (-) in this field relinquishes control of this timer to Procedure 275 Word 3 field 12.
- Field 13 Enter the pad group assignment:
 - O Determined by the trunk type assigned in Procedure 100 Word 1
 - 1 ISL TIE (S/DTT or S/ATT)
 - 2 EIA TIE (D/TT)
 - 3 ISL DCO (D/CO option -3/3)
 - 4 EIA DCO (D/CO option 0/6)
 - 5 DTO (D/TO)
 - 6 ATO (A/TO)
 - 7 N12A
 - 8 N12B
 - **S/DTT** Digital trunk interface to digital satellite PBX tie trunk.
 - **S/ATT** Analog trunk interface to analog satellite PBX tie trunk.
 - D/TT Digital trunk interface to a digital tie trunk,

combination tie trunk, or any other tie trunk with a digital termination at a PBX that uses the mu-law interfaces.

- **D/CO** Digital trunk interface to digital CO trunk, combination CO trunk, or any other CO trunk with a digital termination at a PBX that uses the mu-law interfaces.
- **D/TO** Digital trunk interface to digital toll office trunk, combination toll office trunk, or any other toll office trunk with a digital termination at a PBX that uses the mu-law interfaces.
- **A/TO** Analog trunk interface to an analog toll office trunk. Due to potential problems with feedback, the A/TO padgroup type should also be assigned to loudspeaker paging trunk groups that provide "all-zones" paging to three or more zones.
- Field 14 Enter the tie trunk toll restriction assignment:
 - O This trunk group is not toll restricted
 - 1 This trunk group is toll restricted
- Field 15 Enter the APLT features allowed assignment:
 - O APLT features are not active on this trunk group (CCSA features only)
 - 1 APLT features are active on this trunk group
- Field 16 Enter the disconnect supervision assignment:
 - O Disconnect supervision is not given on this trunk group
 - 1 Disconnect supervision is given on this trunk group
- 101 Word 2 Administers the redial delay timer, hybrid balance specifications, and tie type capability for a trunk group.
 - Field 1 Enter the trunk group number (18-999).
 - Field 2 Enter the redial delay time in tenths-of-seconds (0-50).
 - Field 3 Enter the hybrid balance specifications:
 - Not applicable
 - 0 RC coupling
 - 1 600 ohm coupling
 - Field 4 Enter the tie type capability:
 - Not applicable
 - 0 Type 1 format
 - 1 Type 1 compatible
 - 2 Type 5 format

103 Word 1	Administers network trunk group parameters.
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Field 1 Enter the trunk group number (18-999).

Field 2 Enter the FRL (0-7).

Field 3 Enter the desired Travelling Class Mark specification:

- O Do not send or expect to receive any TCMs
- 1 Send and receive the FRL TCM
- 2 Send and receive the FRL and the conditional routing TCMs
- Field 4 Specify whether symmetrical routing is possible:

0 No

1 Yes

Field 5 Specify whether incoming tie trunk and APLT trunk can access WCR

0 Disabled

1 Enabled (use only if the trunk group consists of tie trunks or APLT trunks)

Field 6 Specify whether an authorization code is required (incoming calls only):

0 No

1 Yes

Field 7 Specify whether bridge-on is allowed:

0 No

1 Yes

Field 8 Enter the number of trunks (0-15) in this trunk group that are reserved for "first preferences" in any network routing pattern.

Field 9 Specify whether dial tone detect ignore is in effect:

0 Dial tone detection is active

1 Dial tone detection is not active (ignore dial tone)

Field 12 Enter the WCR conditional routing specifications:

0 Is not a satellite facility

1 Is a satellite facility

Field 14 Enter the digit collection specifications:

0 Overlap outpulsing

1 Collect digits before outpulsing

Field 15 Specify whether dial tone is suppressed after a WCR DAC is dialed or inferred via Procedure 101 Word 3.

0 Apply dial tone

1 Suppress dial tone

116 Word 1 Administers digital (DS1 and ISDN/PRI) trunks to a trunk group. If you're assigning analog trunks to a trunk group, use Procedure 150 Word 1. When assigning the DS1 circuit pack, the slot to the right of the pack must be left un

nequipped or used only for packet adjunct ISDN applications.			
Field 1	Enter the module number (0-30).		
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules).		
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules).		
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).		
Field 5	Enter the circuit number (0-23).		
Field 6	Enter the trunk group number (18-999).		
Field 8	Enter the signaling assignment: - ISDN signaling 0 Disable (for robbed-bit signaling) 1 Enable (for DSC)		
Field 9	Enter the AIOD equipment number (0000-9999).		
Field 10	Enter the interface endpoint:		

- - PBX 0
 - 1 **Host Computer**
 - 2 Network
- Field 11 Enter the D-channel group number (1-255). This field is the Dchannel used by the associated B-channels (trunk circuits in field 5) for signaling. The D-channel group number specified here may be administered with a backup D-channel in Procedure 262 Word 2. The backup D-channel automatically take over signaling responsibility if the primary fails.
- 260 Word 1 Administers the DS1 and ISDN interface circuits with signaling and SCS parameters.
 - Field 1 Enter the module number (0-30).
 - Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules).
 - Enter the port carrier number (0-3 for traditional modules, c-e for Field 3 universal modules and XE modules).

Field 14

Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).		
Field 5	Enter the alarm level encode: - Conventional 0 None 1 Warning (default) 2 Minor 3 Major		
Field 6	Enter the framing format encode: 0 D4 (superframe) 1 FE (extended superframe)		
Field 7	Enter the channel signaling specification: 0 23 B plus 1 D-channel (non-NFAS). 1 24 B-channel (NFAS)		
Field 8	Enter the signaling specification. 0 24th channel signaling (for ISDN/PRI, DS1, DMI) 1 Robbed bit signaling (for DS1 robbed bit, ACCUNET®)		
Field 9	Enter the suppression encode: 0 Zero code suppression 1 Bipolar-8 zero code suppression		
Field 10	Enter the slip Enable encode: 0 Slip count off 1 Slip count on		
Field 11	Enter the external loop encode: 0 Disable 1 Enable		
Field 12	Enter the SCS equipment type encode: 0 None 1 DS1/T1 SCS		
Field 13	Enter the SCS reference for this circuit pack. Make sure this SCS reference is coordinated between the central office and the network to which your system is connected. If this circuit pack is administered as the primary SCS reference, make sure the circuit pack on the other end of the interface is administered with a "0" in this field (no SCS reference). O No SCS reference Primary SCS reference Secondary SCS reference		

Enter the application type encode:

	0	DS1 trunks, lines
	1	DMI-BOS
	3	DS1 RCG
	5	ISDN/PRI, DMI-MOS
Field 15	Enter th	e encode for bit inversion.
	-	Not applicable
	0	Bit inversion
	1	No bit inversion
Field 16	Enter th	e transmission type.
	-	Not applicable
	0	Copper (T1)
	1	Fiber

262 Word 1 Administers the ISDN/PRI board parameters.

If you are administering ISDN/PRI in a non-NFAS arrangement, refer to the ISDN/PRI feature to do this procedure. All standard PRI boards do their own signaling over a D-channel.

The D-channel of an NFAS configuration is administered exactly like a standard ISDN/PRI D-channel except that field 13 requires an interface identifier for NFAS.

All boards in an NFAS arrangement rely on a common D-channel for signaling. The NFAS configuration uses the ANN35 on a traditional module and the TN767 on a universal or XE module (for all non-signaling boards). However, Each NFAS arrangement on a universal or XE module requires a TN767 and a TN555 for common D-channel signaling. The ANN35 on a traditional module doesn't require any additional boards for D-channel signaling.

See the *DEFINITY*TM *Communications System Generic 2 Feature Descriptions* (555-105-301) for more information on ISDN/PRI — NFAS.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules).
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).
Field 5	Enter a dash (-).
Field 6	Enter the interface type: 0 For user side (to CO to other PBX)

1 For network side (to other PBX)

Make sure this field is coordinated with the administration on the other end of the link. This field must remain dashed for NFAS B-channel administration.

- Field 7 Enter the NFAS-ISDN facility test type:
 - 0 None
 - 1 Level 2
 - 2 Level 3
 - 3 Both level 2 and level 3
- Field 8 Enter the assigned terminal endpoint identifier for use with Procedure 648 (0-63, 128). This field must remain dashed for NFAS B-channel administration.
- Field 9 Enter the timer delay in seconds (0-255, default is 30). This field must remain dashed for NFAS B-channel administration.
- Field 10 Enter the timer delay in tenths-of-seconds (0-255, default is 10). This field must remain dashed for NFAS B-channel administration.
- Field 11 Enter the number of retransmissions allowed (1-10, default is 3).

 This field must remain dashed for NFAS B-channel administration.
- Field 12 Enter the maximum number of outstanding data packets to be transmitted (1-7, default is 7). This field must remain dashed for NFAS B-channel administration.
- Field 13 Enter the NFAS (PRI) interface identifier (0-31).
- Administers a backup D-channel to a primary D-channel. If you are administering ISDN/PRI in a non-NFAS arrangement, refer to the ISDN/PRI feature to do this procedure.
 - Field 1 Enter the D-channel group number (1-255). The D-channel group numbers administered in this field are the same as the D-channel group numbers administered in Procedure 116 Word 1 field 11. The goal in Procedure 116 Word 1 field 11 is to associate B-channels with a D-channel.
 - Field 2 Enter the module number (0-30).
 - Field 3 Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules).
 - Field 4 Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules).

Field 5	Enter the slot number in the port carrier (5 and 18 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).
Field 6	Enter the module number (0-30).
Field 7	Enter the cabinet number (0-7 for traditional modules, 0 for universal modules and XE modules).
Field 8	Enter the port carrier number (0-3 for traditional modules, c-e for universal modules and XE modules).
Field 9	Enter the slot number in the port carrier (5 and 18 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).

Trunk Types Associated With Features

This section lists the trunk types that are compatible with each feature. The number in parentheses is the default signaling type automatically assigned to the trunk group upon administration in Procedure 100 Word 1. If a signaling type other than the default is desired, see the "Trunk Signaling Type" section in this chapter.

ACCUNET® Service Interface

- DMI host terminating, dial repeating in/automatic out (5)
- 109 DMI dial repeating in and out (11)

Advanced Private Line Termination

- 12 CCSA/APLT 2-way with dial tone out (9)
- 13 CCSA/APLT 2-way with dial tone out (10)
- 14 CCSA/APLT 2-way (8)
- 15 CCSA/APLT 2-way (5)
- 32 TIE 1-way in dial repeating (4)
- 33 TIE 1-way out automatic (31)
- 34 TIE 1-way out dial repeating (4)
- 35 TIE 1-way in automatic (28)
- 36 TIE 2-way dial repeating in and out (4)
- 37 TIE 2-way dial repeating in/automatic out (31)
- 38 TIE 2-way automatic in/dial repeating out (28)
- 39 TIE 2-way automatic in and out (32)
- 40 TIE 1-way in dial repeating, delay dial (8)
- 41 TIE ETN 2-way dial repeating (26)
- 42 TIE ETN 1-way in dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 44 TIE 2-way dial repeating (27)
- 45 TIE 2-way dial repeating in/immediate out (8)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)

ASAI Gateway

47 TIE ETN 2-way dial repeating (24)

Automatic Call Distribution

- 6 Queuing (No signaling required)
- 65 SN241 contact interface (0)
- 66 CAS release link trunk 1-way incoming at main (14)
- 90 ACD First announcement (7)
- 91 ACD Second announcement (7)
- 92 ACD Origin announcement (7)

Automatic Identification of Outward Dialing

58 ANI interface (6)

Call Park

54 Loudspeaker Paging interface (7)

Call Vectoring

- 16 CO 1-way in attendant completing (1)
- 19 CO 2-way attendant completing in/DOD out (1)
- 20 CO 2-way with party test attendant completing in/DOD out (2)
- 21 FX 1-way in attendant completing (1)
- FX 2-way attendant completing in/DOD out (1)
- 25 FX 2-way with party test attendant completing in/DOD out (2)
- 26 WATS 1-way in attendant completing (1)
- 35 TIE 1-way in automatic (28)
- 38 TIE 2-way automatic in/dial repeating out (28)
- 39 TIE 2-way automatic in and out (32)
- 66 CAS release link trunk 1-way incoming from main (14)
- 90 Call Vectoring announcement (7)

Centralized Attendant Service

- 6 Queuing (No signaling required)
- 57 CAS release link trunk 1-way outgoing from branch (13)
- 65 SN241 contact interface (0)
- 66 CAS release link trunk 1-way incoming at main (14)

Code Calling Access — Traditional

53 Code Calling Interface (7)

Conference — Attendant Six Party

5 Attendant Conference (0)

Data Call Setup

100 Data-tones tone detector (0)

Data Communications Access

- 50 Remote Access 2-way (1)
- 33 TIE 1-way out automatic (31)
- 37 TIE 2-way dial repeating in/automatic out (31)

Digital Multiplexed Interface

- 16 CO 1-way in attendant completing (1)
- 17 CO 1-way out DOD (1)
- 19 CO 2-way attendant completing in/DOD out (1)
- 21 FX 1-way in attendant completing (1)
- 22 FX 1-way out DOD (1)
- FX 2-way attendant completing in/DOD out (1)
- WATS 1-way in attendant completing (1)
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)
- 41 TIE ETN 2-way dial repeating (26)
- 42 TIE ETN 1-way in dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)
- Remote Access 2-way (1)
- 120 ISDN dynamic (20)

Digital Service (DS1) Interface

- 12 CCSA/APLT 2-way with dial tone out (9)
- 13 CCSA/APLT 2-way with dial tone out (10)
- 14 CCSA/APLT 2-way (8)

- 15 CCSA/APLT 2-way (5)
- 16 CO 1-way in attendant completing (1)
- 17 CO 1-way out DOD (1)
- 19 CO 2-way attendant completing in/DOD out (1)
- 21 FX 1-way in attendant completing (1)
- 22 FX 1-way out DOD (1)
- 24 FX 2-way attendant completing in/DOD out (1)
- 26 WATS 1-way in attendant completing (1)
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)
- 30 DID immediate start (30)
- 31 DID wink start (3)
- 32 TIE 1-way in dial repeating (4)
- 33 TIE 1-way out automatic (31)
- 34 TIE 1-way out dial repeating (4)
- 35 TIE 1-way in automatic (28)
- 36 TIE 2-way dial repeating in and out (4)
- 37 TIE 2-way dial repeating in/automatic out (31)
- 38 TIE 2-way automatic in/dial repeating out (28)
- 39 TIE 2-way automatic in and out (32)
- 40 TIE 1-way in dial repeating, delay dial (8)
- 41 TIE ETN 2-way dial repeating (26)
- 42 TIE ETN 1-way in dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 44 TIE 2-way dial repeating (27)
- 45 TIE 2-way dial repeating in/immediate out (8)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)
- 50 Remote Access 2-way (1)
- 57 CAS release link trunk 1-way outgoing from branch (13)
- 66 CAS release link trunk 1-way incoming at main (14)
- 70 Main/Satellite 1-way in (15)
- 71 Main/Satellite 1-way out (15)
- 72 Main/Satellite 2-way (15)
- 73 Main/Satellite 1-way in (16)
- 74 Main/Satellite 1-way out (16)
- 75 Main/Satellite 2-way (16)
- 76 Main/Satellite 1-way in (17)
- 77 Main/Satellite 1-way out (17)
- 78 Main/Satellite 2-way (17)
- 108 DMI host terminating, dial repeating in/automatic out (5)
- 109 DMI dial repeating in and out (11)

Direct Inward Dialing

31 DID wink start (3)

Direct Outward Dialing

- 17 CO 1-way out DOD (1)
- 18 CO 1-way out DOD with party test (2)
- 19 CO 2-way attendant completing in/DOD out (1)
- 22 FX 1-way out DOD (1)
- 23 FX 1-way out DOD with party test (2)
- FX 2-way attendant completing in/DOD out (1)
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)
- 28 WATS 1-way out DOD with party test (2)

Distributed Communications System

- 12 CCSA/APLT 2-way with dial tone out (9)
- 13 CCSA/APLT 2-way with dial tone out (10)
- 14 CCSA/APLT 2-way (8)
- 15 CCSA/APLT 2-way (5)
- 32 TIE 1-way in dial repeating (4)
- 33 TIE 1-way out automatic (31)
- 34 TIE 1-way out dial repeating (4)
- 35 TIE 1-way in automatic (28)
- 36 TIE 2-way dial repeating in and out (4)
- 37 TIE 2-way dial repeating in/automatic out (31)
- 38 TIE 2-way automatic in/dial repeating out (28)
- 39 TIE 2-way automatic in and out (32)
- 40 TIE 1-way in dial repeating, delay dial (8)
- 41 TIE ETN 2-way dial repeating (26)
- 42 TIE ETN 1-way in dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 44 TIE 2-way dial repeating (27)
- 45 TIE 2-way dial repeating in/immediate out (8)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)
- 70 Main/Satellite 1-way in (15)
- 71 Main/Satellite 1-way out (15)
- 72 Main/Satellite 2-way (15)
- 73 Main/Satellite 1-way in (16)
- 74 Main/Satellite 1-way out (16)
- 75 Main/Satellite 2-way (16)
- 76 Main/Satellite 1-way in (17)
- 77 Main/Satellite 1-way out (17)
- 78 Main/Satellite 2-way (17)

120 ISDN dynamic (20)

Foreign Exchange Access

- 21 FX 1-way in attendant completing (1)
- 22 FX 1-way out DOD (1)
- 23 FX 1-way out DOD with party test (2)
- 24 FX 2-way attendant completing in/DOD out (1)
- 25 FX 2-way with party test attendant completing in/DOD out (1)

Host Computer Access

- Host access PDM (18)
- 104 Host access TDM (18)
- 106 EIA 4 Port (18)

Information Systems Network Interface

107 ISN/EIA port (18)

Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI)

- 16 CO 1-way in attendant completing (1)
- 17 CO 1-way out DOD (1)
- 19 CO 2-way attendant completing in/DOD out (1)
- 21 FX 1-way in attendant completing (1)
- 22 FX 1-way out DOD (1)
- FX 2-way attendant completing in/DOD out (1)
- 26 WATS 1-way in attendant completing (1)
- WATS 1-way out DOD or toll terminal access for TSPS (1)
- 30 DID immediate start (30)
- 31 DID wink start (3)
- 41 TIE ETN 2-way dial repeating (26)
- 42 TIE ETN 1-way in dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)
- Remote Access 2-way (1)
- 108 DMI host terminating, dial repeating in/automatic out (5)
- 109 DMI dial repeating in and out (11)
- 120 ISDN dynamic (20)

Intercept Treatment

52 Recorded Announcement interface (7)

Loudspeaker Paging Access

54 Loudspeaker Paging interface (7)

Main/Satellite/Tributary

- 70 Main/Satellite 1-way in (15)
- 71 Main/Satellite 1-way out (15)
- 72 Main/Satellite 2-way (15)
- 73 Main/Satellite 1-way in (16)
- 74 Main/Satellite 1-way out (16)
- 75 Main/Satellite 2-way (16)
- 76 Main/Satellite 1-way in (17)
- 77 Main/Satellite 1-way out (17)
- 78 Main/Satellite 2-way (17)

Malicious Call Trace

93 Malicious Call Trace recorder (7)

MEGACOM® Service Access

- WATS 1-way in attendant completing (1)
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)

Modem Pooling

- 100 Data-tones tone detector (0)
- 101 Analog data modem pool (27)
- 102 Digital data modem pool (18)

Music-On-Hold Access

62 Music-on-Hold interface (0)

Personal Central Office Line

- 19 CO 2-way attendant completing in/DOD out (1)
- FX 2-way attendant completing in/DOD out (1)
- 26 WATS 1-way in attendant completing (1)
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)

Precedence Calling

- 12 CCSA/APLT 2-way with dial tone out (9)
- 13 CCSA/APLT 2-way with dial tone out (10)
- 14 CCSA/APLT 2-way (8)
- 15 CCSA/APLT 2-way (5)

Queuing

67 Audio interface (0)

Radio Paging Access

17 CO 1-way out DOD (1)

Recorded Telephone Dictation Access

Telephone dictation interface (7)

Remote Access

Remote Access 2-way (1)

Route Advance

- 2 Touch-tone digit register (0)
- 6 Queuing (0)
- 12 CCSA/APLT 2-way with dial tone out (9)
- 13 CCSA/APLT 2-way with dial tone out (10)
- 14 CCSA/APLT 2-way (8)
- 15 CCSA/APLT 2-way (5)
- 17 CO 1-way out DOD (1)
- 18 CO 1-way out DOD with party test (2)
- 19 CO 2-way attendant completing in/DOD out (1)

- 20 CO 2-way with party test attendant completing in/DOD out (2)
- 22 FX 1-way out DOD (1)
- 23 FX 1-way out DOD with party test (2)
- 24 FX 2-way attendant completing in/DOD out (1)
- 25 FX 2-way with party test attendant completing in/DOD out (1)
- 27 WATS 1-way out DOD or toll terminal access for TSPS (1)
- 28 WATS 1-way out DOD with party test (2)
- 33 TIE 1-way out automatic (31)
- 34 TIE 1-way out dial repeating (4)
- 36 TIE 2-way dial repeating in and out (4)
- 37 TIE 2-way dial repeating in/automatic out (31)
- 38 TIE 2-way automatic in/dial repeating out (28)
- 39 TIE 2-way automatic in and out (32)
- 41 TIE ETN 2-way dial repeating (26)
- 43 TIE ETN 1-way out dial repeating (26)
- 44 TIE 2-way dial repeating (27)
- 45 TIE 2-way dial repeating in/immediate out (8)
- 46 TIE ETN 2-way dial repeating/delay dial in (24)
- 47 TIE ETN 2-way dial repeating (24)
- 50 Remote Access 2-way (1)
- Telephone dictation interface (7)
- 53 Code Calling interface (7)
- 54 Loudspeaker Paging interface (7)
- 58 ANI interface (6)
- 65 SN241 contact interface (0)
- 66 CAS release link trunk 1-way incoming at main (14)
- 71 Main/Satellite 1-way out (15)
- 72 Main/Satellite 2-way (15)
- 74 Main/Satellite 1-way out (16)
- 75 Main/Satellite 2-way (16)
- 77 Main/Satellite 1-way out (17)
- 78 Main/Satellite 2-way (17)
- 93 Malicious Call Trace recorder (7)
- 102 Digital data modem pool (18)
- 103 Host access PDM (18)
- Host access TDM (18)
- 105 3B5 AP DCPI (18)
- 106 EIA 4 Port (18)
- 107 ISN/EIA port (18)
- DMI host terminating, dial repeating in/automatic out (5)
- 109 DMI dial repeating in and out (11)
- 120 ISDN dynamic (20)

Touch-Tone Calling Senderized Operation

Touch-Tone sender (0)

Wide Area Telecommunications Service Access

- 26 WATS 1-way in attendant completing (1)
- WATS 1-way out DOD or toll terminal access for TSPS (1)
- WATS 1-way out DOD with party test (2)

Trunk Signaling Types

Use Procedure 100 Word 3 to change the default signaling type of a trunk group. Use the trunk signaling type compatibility table in this section to ensure that the signaling on this system is compatible with the distant system.

NOTE

You cannot assign loop start trunk signaling (19) to analog CO trunk groups.

100 Word 3 Administers the trunk group signaling type. Use this procedure when a signaling type other than the default is desired.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the signaling type from the list below. Make sure the signaling type is going to be compatible with the signaling type administered on the distant system. Use the trunk signaling type compatibility table.

- 0 No signaling required
- 1 Ground start
- 2 Ground start with party test
- 3 Loop/reverse battery, wink start
- 4 E&M immediate start in and out
- 5 E&M wink start in, immediate start out
- 6 ANI signaling
- 7 Auxiliary equipment
- 8 E&M delay dial in, immediate start out
- 9 E&M delay dial in wink/delay with dial tone out
- 10 E&M wink start in, wink/delay dial with dial tone out
- 11 E&M wink start in, wink/delay dial out (universal sequence)
- 12 E&M immediate start in, wink/delay dial out
- 13 E&M release link trunk out
- 14 E&M release link trunk in
- 15 E&M Main/Satellite, immediate start
- 16 E&M Main/Satellite, wink start
- 17 E&M Main/Satellite, delay dial
- 18 S-Channel signaling, host access-GPP, host access EIA
- 19 Loop start
- 20 Digital Multiplexed Interface ISDN message oriented signaling
- 21 E&M wink start both ways
- E&M delay dial both ways
- 23 E&M delay dial in, wink/delay dial out

- 24 E&M delay dial in, wink/delay dial out with fail on timeout
- 25 E&M immediate start in, wink/delay dial out with fail on timeout
- 26 E&M wink start in, wink/delay dial out with fail on timeout
- 27 Analog line loop
- 28 E&M automatic in, immediate start out
- 29 E&M automatic in, wink start out
- 30 Loop/reverse battery, immediate start
- 31 E&M immediate start in, automatic out
- 32 E&M automatic in, automatic out

Trunk Signaling Compatibility

Table 5–1 shows signaling type compatibility between two systems. It also indicates the direction (incoming, outgoing, or two-way) that must be associated with the trunk type. Signaling types for the remote switch appear across the top row; signaling types for the local switch appear down the left-most column.

The direction of compatibility is marked in the table by the following symbols:

two = Two-way compatibility

out = One-way compatibility outgoing

in = One-way compatibility incoming

 Table 5-1. Trunk Signaling Type Compatibility

Signaling Type	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	two																
1		two															
2			two														
3				two													
4					two	in			in				out				
5					out					in	in	in	two				
6							two										
7								two									
8					out					in	in	in	two				
9					out	out			out	two	two	two	two				
10					out	out			out	two	two	two	two				
11					out	out			out	two	two	two	two				
12					two	two			two	out	out	out	out				
13															out		
14														in			
15																two	
16																	two
17																	
18																	
19																	
20																	
21						out				in	two	two	in				
22									out	two	in	in	in				
23					out	out			out	two	two	two	two				
24						out			out	two	two	two	in				
25					in	two			two	out	out	out					
26						out			out	two	two	two	in				
27																	
28					out								out				
29						out					out	out					
30																	
31					in	in			in								
32																	

Signaling Type	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
0																
1																
2																
3																
4									out			in			out	
5					in		in	in	two	in			in		out	
6																
7																
8						in	in	in	two	in					out	
9					out	two	two	two	two						out	
10					two	out	two	two	two	two			in		out	
11					two	out	two	two	two	two			in		out	
12					out	out	out	out	out	out		in			out	
13																
14																
15																
16																
17	two															
18		two														
19			two													
20				two												
21					two		in	in	in	two			in			
22						two	two	two	in	in						
23					out	two	two	two	two	two					out	
24					out	two	two	two	in	two						
25					out	out	out	out		out		in				
26					two	out	two	two	in	two			in			
27											two					
28									out						two	in
29					out					out					in	in
30														two		
31												two	out			out
32												out	out		in	two

DCIU ADMINISTRATION

General Information

This section contains a brief introduction of the Data Communications Interface Unit (DCIU) and some information to help in the administration of the DCIU. The application types of the DCIU include:

- AUDIX
- Call Management System (CMS)
- Distributed Communications System (DCS)
- Leave Word Calling (LWC) on an AP
- Message Center
- 3B2 ISDN Gateway
- DIP/DCIU Test Channel

To establish a DIP/DCIU test channel, the application type in Procedure 257 Word 5 should be set to "10" to specify that the channel being administered is for testing purposes. For more information on the testing and maintenance of the DCIU, refer to the *DEFINITY*TM *Communications System Generic 2 Maintenance Procedures* (555-104-117) and the *DEFINITY*TM *Communications System Generic 2 Maintenance Repair Strategies* (555-104-118).

To administer a specific feature, the corresponding DCIU section and feature section must be administered. For example, to administer DCS, both the DCS administration in the DCIU section and the DCS feature administration must be completed.

DCIU Overview

The DCIU is a special purpose processor which operates like a packet switch. The DCIU is used to pass call-related information between two systems or a system and an external processor. The connection between the two devices is accomplished using a full-duplex, synchronous data link. Each full-duplex, synchronous data link has 64 logical channels.

Basic DCIU Configurations

The DCIU has three basic configurations upon which all other configurations are based. The three basic DCIU configurations are:

- 1. System processor link (link 0) to a DCIU link on the same DCIU
- 2. One DCIU link to another DCIU link on the same DCIU
- 3. One DCIU link to another DCIU link on an external DCIU.

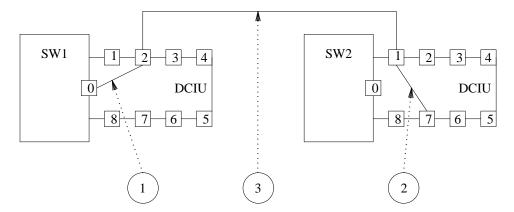


Figure 6-1. Basic Configurations — DCIU

Figure 6-1 illustrates each of the three configurations listed. Each configuration is seen as a separate connection in the system and must be administered as such. This means that the link is administered using all the basic administration. The basic administration for all three configurations is made up of the following: protocol characteristics and timers (256 Words 1, 2, and 3), logical channels and routing (257 Words 1 and 2), DCIU memory values and tables (258 Words 1 and 2), and the DCIU enable (275 Word 1). However, there are some slight differences that will be discussed here.

Configuration "1" is a connection that is administered completely through software associations. There is an administration note pertaining to Procedure 257 Word 1. In this procedure, Component A will always be link 0 for this configuration. Component B will be the other end of this link connection. The logical channel number between these two endpoints may not be the same; however, for practical applications it is suggested that the logical channel between endpoints match.

Configuration "2" is a connection that is administered completely through software associations. There is an administration note pertaining to Procedure 257 Word 1. In this procedure, both Components A and B will use hardware links (1-8) on the same DCIU. Again, the logical channel number between these two endpoints does not have to be the same, although it is suggested that the two endpoints match. This configuration is commonly referred to as a *hop*. A *hop* simply allows a data link connection to be made through a DCIU. For example, suppose a network has two nodes and a peripheral device is connected to the second node. For the first node to access the peripheral device located on the second node, the call related information (for node one) must pass or *hop* through the DCIU on the second node.

Configuration "3" is different in that there is a physical connection between two separate DCIUs. The physical connection also reflects an administration difference in Procedures 256 Word 1, 257

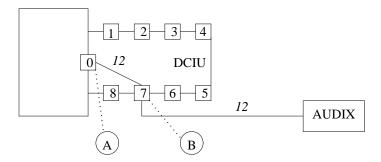
Word 1, and 257 Word 2. In these procedures, because the endpoints are on different DCIUs or external processors, **the characteristics of the data link must be administered at both ends**. Both ends of the link must have the same logical channel number, baud rate, protocol specifications, etc. When assigning the local DTE/DCE, one end of the link is the DTE while the other end of the link is the DCE (Procedure 256 Word 1).

DCIU Link Administration — Simple Network Example

The next three figures illustrate the administration of DCIU links in a small network using the three configurations discussed earlier. The figures show the growth of a small network and the links necessary to connect the network together. Administration for a specific DCIU is done at the system where the DCIU is located. Therefore, to establish a link connecting the two systems, both ends of the link must be administered from their respective systems.

The simple network used in this example consists of three systems (PBXs) with an AUDIX machine as a peripheral device connected to one of the systems. The administration of the DCIU links is done in a step by step process showing how all the systems in the sample network can have access to the AUDIX machine.

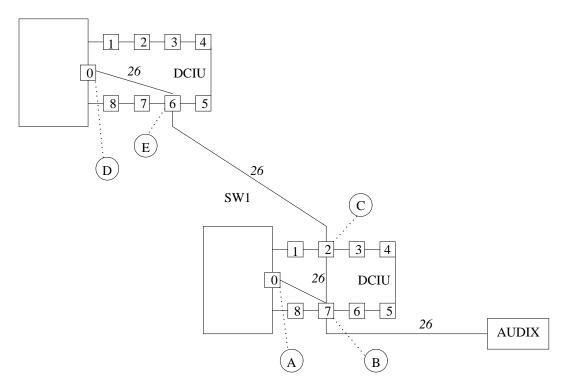
SW1



The figure above illustrates how DCIU links can be administered to connect SW1 to the AUDIX machine:

- On SW1
 - Administer link 0 (A) to link 7 (B) with a logical channel number of 12.
 - Administer link 7 (B) to the AUDIX machine with a logical channel number of 12.
- Between SW1 and the AUDIX machine
 - Physically connect link 7 (B) to the AUDIX machine.

SW2



The figure above illustrates how DCIU links can then be administered to connect SW2 to the AUDIX machine through the DCIU located on SW1. This configuration is known as Centralized Messaging:

• On SW2

— Administer link 0 (D) to link 6 (E) with a logical channel number of 26.

• Between SW2 and SW1

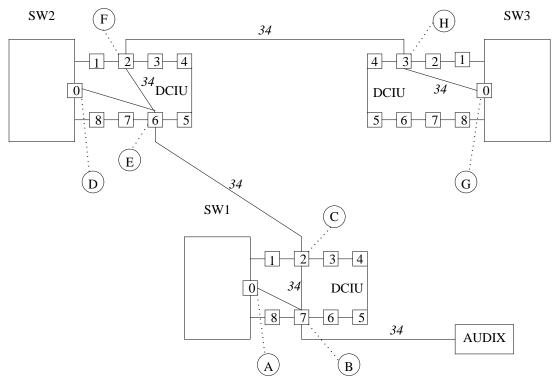
— Physically connect link 6 (E) to link 2 (C). This is the physical connection between the DCIUs on SW1 and SW2.

• On SW1

- Administer link 2 (C) to link 7 (B) with a logical channel number of 26.
- Administer link 7 (B) to the AUDIX machine with a logical channel number of 26.

• Between SW1 and the AUDIX machine

— Physically connect link 7 (B) to the AUDIX machine (if not already done).



The figure above shows how DCIU links can be assigned to connect SW3 to AUDIX through the DCIUs located on SW2 and SW1. This is another example of Centralized Messaging:

• On SW3

— Administer link 0 (G) to link 3 (H) with a logical channel number of 34.

• Between SW3 and SW2

— Physically connect link 3 (H) to link 2 (F). This is the physical connection between the DCIUs located on SW3 and SW2.

• On SW2

— Administer link 2 (F) to link 6 (E) with a logical channel number of 34.

• Between SW2 and SW1

— Physically connect link 6 (E) to link 2 (C). This is the physical connection between the DCIUs located on SW1 and SW2.

• On SW1

- Administer link 2 (C) to link 7 (B) with a logical channel number of 34.
- Administer link 7 (B) to the AUDIX with a logical channel number of 34.

• Between SW1 and the AUDIX machine

— Physically connect link 7 (B) to the AUDIX machine (if not already done).

AUDIX

The Audio Information Exchange (AUDIX) message-handling system provides subscribers with the ability to send and receive voice messages. AUDIX subscribers can also receive messages from callers using either the call answering capabilities of the AUDIX feature or the Leave Word Calling (LWC) feature. The AUDIX system uses recorded prompts and announcements to guide callers through the messaging operations. After completing the DCIU administration, you must continue with the AUDIX feature administration given later in this book.

Procedure Sequence

CHANGE	REMOVE
258 Word 2	275 Word 1
256 Word 1	258 Word 2
256 Word 2	256 Word 3
256 Word 3	256 Word 2
257 Word 5	256 Word 1
257 Word 4	257 Word 6
257 Word 2	257 Word 1
257 Word 1	257 Word 2
257 Word 6	257 Word 4
258 Word 1	257 Word 5
	258 Word 1
	258 Word 2 256 Word 1 256 Word 2 256 Word 3 257 Word 5 257 Word 4 257 Word 2 257 Word 1 257 Word 6

Procedure Usage

256 Word 1 Administers the major characteristics of the data link. Included are the link number, status, data rate, DTE/DCE, type of link, protocol, destination machine type, and the destination machine number.

Field 1	Enter the	DCIU link number (1-8).		
Field 2	Enter the link status:			
	0	Unassigned		
	1	Assigned		
Field 3	Enter the	data rate:		
	0	No data rate required		
	1	300 bps		
	2	600 bps		
	3	1200 bps		
	4	2400 bps		
	5	4800 bps		
	6	9600 bps		
	7	19200 bps		

Field 4	Enter the local DTE/DCE assignments:
	0 Local end of DCIU link is functioning as a DTE
	1 Local end of DCIU link is functioning as a DCE
	One end of the link must be administered as the DTE while the
	other is administered as the DCE.
Field 5	Enter the dial up capabilities:
	0 Link is not a dial up link
	1 Link is a dial up link
Field 6	Enter a "1" to select the BX.25 protocol.
Field 7	Enter a "3" to specify AUDIX as the destination machine type.
Field 8	Enter the destination AUDIX machine number (1-8).
Field 9	Enter the table indicator:
	-, 0 Display scratch-pad table values
	1 Display machine-used table values

256 Word 2 Administers the BX.25 level 2 characteristics. Included are the link number, the retransmission timer, the idle timer, the maximum number of retransmissions, and the maximum number of unacknowledged frames allowed on the link.

Field 1	Enter the link number (1-8).					
Field 2	Enter the retransmission timer (1-255 in seconds). A typical value is $1. $					
Field 3	Enter the idle timer (1-255 in seconds). A typical value is 10.					
Field 4	Enter the maximum number of retransmissions allowed (1-15). A typical value is 2.					
Field 5	Enter the maximum number of frames transmitted without acknowledgement (1-7). A typical value is 7.					
Field 6	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values					

256 Word 3 Administers the BX.25 level 3 characteristics. Included are the link number, the activity timer, the acknowledgement timer, the interrupt timer, the restart timer, and the maximum number of unacknowledged packets.

Field 1	Enter the link number (1-8).
Field 2	Enter the activity timer (1-255 in seconds). A typical value is 180.
Field 3	Enter the acknowledgement timer (1-255 in seconds). A typical value is 20.
Field 4	Enter the interrupt timer (1-255 in seconds). A typical value is 180.

Field 5	Enter the reset timer (1-255 in seconds). A typical value is 8.				
Field 6	Enter the restart timer (1-255 in seconds). A typical value is 8.				
Fields 7-9	These fields are not used at this time.				
Field 10	Enter the maximum number of unacknowledged packets (1-7). A typical value is 4 .				
Field 11	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values				

257 Word 1 Administers the network channel for AUDIX applications. Included are the system link, the logical channel on the local port, the hardware link, the logical channel, and the priority. The logical channel in fields 2 and 4 must be the same.

Field 1	Enter the local link number (Component A): 0 Local system link (commonly known as link 0) 1-8 Hardware links
Field 2	Enter the logical channel number (1-64) on the local link/system.
Field 3	Enter the link number (Component B): - Not assigned 0 Link is the system (for loop around test, fields 1 and 3 must be set to 0) 1-8 Hardware links (this link is connected to link specified in field 1)
Field 4	Enter the logical channel number on the link (component B): - Component A is alternate routed 1-64 Logical channel number
Field 5	Enter the priority level: 0 Low priority 1 High priority
Field 6	Enter the alternate routing flag status: 0 Link is not used as an alternate routed network channel 1 Link is used as an alternate routed network channel
Field 7	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

257 Word 2 Administers the port characteristics including the local port, the remote port/destination, the alternate routing destination routing code, and the alternate routing postage.

Field 1	Enter the local port number (1-64).
Field 2	Enter the AUDIX remote port/destination (-, 1-20).
Field 3	Enter the alternate destination routing code (-, 1-255).

Field 4 Enter the number of alternate DCIUs an alternate routed packet can go through before packet is terminated (-, 2-255).

Field 8 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

257 Word 4 Administers the alternate routes associated with a destination map.

Field 1 Enter the destination routing code (1-255).

Field 2 Enter the routing algorithm:

Fixed routingRouting on failure

Field 3 Enter the number of routes:

Fields 4-9 must be dashed Input expected in fields 4-5 Input expected in fields 4-7

3 Input expected in fields 4-9

Fields 4, 6, 8 Enter the link number of corresponding route:

0 Local system1-8 Link number

Fields 5, 7, 9 Enter the logical channel number (0-64).

257 Word 5 Reserves ports for feature usage.

Field 1 Enter the port number (-, 1-64).

Field 2 Enter the application type:

0 Unreserved 13 AUDIX

Field 3 Enter the instance number (1-8). This number must match the AUDIX machine number.

Field 9 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

258 Word 1 Swaps the changes made to the DCIU scratch-pad table with the machine-read memory. Use this procedure *after* making any DCIU changes.

Field 1 Enter a "1" to swap tables and reboot DCIU.

258 Word 2 Copies the DCIU machine-read memory values to the scratch-pad table. Use this procedure *before* making any DCIU changes.

Field 1 Enter a "1" to make a copy of DCIU tables. (This procedure overwrites the contents of the scratch-pad table.)

275 Word 1 Administers the DCIU to the system class of service.

Field 17 Enter the DCIU assignment:

- Not available

0 Disable

1 Enable

Call Management System (CMS)

The Call Management System (CMS) is an adjunct processor that collects data generated by ACD users and presents the data as reports to help optimize ACD use.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Automatic Call Distribution (ACD).

Procedure Sequence

ADD	CHANGE	REMOVE
028 Word 2	028 Word 2	028 Word 2
275 Word 4	028 Word 1	115 Word 1
115 Word 1	115 Word 1	028 Word 1
028 Word 1	031 Word 1	275 Word 4
031 Word 1	258 Word 2	258 Word 2
258 Word 2	256 Word 1	257 Word 1
256 Word 1	256 Word 2	257 Word 2
256 Word 2	256 Word 3	257 Word 5
256 Word 3	257 Word 5	256 Word 3
257 Word 5	257 Word 2	256 Word 2
257 Word 2	257 Word 1	256 Word 1
257 Word 1	258 Word 1	258 Word 1
258 Word 1	028 Word 2	258 Word 2
028 Word 2		275 Word 1
275 Word 1		

Procedure Usage

028 Word 1 Administers the Call Management System (CMS) to an extension or group of extensions.

Field 1	Enter the CMS terminal number (1-1023).
Field 2	Enter the CMS extension low (000-99999).
Field 3	Enter the CMS extension high (000-99999).

O28 Word 2 This procedure is used to busy out CMS while translation changes are made. After making the translation changes, the CMS busy out must be released.

Field 1 Enter the CMS busy out specifications:

0 Not busied out

1 Busied out



Field 1 Enter the vector directory number (000-99999).

Field 2 Enter the vector number (-, 1-511).

Field 3 Enter the measure capabilities:

VDN is not measured by CMSVDN is measured by CMS

115 Word 1 Administers CMS measurement types to trunk groups that have already been administered to terminate at ACD splits.

Field 1 Enter the trunk group number (18-255). CMS can only measure trunk groups 18-255.

Field 2 Enter the CAS termination point:

Trunk group terminates in an ACD group
 Trunk group terminates on local attendant

1 Trunk group terminates on CAS

2 Trunk group terminates on VDN

Field 3 Enter the restricted dial code entry number (1-16, 99).

Field 5 Enter the types of CMS measurements being made:

- Trunk group not measured by CMS

Outgoing measurements by CMS

1 Incoming measurements by CMS

2 Both incoming and outgoing measurements by CMS

256 Word 1 Administers the major characteristics of the data link. Included are the link number, status, baud rate, DTE/DCE, type of link, protocol, destination machine type, and the destination machine number.

- Field 1 Enter the DCIU physical link number (1-8). This is the link number of the physical port on the DCIU that is connected to the host computer for CMS.
- Field 2 Enter the link status:
 - 0 Unassigned
 - 1 Assigned

Field 3 Enter the data rate:

- 0 No data rate required
- 1 300 bps
- 2 600 bps
- 3 1200 bps
- 4 2400 bps
- 5 4800 bps
- 6 9600 bps
- 7 19200 bps

Field 4 Enter the local DTE/DCE assignments:

0 Local end of DCIU link is functioning as a DTE

1 Local end of DCIU link is functioning as a DCE
One end of the link must be administered as the DTE while the
other is administered as the DCE.

Enter the dial up capabilities:

Field 5 Enter the dial up capabilities:

0 Link is not a dial up link

1 Link is a dial up link

Field 6 Enter a "1" to select the BX.25 protocol.

Field 7 Enter the type of machine interface:

1 AP 16 2 3B5 AP

8 3B2 Messaging Server or 3B2 CMS

Field 8 Enter the destination machine number (1-7).

256 Word 2 Administers the BX.25 level 2 characteristics. Included are the link number, the retransmission timer, the idle timer, the maximum number of retransmissions, and the maximum number of unacknowledged frames allowed on the link.

Field 1 Enter the DCIU physical link number (1-8).

Field 2 Enter the time in seconds before retransmitting unacknowledged frames (1-255). A typical value is 1.

Field 3 Enter the time in seconds before frames are exchanged on a link (1-255). A typical value is 10.

Field 4 Enter the maximum number of retransmissions of an acknowledged frame (1-15). A typical value is 2.

Field 5 Enter the maximum number of frames transmitted on a link without acknowledgement (1-7). A typical value is 7.

Administers the BX.25 level 3 characteristics. Included are the link number, the activity timer, the acknowledgement timer, the interrupt timer, the restart timer, and the maximum number of unacknowledged packets.

Field 1 Enter the DCIU physical link number (1-8).

Field 2 Enter the time, in seconds, before sending a window advancement packet to indicate the present condition of a logical channel (1-255). A typical value is 180.

Field 3 Enter the time, in seconds, waited for acknowledgement of data packet before resetting a logical channel (1-255). A typical value is 20.

Field 4 Enter the time, in seconds, waited for confirmation of an interrupt packet before resetting a logical channel (1-255). A typical value is 180.

Field 5 Enter the time, in seconds, waited before retransmitting an unconfirmed reset request package (1-255). A typical value is 8.

- Field 6 Enter the time, in seconds, waited before retransmitting an unconfirmed restart request package (1-255). A typical value is 8.
- Field 10 Enter the maximum number of times an unacknowledged data packet can be transmitted (1-7). A typical value is 4.
- Administers the network channel for CMS applications. Included are the system link, the logical channel on the local port, the hardware link, the logical channel, the priority, and the alternate routing flag.
 - Field 1 Enter the local link number (Component A):
 - 0 Local system link (commonly known as link 0)
 - 1-8 Hardware links
 - Field 2 Enter the logical channel number (1-64) on the local link/system.
 - Field 3 Enter the link number (Component B):
 - Not assigned
 - O Link is the system (for loop around test, fields 1 and 3 must be set to 0)
 - 1-8 Hardware links (this link is connected to the link specified in field 1)
 - Field 4 Enter the logical channel number on the link:
 - Component A is alternate routed
 - 1-64 Logical channel number
 - Field 5 Enter the priority level:
 - 0 Low priority
 - 1 High priority
 - Field 6 Enter the alternate routing flag status:
 - 0 Link is not used as an alternate routed network channel
 - 1 Link is used as an alternate routed network channel
- 257 Word 2 Administers the port characteristics including the local port, the remote port/destination, the alternate routing destination routing code, and the alternate routing postage.
 - Field 1 Enter the local port number (1-64).
 - Field 2 Enter the remote port/destination (-, 1-11).
 - Field 3 Enter the alternate destination routing code (-, 1-255).
 - Field 4 Enter the number of alternate DCIUs an alternate routed packet can go through before packet is terminated (-, 2-255).
- 257 Word 5 Reserves ports for CMS usage including the port number, the application type, and the application instance number.
 - Field 1 Enter the number of the local port (-, 1-64).
 - Field 2 Enter an "11" to specify the application type as CMS.

Field 3 Enter a "1" for the application instance number.

Field 9 Enter the table indicator:

- -, 0 Display scratch-pad table values1 Display machine-used table values
- **258 Word 1** Swaps the changes made to the DCIU scratch-pad table with the machine-read memory. Use this procedure *after* making any DCIU changes.

Field 1 Enter a "1" to swap the tables and reboot DCIU.

258 Word 2 Copies the DCIU machine-read memory values to the scratch-pad table. Use this procedure *before* making any DCIU changes.

Field 1 Enter a "1" to make a copy of DCIU tables.

NOTE

This procedure overwrites the contents of the scratch-pad table.

275 Word 1 Activates the DCIU.

Field 17 Enter the DCIU assignment:

- Feature not available

0 Disable1 Enable

275 Word 4 Enables or disables CMS for the system. CMS must be busied out in Procedure 028 Word 2 before it can be enabled or disabled.

Field 13 Enter the CMS assignment:

Feature not available

0 Disable1 Enable

Distributed Communications System (DCS)

The Distributed Communications System (DCS) is designed to meet the needs of customers with telecommunication requirements that exceed the capacity of a single system. Using a DCS allows the customer to operate and control multiple systems as if they were one system.

Procedure Sequence

ADD	CHANGE	REMOVE
258 Word 2	258 Word 2	258 Word 1
256 Word 1	256 Word 1	256 Word 3
256 Word 2	256 Word 2	256 Word 2
256 Word 3	256 Word 3	256 Word 1
257 Word 5	257 Word 5	257 Word 6
257 Word 2	257 Word 2	257 Word 5
257 Word 1	257 Word 1	257 Word 2
257 Word 3	257 Word 3	257 Word 3
257 Word 4	257 Word 4	257 Word 4
257 Word 6	257 Word 6	257 Word 1
258 Word 1	275 Word 1	275 Word 1
275 Word 1	258 Word 1	

Procedure Usage

256 Word 1 Administers the major characteristics of the data link. Included are the link number, status, baud rate, DTE/DCE, type of link, protocol, destination machine type, and the destination machine number.

Field 1	Enter the	DCIU link number (1-8).
Field 2	Enter the 0	link status: Unassigned Assigned
Field 3	0 1 2 3 4 5	data rate: No data rate required 300 bps 600 bps 1200 bps 2400 bps 4800 bps
	6 7	9600 bps 19200 bps

Field 4	Enter the local DTE/DCE assignments:		
	0 Local end of DCIU link is functioning as a DTE		
	1 Local end of DCIU link is functioning as a DCE		
	One end of the link must be administered as the DTE while t		
	other is administered as the DCE.		
Field 5	Enter the dial up capabilities:		
	0 Link is not a dial up link		
	1 Link is a dial up link		
Field 6	Enter a "1" to select the BX.25 protocol.		
Field 7	Enter the type of machine interface:		
	4 System 75 or DEFINITY Generic 1 system		
	5 System 85, Release 1 system		
	6 System 85, Release 2 or DEFINITY Generic 2 system		
	7 Enhanced DIMENSION PBX		
Field 8	Enter the node number of the destination machine (1-63).		
Field 9	Enter the table indicator:		
	-, 0 Display scratch-pad table values		
	1 Display machine-used table values		

256 Word 2 Administers the BX.25 level 2 characteristics. Included are the link number, the retransmission timer, the idle timer, the maximum number of retransmissions, and the maximum number of unacknowledged frames allowed on the link.

Field 1	Enter the link number (1-8).
Field 2	Enter the retransmission timer (1-255 in seconds). A typical value is $1. $
Field 3	Enter the idle timer (1-255 in seconds). A typical value is 10.
Field 4	Enter the maximum number of retransmissions allowed $(1-15)$. A typical value is 2 .
Field 5	Enter the maximum number of frames transmitted without acknowledgement (1-7). A typical value is 7.
Field 6	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

256 Word 3 Administers the BX.25 level 3 characteristics. Included are the link number, the activity timer, the acknowledgement timer, the interrupt timer, the restart timer, and the maximum number of unacknowledged packets.

Field 1	Enter the link number (1-8).
Field 2	Enter the activity timer (1-255 in seconds). A typical value is 180.
Field 3	Enter the acknowledgement timer (1-255 in seconds). A typical value is 20.

Field 4	Enter the interrupt timer (1-255 in seconds). A typical value is 180 .
Field 5	Enter the reset timer (1-255 in seconds). A typical value is 8.
Field 6	Enter the restart timer (1-255 in seconds). A typical value is 8.
Fields 7-9	These fields are not used at this time.
Field 10	Enter the maximum number of unacknowledged packets (1-7). A typical value is 4.
Field 11	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

257 Word 1 Administers the network channel for DCS applications. Included are the system link, the logical channel on the local port, the hardware link, the logical channel, and the priority. The logical channel in fields 2 and 4 must be the same.

Field 1	Enter the 0 1-8	e local link number (Component A): Local system link (commonly known as link 0) Hardware links
Field 2	Enter the	e logical channel number (1-64) on the local link/system.
Field 3	Enter the - 0 1-8	e link number (Component B): Not assigned Link is the system (for loop around test, fields 1 and 3 must be set to 0) Hardware links (this link is connected to the link specified in field 1)
Field 4	Enter the - 1-64	e logical channel number on the link: Component A is alternate routed Logical channel number
Field 5	Enter the 0	e priority level: Low priority High priority
Field 6	Enter the 0	e alternate routing flag status: Link is not used as an alternate routed network channel Link is used as an alternate routed network channel
Field 7	Enter the -, 0	e table indicator: Display scratch-pad table values Display machine-used table values

- **257 Word 2** Administers the port characteristics including the local port, the remote port/destination, the alternate routing destination routing code, and the alternate routing postage.
 - Field 1 Enter the local port number (1-64).

	Field 2	Enter the remote port/destination: - Unassigned 1-20 System 85, Release 1 1-64 System 85, Release 2 or DEFINITY Generic 2 1-20 Enhanced DIMENSION PBX Enter the alternate destination routing code (-, 1-255).
	Field 4	Enter the number of alternate DCIUs an alternate routed packet can go through before packet is terminated (-, 2-255).
	Field 8	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values
257 Word 3	Administers the DCS node.	local port to the trunk group number used for access to the remote
	Field 1	Enter the local port number (1-64).
	Field 2	Enter the trunk group number (18-255).
	Field 3	Enter the remote DCS node number (1-63).
257 Word 4	Administers the a	alternate routes associated with a destination map.
	Field 1	Enter the destination routing code (1-255).
	Field 2	Enter the routing algorithm: 0 Fixed routing 1 Routing on failure
	Field 3	Enter the number of routes: 0 Fields 4-9 must be dashed 1 Input expected in fields 4-5 2 Input expected in fields 4-7 3 Input expected in fields 4-9
	Fields 4, 6, 8	Enter the link number of corresponding route: 0 Local system 1-8 Link number
	Fields 5, 7, 9	Enter the logical channel number (0-64).
257 Word 5	Reserves ports fo	or feature usage.
	Field 1	Enter the port number (-, 1-64).
	Field 2	Enter the application type: 0 Unreserved 9 Distributed Communications System (DCS) 12 Enhanced Services (ES)
	Field 3	Enter the instance number (-, 1-63).

Field 9 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

257 Word 6 Associates tables containing the correlations between the Enhanced Service (ES) ports, the network class, and the network numbers for DCS nodes.

Field 1 Enter the ES port number (1-64).

Field 2 Enter a "3" to specify DCS as the network adjunct class.

Field 3 Enter the network adjunct number for DCS nodes (1-63).

Field 4 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

258 Word 1 Swaps the changes made to the DCIU scratch-pad table with the machine-read memory. Use this procedure *after* making any DCIU changes.

Field 1 Enter a "1" to swap the tables and reboot DCIU.

258 Word 2 Copies the DCIU machine-read memory values to the scratch-pad table. Use this procedure *before* making any DCIU changes.

Field 1 Enter a "1" to make a copy of DCIU tables. *This procedure overwrites the contents of the scratch-pad table.*

275 Word 1 Administers the DCIU to the system class of service.

Field 17 Enter the DCIU assignment:

- Not available
- 0 Disable
- 1 Enable

Leave Word Calling on an AP

The Leave Word Calling (LWC) feature allows internal callers (internal to the local system or the DCS) to leave messages for internal principals (the called parties) without assistance of a secretary or Message Center agent. The DCIU administration for Leave Word Calling is not needed if Leave Word Calling is on the system or on AUDIX.

Procedure Sequence

ADD	CHANGE	REMOVE
258 Word 2	258 Word 2	258 Word 2
256 Word 1	256 Word 1	256 Word 3
256 Word 2	256 Word 2	256 Word 2
256 Word 3	256 Word 3	256 Word 1
257 Word 5	257 Word 5	257 Word 6
257 Word 4	257 Word 4	257 Word 1
257 Word 2	257 Word 2	257 Word 2
257 Word 1	257 Word 1	257 Word 4
257 Word 6	257 Word 6	257 Word 5
258 Word 1	275 Word 1	275 Word 1
275 Word 1	258 Word 1	258 Word 1
		258 Word 2

Procedure Usage

256 Word 1 Administers the major characteristics of the data link. Included are the link number, status, baud rate, DTE/DCE, type of link, protocol, destination machine type, and the destination machine number.

Field 1	Enter the DCIU link number (1-8).	
Field 2	Enter the link status:	
	0	Unassigned
	1	Assigned
Field 3	Enter th	e data rate:
	0	No data rate required
	1	300 bps
	2	600 bps
	3	1200 bps
	4	2400 bps
	5	4800 bps
	6	9600 bps
	7	19200 bps

Field 4	Enter the local DTE/DCE assignments: 0 Local end of DCIU link is functioning as a DTE 1 Local end of DCIU link is functioning as a DCE One end of the link must be administered as the DTE while the other is administered as the DCE.
Field 5	Enter the dial up capabilities: 0 Link is not a dial up link 1 Link is a dial up link
Field 6	Enter a "1" to select the BX.25 protocol.
Field 7	Enter the type of machine interface: 1 AP 16 2 3B5 AP 8 3B2 Messaging Server (AP)
Field 8	Enter the destination machine number (1-7).
Field 9	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

256 Word 2 Administers the BX.25 level 2 characteristics. Included are the link number, the retransmission timer, the idle timer, the maximum number of retransmissions, and the maximum number of unacknowledged frames allowed on the link.

Field 1	Enter the link number (1-8).
Field 2	Enter the retransmission timer (1-255 in seconds). A typical value is 1.
Field 3	Enter the idle timer (1-255 in seconds). A typical value is 10.
Field 4	Enter the maximum number of retransmissions allowed (1-15). A typical value is 2.
Field 5	Enter the maximum number of frames transmitted without acknowledgement (1-7). A typical value is 7.
Field 6	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

256 Word 3 Administers the BX.25 level 3 characteristics. Included are the link number, the activity timer, the acknowledgement timer, the interrupt timer, the restart timer, and the maximum number of unacknowledged packets.

Field 1 Enter the link number (1-8).

Field 2	Enter the activity timer (1-255 in seconds). A typical value is 180 .
Field 3	Enter the acknowledgement timer (1-255 in seconds). A typical value is 20.
Field 4	Enter the interrupt timer (1-255 in seconds). A typical value is 180.
Field 5	Enter the reset timer (1-255 in seconds). A typical value is 8.
Field 6	Enter the restart timer (1-255 in seconds). A typical value is 8.
Fields 7-9	These fields are not used at this time.
Field 10	Enter the maximum number of unacknowledged packets (1-7). A typical value is 4.
Field 11	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

257 Word 1 Administers the network channel for Leave Word Calling applications. These applications are Message Waiting — Automatic, the Clock, and Leave Word Calling. Included are the system link, the logical channel on the local port, the hardware link, the logical channel, and the priority. The logical channel in fields 2 and 4 must be the same.

Field 1	Enter the local link number (Component A): 0 Local system link (commonly known as link 0) 1-8 Hardware links
Field 2	Enter the logical channel number (1-64) on the local link/system.
Field 3	Enter the link number (Component B): - Not assigned 0 Link is the system (for loop around test, fields 1 and 3 must be set to 0) 1-8 Hardware links (this link is connected to the link specified in field 1)
Field 4	Enter the logical channel number on the link: - Component A is alternate routed 1-64 Logical channel number
Field 5	Enter the priority level: 0 Low priority 1 High priority
Field 6	Enter the alternate routing flag status: 0 Link is not used as an alternate routed network channel

1 Link is used as an alternate routed network channel

Field 7 Enter the table indicator:

- -, 0 Display scratch-pad table values
- 1 Display machine-used table values
- **257 Word 2** Administers the port characteristics including the local port, the remote port/destination, the alternate routing destination routing code, and the alternate routing postage.

```
Field 1 Enter the local port number (1-64).
```

Field 2 Enter the remote port/destination (-, 1-11).

Field 3 Enter the alternate destination routing code (1-255).

Field 4 Enter the number of alternate DCIUs an alternate routed packet

can go through before packet is terminated (-, 2-255).

Field 8 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

257 Word 4 Administers the alternate routes associated with a destination map.

Field 1 Enter the destination routing code (1-255).

Field 2 Enter the routing algorithm:

0 Fixed routing

1 Routing on failure

Field 3 Enter the number of routes:

O Fields 4-9 must be dashed

1 Input expected in fields 4-5

2 Input expected in fields 4-7

3 Input expected in fields 4-9

Fields 4, 6, 8 Enter the link number of corresponding route:

0 Local system

1-8 Link number

Fields 5, 7, 9 Enter the logical channel number (0-64).

257 Word 5 Reserves ports for feature usage.

Field 1 Enter the port number (-, 1-64).

Field 2 Enter the application type:

0 Unreserved

- 2 AP clock synchronization (CLK)
- 4 LWC high priority (LWCH)
- 5 LWC low priority (LWCL)
- 6 Message Waiting Automatic lamp (AMWL)
- Field 3 Enter the instance number (-, 1-7).
- Field 9 Enter the table indicator:
 - -, 0 Display scratch-pad table values
 - 1 Display machine-used table values
- 257 Word 6 Associates tables containing the correlations between the Enhanced Service (ES) ports, the network class, and the network numbers for DCS nodes.
 - Field 1 Enter the ES port number (1-64).
 - Field 2 Enter a "1" to specify the AP as the network adjunct class.
 - Field 3 Enter the network adjunct number for AP (1-99).
 - Field 4 Enter the table indicator:
 - -, 0 Display scratch-pad table values
 - 1 Display machine-used table values
- Swaps the changes made to the DCIU scratch-pad table with the machine-read memory. Use this procedure *after* making any DCIU changes.
 - Field 1 Enter a "1" to swap the tables and reboot DCIU.
- 258 Word 2 Copies the DCIU machine-read memory values to the scratch-pad table. Use this procedure *before* making any DCIU changes.
 - Field 1 Enter a "1" to make a copy of DCIU tables.

NOTE

This procedure overwrites the contents of the scratch-pad table.

- 275 Word 1 Administers the DCIU to the system class of service.
 - Field 17 Enter the DCIU assignment:
 - Not available
 - 0 Disable
 - 1 Enable

Message Center

Message Center is an answering service for redirected calls from the called party to an agent in the Message Center. Agents enter messages from the caller at an agent data terminal. The called party can retrieve their messages later by printing the message at a nearby printer, through a digital display module, calling the Message Center agent, or through a text mail service.

Procedure Sequence

ADD	CHANGE	REMOVE
258 Word 2	258 Word 2	258 Word 1
256 Word 1	256 Word 1	256 Word 3
256 Word 2	256 Word 2	256 Word 2
256 Word 3	256 Word 3	256 Word 1
257 Word 5	257 Word 5	257 Word 6
257 Word 2	257 Word 2	257 Word 1
257 Word 1	257 Word 1	257 Word 2
257 Word 6	257 Word 6	257 Word 5
258 Word 1	275 Word 1	275 Word 1
275 Word 1	258 Word 1	

Procedure Usage

256 Word 1

Administers the major characteristics of the data link. Included are the link number, status, baud rate, DTE/DCE, type of link, protocol, destination machine type, and the destination machine number.

Field 1	Enter the DCIU link number (1-8).
Field 2	Enter the link status:
	0 Unassigned 1 Assigned
Field 3	Enter the data rate:
	0 No data rate required
	1 300 bps
	2 600 bps
	3 1200 bps
	4 2400 bps
	5 4800 bps
	6 9600 bps
	7 19200 bps
Field 4	Enter the local DTE/DCE assignments:
	0 Local end of DCIU link is functioning as a DTE
	1 Local end of DCIU link is functioning as a DCE
	One end of the link must be administered as the DTE while the
	other is administered as the DCE.

Field 5	Enter the dial up capabilities: 0 Link is not a dial up link 1 Link is a dial up link	
Field 6	Enter a "1" to select the BX.25 protoc	col.
Field 7	Enter the type of machine interface: 1	
Field 8	Enter the destination machine number	(1-7).
Field 9	Enter the table indicator: -, 0 Display scratch-pad table va 1 Display machine-used table	

256 Word 2 Administers the BX.25 level 2 characteristics. Included are the link number, the retransmission timer, the idle timer, the maximum number of retransmissions, and the maximum number of unacknowledged frames allowed on the link.

Field 1	Enter the link number (1-8).
Field 2	Enter the retransmission timer (1-255 in seconds). A typical value is $1. $
Field 3	Enter the idle timer (1-255 in seconds). A typical value is 10.
Field 4	Enter the maximum number of retransmissions allowed (1-15). A typical value is 2.
Field 5	Enter the maximum number of frames transmitted without acknowledgement (1-7). A typical value is 7.
Field 6	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

256 Word 3 Administers the BX.25 level 3 characteristics. Included are the link number, the activity timer, the acknowledgement timer, the interrupt timer, the restart timer, and the maximum number of unacknowledged packets.

Field 1	Enter the link number (1-8).
Field 2	Enter the activity timer (1-255 in seconds). A typical value is 180.
Field 3	Enter the acknowledgement timer (1-255 in seconds). A typical value is 20.
Field 4	Enter the interrupt timer (1-255 in seconds). A typical value is 180.
Field 5	Enter the reset timer (1-255 in seconds). A typical value is 8.
Field 6	Enter the restart timer (1-255 in seconds). A typical value is 8.

Fields 7-9 These fields are not used at this time.

Field 10 Enter the maximum number of unacknowledged packets (1-7). A typical value is 4.

Field 11 Enter the table indicator:

- -, 0 Display scratch-pad table values
- 1 Display machine-used table values

Administers the network channel for Message Center applications. Included are the system link, the logical channel on the local port, the hardware link, the logical channel, and the priority. The logical channel in fields 2 and 4 must be the same.

- Field 1 Enter the local link number (Component A):
 - 0 Local system link (commonly known as link 0)
 - 1-8 Hardware links
- Field 2 Enter the logical channel number (1-64) on the local link/system.
- Field 3 Enter the link number (Component B):
 - Not assigned
 - 0 Link is the system (for loop around test, fields 1 and 3 must be set to 0)
 - 1-8 Hardware links (this link is connected to the link specified in field 1)
- Field 4 Enter the logical channel number on the link:
 - Component A is alternate routed
 - 1-64 Logical channel number
- Field 5 Enter the priority level:
 - 0 Low priority
 - 1 High priority
- Field 6 Enter the alternate routing flag status:
 - 0 Link is not used as an alternate routed network channel
 - 1 Link is used as an alternate routed network channel
- Field 7 Enter the table indicator:
 - -, 0 Display scratch-pad table values
 - 1 Display machine-used table values

257 Word 2 Administers the port characteristics including the local port, the remote port/destination, the alternate routing destination routing code, and the alternate routing postage.

Field 1 Enter the local port number (1-64).

Field 2 Enter the remote port/destination (-, 1-11).

Field 3 Leave blank.

Field 4 Leave blank.

Field 8 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

257 Word 5 Reserves ports for feature usage.

Field 1 Enter the port number (-, 1-64).

Field 2 Enter the application type:

0 Unreserved

2 AP clock synchronization (CLK)

3 Message Center (MCS)

Field 3 Enter the instance number (-, 1-7).

257 Word 6 Associates tables containing the correlations between the Enhanced Service (ES) ports, the network class, and the network numbers for DCS nodes.

Field 1 Enter the ES port number (1-64).

Field 2 Enter the "1" to specify AP as the network adjunct class.

Field 3 Enter the network adjunct number for AP (1-99).

Field 4 Enter the table indicator:

-, 0 Display scratch-pad table values

1 Display machine-used table values

Swaps the changes made to the DCIU scratch-pad table with the machine-read memory. Use this procedure *after* making any DCIU changes.

Field 1 Enter a "1" to swap the tables and reboot DCIU.

258 Word 2 Copies the DCIU machine-read memory values to the scratch-pad table. Use this procedure *before* making any DCIU changes.

Field 1 Enter a "1" to make a copy of DCIU tables.

NOTE

This procedure overwrites the contents of the scratch-pad table.

275 Word 1 Administers the DCIU to the system class of service.

Field 17 Enter the DCIU assignment:

Not available

0 Disable

1 Enable

3B2 ISDN Gateway

The 3B2 ISDN Gateway receives call information from the switch, translates the information into a form that a software application can use, and sends that information to the application. This application can use the information it receives from the 3B2 ISDN Gateway to send pertinent data about a call to a selected agent's terminal screen.

Procedure Sequence

ADD	CHANGE	REMOVE
258 Word 2	258 Word 2	258 Word 1
256 Word 1	256 Word 1	256 Word 3
256 Word 2	256 Word 2	256 Word 2
256 Word 3	256 Word 3	256 Word 1
257 Word 5	257 Word 5	257 Word 1
257 Word 2	257 Word 2	257 Word 2
257 Word 1	257 Word 1	257 Word 5
258 Word 1	275 Word 1	275 Word 1
275 Word 1	258 Word 1	

Procedure Usage

256 Word 1 Administers the major characteristics of the data link. Included are the link number, status, baud rate, DTE/DCE, type of link, protocol, destination machine type, and the destination machine number.

Field 1	Enter the DCIU link number (1-8).
Field 2	Enter the link status: 0 Unassigned 1 Assigned
Field 3	Enter a "6" for the 9600 bps data rate.
Field 4	Enter a "0" to set the switch as DTE.
Field 5	Enter a "0" to not allow the link to be a dial-up link.
Field 6	Enter a "1" to select the BX.25 protocol.
Field 7	Enter an "8" to set the machine type.
Field 8	Enter the destination machine number (1-7). This should match the number assigned to the ACD split in Procedure 026 Word 1.
Field 9	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

256 Word 2 Administers the BX.25 level 2 characteristics. Included are the link number, the retransmission timer, the idle timer, the maximum number of retransmissions, and the maximum number of unacknowledged frames allowed on the link.

Field 1	Enter the link number (1-8).
Field 2	Enter a "1" for the retransmission timer.
Field 3	Enter a "10" for the idle timer.
Field 4	Enter a "2" for the maximum number of retransmissions allowed.
Field 5	Enter a "7" for the maximum number of frames transmitted without acknowledgement.
Field 6	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

256 Word 3 Administers the BX.25 level 3 characteristics. Included are the link number, the activity timer, the acknowledgement timer, the interrupt timer, the restart timer, and the maximum number of unacknowledged packets.

Field 1	Enter the link number (1-8).
Field 2	Enter a "180" for the activity timer.
Field 3	Enter a "20" for the acknowledgement timer.
Field 4	Enter a "180" for the interrupt timer.
Field 5	Enter an "8" for the reset timer.
Field 6	Enter an "8" for the restart timer.
Fields 7-9	These fields are not used at this time.
Field 10	Enter a "4" for the maximum number of unacknowledged packets.
Field 11	Enter the table indicator: -, 0 Display scratch-pad table values 1 Display machine-used table values

257 Word 1 Administers the network channel for the 3B2 ISDN Gateway application. Included are the system link, the logical channel on the local port, the hardware link, the logical channel, and the priority.

Field 1	Enter a "0" for the local system link (Component A).
Field 2	Enter the logical channel number on the local link/system (1, 10, 15, 30, 38, 46, or 54).
Field 3	Enter the link number (Component B) (1-7). This number corresponds to the machine number.
Field 4	Enter a "1" for the logical channel number on the link.

Field 5 Enter a "1" to get high priority.

Field 6 Enter a "0" for the alternate routing flag status.

Field 7 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

257 Word 2 Administers the port characteristics including the local port, the remote port/destination, the alternate routing destination routing code, and the alternate routing postage.

Field 1 Enter the local port number (1, 10, 15, 30, 38, 46, or 54).

Field 2 Enter a "1" for the remote port/destination.

Fields 3-4 Leave blank.

Field 8 Enter the table indicator:

-, 0 Display scratch-pad table values1 Display machine-used table values

257 Word 5 Reserves ports for feature usage.

Field 1 Enter the port number (1, 10, 15, 30, 38, 46, or 54 depending on

the instance number in field 3).

Field 2 Enter a "3" for the application type.

Field 3 Enter the instance number (-, 1-7). This number corresponds to

the ISDN Gateway machine number.

258 Word 1 Swaps the changes made to the DCIU scratch-pad table with the machine-read memory. Use this procedure *after* making any DCIU changes.

Field 1 Enter a "1" to swap the tables and reboot DCIU.

258 Word 2 Copies the DCIU machine-read memory values to the scratch-pad table. Use this procedure *before* making any DCIU changes.

Field 1 Enter a "1" to make a copy of DCIU tables.

NOTE

This procedure overwrites the contents of the scratch-pad table.

275 Word 1 Administers the DCIU to the system class of service.

Field 17 Enter the DCIU assignment:

Not available

0 Disable

1 Enable

ABBREVIATED DIALING

The Abbreviated Dialing feature allows terminal users to dial frequently called or emergency numbers with significantly fewer button presses than if the number were dialed in the usual way (i.e., one digit at a time). Abbreviated Dialing can be used to dial on- or off-premises numbers. Assignment of the Abbreviated Dialing feature is on a per-system and per-terminal basis.

Special Functions

The following special functions can be programmed within an Abbreviated Dialing entry for special dialing needs:

Pause (PA)

Used when a second dial tone is required before sending additional digits. This is typically used when a wait of 1.5 seconds is required for second dial tone provided on a trunk call.

Wait (WT)

Used when a longer pause is required before sending additional digits. This is used when a pause of 4 to 10 seconds is required before sending additional digits. This longer pause allows for trunk dial tone to be provided from other systems (long distance calls).

Mark (MK)

Used when an outgoing call requires the digit * or # to be outpulsed. Without the mark, a * or # is interpreted as the first digit of a dial access code and is not outpulsed. When the mark function is programmed into a stored number, the function is activated after a talk path is established with another system via a trunk. If the user has an ABRVDIAL MARK button, the lamp lights when the function is active. It remains active for the duration of the call. A * or # can be entered in the stored number after the mark or can be dialed manually after accessing the stored number.

Stop or Wait for Dial Tone (DT)

Used in conjunction with Data Terminal (Keyboard) Dialing. It conditions the data terminal for return of dial tone from the system. See the Data Call Setup feature.

Suppress

Used when a security code, such as a password or authorization code, is used in an Abbreviated Dialing list entry and a terminal with the Display — Voice Terminal feature is used. By enclosing the password or authorization code in the suppress function, the characters of the security code are converted to "s" on the display. This avoids the possibility of inadvertently compromising the security code.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Procedure Sequence

ADD	CHANGE	REMOVE	
059 Word 5	059 Word 5	059 Word 3	
059 Word 1	059 Word 1	059 Word 4	
059 Word 2	059 Word 2	059 Word 2	
059 Word 3	059 Word 3	059 Word 1	
059 Word 4	059 Word 4	275 Word 3	
275 Word 3	275 Word 3	350 Word 2	
350 Word 2	350 Word 2		

Procedure Usage

Administers the following to a voice terminal equipment location: the list type, the group list number, the list size, the group list controller, and system list access. Use the following table to help you select the desired input:

D	Field					
Purpose	1-5	6	7	8	9	10
To administer group list	-	0	group #	size	-	-
To share terminal to a group list with control	equipment location	1,2	group#	-	1	-
To share terminal to a group list without control	equipment location	1,2	group#	-	0	-
To assign a personal list to a terminal	equipment location	1,2	-	size	-	-
To assign or deny terminal access to system list	equipment location	3	-	-	-	0,1

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $$
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the list type: 0 Group list 1 List A access 2 List B access 3 System list access
Field 7	Enter the group list number (-, 1-9999).
Field 8	Enter the list size (-, 5-95 in increments of 5).
Field 9	Enter the assignment that identifies this voice terminal as a group list controller: O Not the controller of a group list I Is the controller of a group list
Field 10	Enter the system list access assignment: 0 No access 1 Access

059 Word 2

Administers the following to a voice terminal equipment location: the list type, the group list number or system list item, the list item, the segment number, read/write mode, and the dialed digits. This procedure is used to add list items to a group list. It is not necessary to administer each voice terminal's abbreviated dialing list from this procedure; users usually do that from their voice terminals. Use the following table to help you select the desired input:

Dumaga	Field						
Purpose	1-5	6	7	8	9	10	
To assign group list item	-	0	group #	item#	1-5	-,0,1	
To assign personal list item	equipment location	1,2	-	item #	1-5	-,0,1	
To assign system list item	-	3	item#	-	1-5	-,0,1	

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number $(0-7)$ for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the list type: 0 Group list 1 List A 2 List B 3 System list
Field 7	Enter the group list number or system list item (0-9999).
Field 8	Enter the group list number or personal list item (1-95).
Field 9	Enter the segment number: 1
Field 10	Enter the read/write mode: -, 1 Read/Write - machine-used table 0 Read/Write - scratch-pad table
	For a display (read) routine: -, 1 Read list item from machine-used table 0 Read list item from scratch-pad table
	For a change (write) routine: Write list item to machine-used table Write list item to scratch-pad table
Fields 11-14	Enter the dialed digits and special functions: 0-9 11 or * 12 or # 13 Function entry 14 Pause (wait for dial tone) 15 Wait (wait for dial tone) 16 Mark 17 Await dial tone 18 Manual digit entry 19 Suppress display 20 End of dialing character 1-15 Number of digits that will be dialed manually (must follow encode 18)

059 Word 3 Administers the list-access and special function buttons to an assigned multiappearance voice terminal.

Field 1	Enter the module number (0-30).	
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).	
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).	
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP	
Field 7	Enter the member (button) number (0-62).	
Field 8	Enter the button type: 1 List A item 2 List B item 3 System list item 4 List A access 5 List B access 6 System list access 7 Program 13 Function entry 14 Pause (for dial tone) 15 Wait (for dial tone) 16 Mark 17 Await dial tone 18 Manual digit entry 19 Suppress display 20 End of dialing character	
Field 9	Enter the list item index: 1-9999 System list 1-95 List A or list B	

O59 Word 4 Administers the following to a voice terminal equipment location: button-stored numbers, the segment number, read/write mode, and the dialed digits. This procedure is used for multiappearance voice terminals with feature buttons.

Field 1 Enter the module number (0-30).
 Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
 Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules). $$
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter the segment number: - Assign automatic dialing button 1 Characters 1-4 2 Characters 5-8 3 Characters 9-12 4 Characters 13-16 5 Characters 17-20
Field 9	Enter the read/write mode: -, 1 Read/Write - machine-used table 0 Read/Write - scratch-pad table
	For a display (read) routine: -, 1 Read list item from machine-used table 0 Read list item from scratch-pad table
	For a change (write) routine: Write list item to machine-used table Write list item to scratch-pad table
Fields 10-13	Enter the additional characters and special functions: 0-9 11 or * 12 or # 13 Function entry 14 Pause (wait for dial tone) 15 Wait (wait for dial tone) 16 Mark 17 Await dial tone 18 Manual digit entry 19 Suppress display 20 End of dialing character 1-15 Number of digits that will be dialed manually (must follow encode 18)

275 Word 3 Administers the system list size and enables system-wide access to the system list. This procedure is not used if administering personal or group lists.

Field 5

Enter the system list size:

1 System list size 1-9
2 System list size 01-99
3 System list size 001-999
4 System list size 0001-9999
Field 6

Enter the system list access capabilities:
0 Access is on a per extension basis
1 Universal access

350 Word 2 Administers the dial access codes for the Abbreviated Dialing feature.

Field 1 Enter the feature encode: 90 Dial the System (global) List - touch tone terminal 91 Dial List A - touch-tone terminal 92 Dial List B - touch-tone terminal 93 Program auto dial number or list 94 Dial the System List - rotary terminal 95 Dial List A - rotary terminal 96 Dial List B - rotary terminal Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9).

ACCUNET® SERVICE INTERFACE

The ACCUNET Service Interface feature provides an interface between the DEFINITY Generic 2 system and the AT&T Communications ACCUNET Switched 56 Service. The ACCUNET Service Interface feature is similar to the DS1 Interface feature, with a special in-band signaling mode to provide 56Kbps access to ACCUNET Switched 56 Service. Unlike standard in-band (robbed bit) signaling used with the DS1 feature (voice grade service), neither Data Preindication (the Data Call Setup feature), nor a Modem Pooling conversion resource is needed for data communications over this service.

Assignment of the ACCUNET Service Interface feature is on a per-system basis and a trunk group basis within the system.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Bearer Capability

Digital Multiplexed Interface (DMI)

The message oriented signaling (MOS) version of DMI can support the ACCUNET Service Interface feature.

Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI)

ISDN trunks can support the ACCUNET Service Interface feature.

Restriction — Miscellaneous Trunk Restrictions

Route Advance

Trunk-to-Trunk Connections

Procedure Sequence

ADD	CHANGE	REMOVE
103 Word 1	103 Word 1	115 Word 1
115 Word 1	115 Word 1	275 Word 1
275 Word 1	275 Word 1	

Procedure Usage

103 Word 1 Administers the network translations for assigned trunks (e.g., Data Protection, FRL, bridge-on).

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the FRL (0-7) for the trunk group.

Field 7 Enter the bridge-on capabilities:

0 Trunk verification bridge-on is not permitted
1 Trunk verification bridge-on is permitted
Field 10 Enter the trunk group data protection assignment:
0 Disable
1 Enable

115 Word 1 Administers the trunk group termination point.

1

Field 1 Enter the trunk group number (18-999). Field 2 Enter the trunk group termination point: Trunk group terminates in an ACD group 0 Trunk group terminates on local attendant Trunk group terminates on CAS attendant 1 2 Trunk group terminates on a VDN (see Procedure 031 Word 3) Field 3 Enter the ACD split number: Trunk group terminates on a local attendant or CAS, not at ACD 1-60 ACD split number which is the destination of specified trunk group Field 4 Enter the ACD priority of termination:

Nonpriority ACD split termination

Priority ACD split termination

Field 5	Enter the CMS	measurement type:
I ICIU J	Linci die Civio	incubal children type.

- Group not measured by CMS
- 1 Outgoing measurements by CMS
- 2 Incoming measurements by CMS
- 3 Two-way measurements by CMS

275 Word 1 Administers the optional tandem tie trunk and trunk-to-trunk calling features.

Field 15 Enter the tandem tie trunk feature enable:

- Feature not available
- 0 Tandem tie trunk feature disable
- 1 Tandem tie trunk feature enable

Field 16 Enter the trunk-to-trunk calling enable:

- Feature not available
- 0 Trunk-to-trunk calling disable
- 1 Trunk-to-trunk calling enable

ADVANCED PRIVATE LINE TERMINATION

The Advanced Private Line Termination (APLT) feature provides access to and termination from the following private line networks:

- Common Control Switching Arrangement (CCSA)
- Enhanced Private Switched Communications Service (EPSCS).

These private networks provide call routing over dedicated facilities. Based on the network numbering plan, on-network calls are routed to terminals or attendants within the network. Private networks can optionally provide off-network calling to a desired destination based on the 7- or 10-digit public network number.

Assignment of the APLT feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection

Intercept Treatment

Restriction — Miscellaneous Trunk Restrictions

Route Advance

Trunk-to-Trunk Connections.

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 3	010 Word 3	103 Word 1
103 Word 1	103 Word 1	010 Word 3

Procedure Usage

010 Word 3 Administers the miscellaneous trunk restriction groups, APLT off-net permissions, and FRL to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 11 Enter the APLT off-net permissions:

0 Not restricted

1 Restricted

Field 23 Enter the FRL (0-7).

103 Word 1 Administers network trunk group parameters.

Field 5 Specify whether incoming tie trunk and APLT trunk can access WCR

0 Disabled

1 Enabled (use only if the trunk group consists of tie trunks or APLT trunks)

ATTENDANT AUTO-MANUAL SPLITTING

The Attendant Auto-Manual Splitting feature allows an attendant, when completing an incoming call to a voice terminal user, to first identify the calling party to the called voice terminal user. The caller is automatically "split away" from the attendant and the called party when the attendant presses either the START or a direct extension selection (DXS) button. The feature is activated manually by pressing the SPLIT button provided on the attendant console. Pressing the SPLIT button changes the condition from split to unsplit or from unsplit to split.

Assignment of the Attendant Auto-Manual Splitting feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Related Administration

The following administration is not required for this feature, but is recommended to enhance operation:

Attendant Direct Extension Selection/Busy Lamp field.

Procedure Usage

203 Word 1

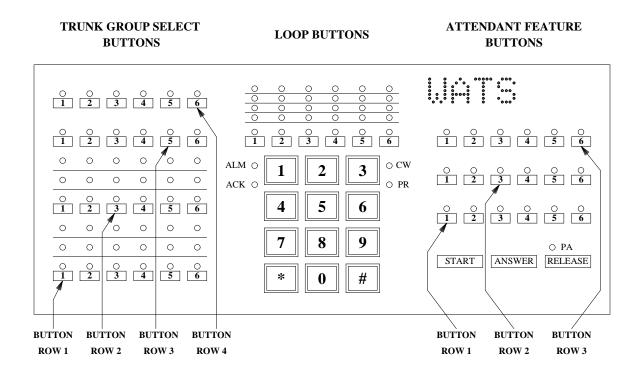
Administers the SPLIT button to the attendant console(s). The buttons used for this feature are located on the right half of the attendant console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number (1-3).

Fields 2-7 Enter a "4" in the desired button location to assign the SPLIT

button.

To remove the button assignment, enter a "0" in that button location (Fields 2–7).



ATTENDANT CALL WAITING

The Attendant Call Waiting feature allows a call to "camp-on" and wait for an answer when an attendant extends that call to a busy single- or multi-appearance voice terminal. Allowing the call to wait permits the attendant to continue with other work.

Two bursts of distinctive tone signal the busy terminal user that a call is waiting. The busy terminal user can answer the call by momentarily pressing the switchhook and dialing the answer-hold access code or by going on-hook. This allows a single-appearance voice terminal to function like two terminals. An individual who is busy on a 2-party call can be alerted to the arrival of another call, and can answer the call if desired.

Assignment of the Attendant Call Waiting feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Procedure Usage

275 Word 1 Administers Call Waiting in the system class of service. This also controls call waiting for voice terminal users.

Field 5 Enter the Call Waiting assignment:

0 Disable

1 Enable

ATTENDANT CONTROL OF TRUNK GROUP ACCESS

The Attendant Control of Trunk Group Access (ACTGA) feature prevents voice terminal users from directly accessing selected trunk groups. If a voice terminal user dials a dial access code to a controlled trunk group, the call routes to an attendant. The attendant then decides, based on instructions from the system administrator, whether to allow the caller to use that trunk facility.

During high demand periods, efficient use of trunk groups can be increased by limiting access. For example, an attendant can control trunk-group usage during peak outgoing call demand periods and can allow access during other periods. This has the effect of allowing outgoing calls on a priority basis. Also, an attendant can control outgoing access on 2-way trunk groups during peak incoming call demand periods. This would have the effect of reserving 2-way trunk groups for incoming calls.

Assignment of the ACTGA feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Attendant Console Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection.

Procedure Sequence

ADD	CHANGE	REMOVE
204 Word 1	204 Word 1	204 Word 1
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

204 Word 1 Administers the desired alphanumeric display for ACTGA on the attendant console(s). This specifies what is to be displayed on the attendant console when a controlled trunk group DAC is dialed by a voice terminal user and the call is redirected to the console.

Field 1 Enter "2291" as the ACTGA call type.

Field 2 Enter the message number 4-63 (whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

350 Word 2 Administers the dial access codes for the ACTGA feature.

Field 1 Enter the feature encodes:

20 Attendant control of trunk group access - activate

21 Attendant control of trunk group access - cancel

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

ATTENDANT DIRECT EXTENSION SELECTION WITH BUSY LAMP FIELD

The Attendant Direct Extension Selection with Busy Lamp Field (DXS/BLF) feature allows an attendant to select an extension from as many as 1800 extension numbers by pressing two buttons instead of dialing the entire extension number. The BLF indicates the busy/idle status of the extension number. The BLF minimizes the time between an attendant's answer of an incoming call and the attendant's report that a voice terminal is busy. An attendant need only look at the busy lamp field to determine whether the terminal is busy or idle.

Assignment of the Attendant DXS/BLF feature is on a per-system basis.

NOTE

This feature does not work with systems using 5-digit dialing plans. Also, this feature will not work with console type 30 since that console is not equipped to handle DXS/BLF.

When changing from DXS/BLF to Extended DXS/BLF, the data for DXS/BLF in Procedure 201 Word 1 is hidden (not displayed) and a note is displayed directing the administrator to use Procedure 201 Word 2. The data in Procedure 201 Word 1 is still present and will be active when changing back to standard DXS/BLF.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
200 Word 1	201 Word 1	203 Word 1
201 Word 1	201 Word 2	201 Word 1
201 Word 2	203 Word 1	201 Word 2
203 Word 1		200 Word 1

Procedure Usage

200 Word 1 Administers whether you have standard DXS/BLF or extended DXS/BLF.

Field 10 Enter the DXS/BLF assignment:

0 Disable (standard DXS/BLF)

1 Enable (extended DXS/BLF)

If field 10 is disabled, use Procedure 201 Word 1 only.

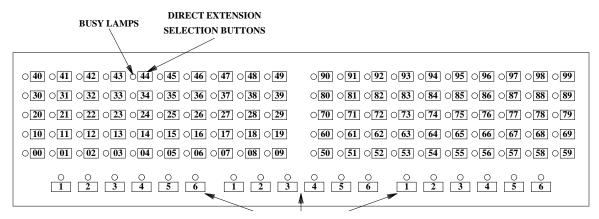
If field 10 is enabled, use Procedure 201 Word 2 and Procedure 203 Word 1.

201 Word 1 Administers the standard DXS/BLF group selection buttons to the attendant console(s). The buttons are added by assigning hundreds group numbers to button locations. The first two digits must correspond to the system dialing plan. Console type 33 only uses the middle button group. Console type 34 uses all three button groups.

Fields 1-3 Enter a "1" in one of these fields to select the left, middle, or right hundreds button groups.

Fields 4-9 Enter the two digits that represent the thousands and hundreds digits desired for this button assignment.

The button assignments are removed by changing the assignment to 00.



HUNDREDS GROUP SELECT BUTTONS

201 Word 2 Administers the hundreds groups accessible to Extended DXS/BLF.

Field 1 Enter the thousands digit that requires extended hundreds groups (0-9).

Field 2 Enter the hundreds digit to be assigned for Extended DXS/BLF (0-9). If field 1 has a "0", you can't put a "0" in this field.

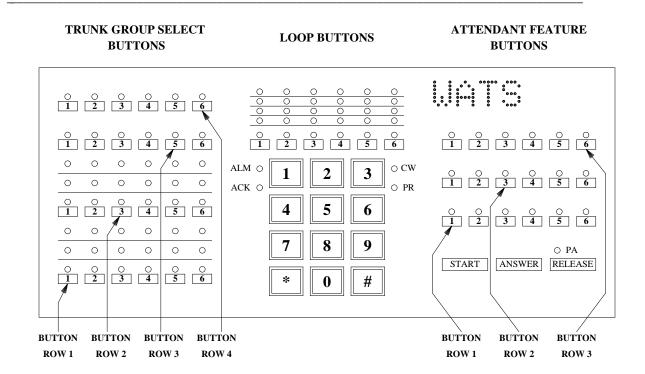
203 Word 1 Administers the control buttons for Extended DXS/BLF. The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter the button types in the desired location:

17 Extended DXS group select (GROUP SELECT)

18 Extended DXS group display (GROUP DISPLAY)



ATTENDANT DIRECT TRUNK GROUP SELECTION

The Attendant Direct Trunk Group Selection (ADTGS) feature allows an attendant to access an idle outgoing trunk by pressing the button assigned to the desired trunk group. The single-button operation reduces the time and effort needed in handling outgoing calls. Each console has 24 DTGS buttons located on the left half of the attendant console. Twelve of these buttons also have control, warning, and busy lamps that light when that status is obtained.

Assignment of the Attendant Direct Trunk Group Selection feature is on a per-trunk group dial access code basis. Before adding any buttons, use Procedure 100 Word 1 or Procedure 178 Word 1 to verify that the selected trunk dial access codes have been assigned.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
200 Word 1 202 Word 1	202 Word 1	202 Word 1 200 Word 1

ATT 1 3 TATE

Procedure Usage

200 Word 1 Administers the ADTGS feature on a console-wide basis.

Field 3 Enter the direct trunk group select assignment:

0 Disable1 Enable

Administers the Direct Trunk Group Select buttons to the attendant console(s). The buttons used for this feature are on the left half of the console. The rows are numbered from bottom-to-top (1-4) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the desired row number (1-4).

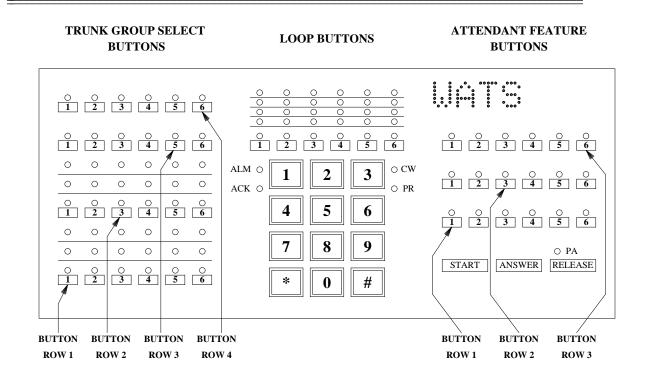
Field 2 Enter the desired button number (1-6).

DEL ...

Field 12

Field 3 Enter the first digit of the dial access code: 0-911 or * 12 or # Field 4 Enter the second digit of the dial access code (0-9). Field 5 Enter the third digit of the dial access code (0-9). Field 6 Enter the fourth digit of the dial access code (0-9). Field 7 Enter the desired trunk group busy/warning status: Busy for this trunk group only 1 Busy for this trunk group and route advance trunk 2 Busy/warning for this trunk group only 3 Busy/warning for this trunk group and route advance trunk groups Field 8 Enter the warning lamp level (1-7). When the number of idle trunks is less than or equal to the number in this field, the applicable warning lamp will light. Enter the remote flag indicator (0, 1). A "1" in this field, when Field 9 there is nothing in fields 10-12, means that the trunk group (DAC in fields 3-6) homes on this system but may be controlled or selected by a remote system. Having a "1" in this field when there is a DAC in fields 10-12 means that the trunk group is remote to this system, but may be controlled or selected by this system. In this case, the local DAC (Fields 3-6) will access the tie trunk to the remote system. Field 10 Enter the first digit of the remote dial access code: -, 0-9 11 or * 12 or # Field 11 Enter the second digit of the remote dial access code (-, 0-9).

Enter the third digit of the remote dial access code (-, 0-9).



ATTENDANT DISPLAY

The Attendant Display feature is provided through an alphanumeric display on the attendant console. This display provides information needed for call identification and rapid call completion. The attendant can display the extension or trunk number, nature, status, and class of service of the calling line or trunk.

Assignment of the Attendant Display feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
200 Word 1	200 Word 1	203 Word 1
203 Word 1	203 Word 1	204 Word 1
204 Word 1	204 Word 1	

Procedure Usage

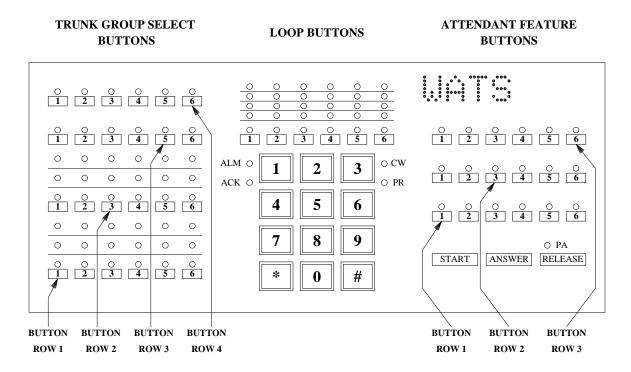
200 Word 1 Administers what display is given on the console when calls come in from on-site extensions and from trunk groups and LDNs.

Field 2	Enter the class of service display assignment:
	O Class of service numbers 1-63 are displayed
	1 Messages NON, FULL, TOLL, REST are displayed
Field 13	Enter whether you want to display the ICI message assigned to
	an LDN or the ICI assigned to a trunk group.
	0 Display ICI of LDN
	1 Display ICI of trunk group

203 Word 1 Administers the display buttons for the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1	Enter the row number where you want the buttons (1-3).
Fields 2-7	Enter the button types in the desired location:
	1 Class of service (CLASS)

- 28 Trunk identification (TRK-ID)
- 42 Station identification (STA-ID)



204 Word 1 Administers the desired alphanumeric display for trunk groups, LDNs, and other call types.

Field 1	Enter the call type or trunk group number:	
	18-999	Trunk group number
	1001-1999	Listed Directory Numbers (LDNs)
	2290	Call Forwarding
	2291	Attendant Control of Trunk Group Access
	2292	Manual line termination
	2293	Controlled restriction
	2294	Timed recall on outgoing trunks
	2295	Recall from six-party conference
	2297	Interposition call
	2298	Automatic Circuit Assurance (ACA) - short call
	2299	Automatic Circuit Assurance (ACA) - long call
	2300	Flash override
	2301	Flash
	2302	Immediate
	2303	Priority
	2304	Routine
	2305	Calls to vacant dial access code
	2306	Calls to restricted features or trunks
	2307	Calls to recently disconnected terminal

2308	Attendant diversion to recorded announcement				
2320	Centralized	Attendant	Service	(CAS)	branch
	identification	n			

Field 2 Enter the message number or CAS branch number. For LDNs, leave blank. For call type 2320 (CAS), use 1-40. For trunk groups or other call types, use 4-63.

Fields 3-6 Enter the desired characters or encodes in each field.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L=22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Enter the Listed Directory Number (LDN) if the call type in field 1 is 1001-1999.

ATTENDANT INTERPOSITION CALLING AND TRANSFER

The Attendant Interposition Calling and Transfer allows an attendant at one position, in a multiposition (multiconsole) system, to call another attendant by dialing an access code and the position's assigned number. The called attendant receives a special alphanumeric display (e.g., IPC) to designate the interposition call. This process is used for consultation or when questions about call processing arise. The attendant can also transfer a call to another position on the same system for special handling. You can also use this feature to allow voice terminal user's to dial a particular console position.

Assignment of the Attendant Interposition Calling and Transfer feature is on a per-system basis. To use this feature, multiple attendant console positions must have already been administered.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Procedure Sequence

ADD	CHANGE	REMOVE
200 Word 1	200 Word 1	200 Word 1
204 Word 1	204 Word 1	204 Word 1
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

200 Word 1 Administers the Interposition Calling and Transfer feature.

Field 5 Enter the interposition calling assignment:

- 0 Disable
- 1 Interposition calling only
- 2 Interposition calling plus extension to selected attendant

204 Word 1 Administers the desired alphanumeric display for interposition calling on the attendant console(s).

Field 1 Enter "2297" as the interposition calling call type.

Field 2 Enter the member number (4-63, whatever is available).

Fields 3-6 Enter the desired characters or encodes.

			L
0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L=22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

350 Word 2 Administers the feature dial access code for Interposition Calling and Transfer and extension to selected attendant.

Field 1 Enter the feature encode:

29 Interposition call

30 Extension to selected attendant

Field 2 Enter the first digit of the dial access code:

0-9 11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

ATTENDANT RECALL

The Attendant Recall feature allows a voice terminal user on a 2-party call or on a conference call to call the attendant for assistance. The Incoming Call Identification (ICI) displays "RCL", or the extension number of one party in the 2-party connection to indicate an attendant recall.

The Attendant Recall feature, as such, does not require administration. However, if administrable recall buttons are needed, they are administered on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Attendant Console Administration

Voice Terminal and Data Module Administration

Procedure Usage

054 Word 1 Administers the recall button to an assigned multiappearance voice terminal that doesn't have a fixed recall button.

10	besii t nave a nx	ed recan button.
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $ \\$
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). $$
	Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
	Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
	Field 6	Enter the device type where the button will be assigned: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
	Field 7	Enter the member (button) number (0-62).
	Field 8	Leave blank.

Field 9 Enter "27" for the RECALL button.

Field 10 Leave blank.

ATTENDANT RELEASE LOOP OPERATION

Attendant Release Loop Operation allows an attendant to hold an incoming trunk call off the console if completion of the call has to be delayed (such as Call Waiting on a busy extension or an idle extension that does not answer). The call will automatically return to the attendant console after an administered time interval. This frees the switch loop and allows the attendant to handle other incoming calls. Therefore, by relieving congestion at the attendant console, this feature is useful to customers with a high volume of incoming console traffic.

Assignment of the Attendant Release Loop feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Attendant Console Administration

Procedure Sequence

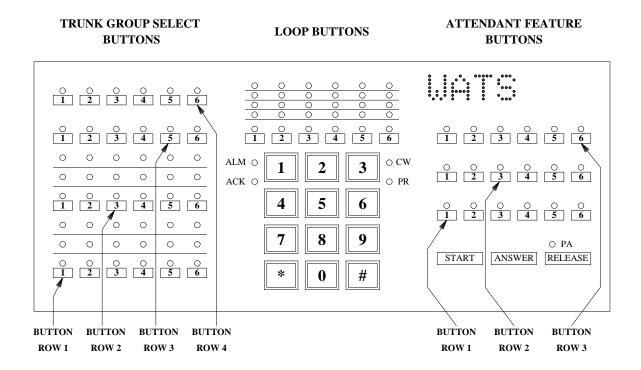
ADD	CHANGE	REMOVE
203 Word 1	203 Word 1	203 Word 1
275 Word 4	275 Word 4	275 Word 4
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

203 Word 1 Administers the console control button for extension number display at the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter a "42" for the STA-ID button type in the desired location.



275 Word 4 Administers the Attendant Release Loop Operation feature to the system class of service.

Field 4 Enter the timed recall activation assignment:

0 Disable1 Enable

Field 5 Enter the timed reminder interval (0-98 in 2-second intervals). This is the amount of time that passes before the attendant is reminded of a held call.

350 Word 2 Administers the dial access code used by the attendant to change the timed reminder interval.

Field 1 Enter a "31" for the Attendant Release Loop time change feature.

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

AUDIXTM VOICE MESSAGING SYSTEM

Subscribers the AUDIX voice messaging system can retreive call answering messages plus send and receive voice messages. The AUDIX system uses recorded prompts and announcements to guide callers through the messaging operations.

Administration of the AUDIX system must be done both on the system and on the individual AUDIX adjuncts. A description of system and AUDIX administration is available in *AUDIX-L Installation* (585-300-101 for AUDIX Large) and *AUDIX-S Installation* (585-302-105 for the single- and two-cabinet AUDIX Small). *AUDIX Administration* (999-700-503IS for AUDIX Release 1, Version 1 or 585-302-501 for AUDIX Release 1, Version 2) is used for AUDIX administration only.

AUDIX is assigned on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Touch-Tone Senders (See Chapter 2, "System Administration")

AUDIX (See Chapter 6, "DCIU Administration")

The Data Communications Interface Unit (DCIU) link is necessary between the system and the AUDIX adjunct.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Automatic Call Distribution (ACD)

The ACD feature (previously called EUCD) serves as the gateway to the AUDIX system.



An AUDIX adjunct can have as many as 32 voice ports. Therefore, an ACD gateway split should be configured to contain 16 or 32 (usually 32) members.

Call Coverage

The AUDIX system (i.e., ACD split number) can be assigned as the final point in a coverage path.

Call Forwarding

The AUDIX system can be assigned as the destination for Call Forwarding.

Call Vectoring

The Call Vectoring feature can be used in conjunction with the ACD feature on a per-system basis. When this is done, some of the standard ACD functions are disabled and replaced by the more flexible vector processing.

Leave Word Calling

The Leave Word Calling feature is also available on the AUDIX adjunct.

Message Waiting — Automatic.

Procedure Usage

350 Word 2 Administers the call transfer into AUDIX dial access code.

Field 1	Enter a "58" for the call transfer into AUDIX feature.
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

AUDIX Phantom Subscribers

You can create "phantom" subscribers on the switch to give non-resident users access to AUDIX mailboxes. Do this with the following administration:

- **Procedure 000 Word 1** Administer an extension without an equipment location and a standard class of service.
- Procedure 000 Word 2 Administer the extension to a Call Coverage group and to an AUDIX machine.
- **Procedure 011 Word 1** Administer the Call Coverage group so that all calls go to the appropriate AUDIX machine extension.

AUTHORIZATION CODES

Voice terminal users and attendants can use Authorization Codes in conjunction with the Facilities Restriction Level (FRL) feature to access special trunks. These codes add flexibility and improve the effectiveness of the FRL feature. Authorization Codes can also be used for billing purposes, as a "movable" personal identifier.

Assignment of the Authorization Codes feature is on a per-system basis.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Facilities Restriction Level (FRL).

Procedure Sequence

ADD	CHANGE	REMOVE
103 Word 1	283 Word 1	283 Word 1
281 Word 1	103 Word 1	103 Word 1
282 Word 1	281 Word 1	281 Word 1
285 Word 1	282 Word 1	282 Word 1
	285 Word 1	285 Word 1

Procedure Usage

103 Word 1 Administers the network trunk group parameters and authorization code requirements for incoming tie trunks.

Field 1	Enter th	ne trunk group number (18-999).	
Field 2	Enter th	Enter the FRL (0-7).	
Field 6	Enter th	ne requirement for authorization code: Authorization code required only when incoming trunk default FRL is less than the FRL associated with route	
	1	Authorization code always required	

Field 2

281 Word 1 Administers the authorization code algorithm parameters.

Field 1 Enter the number of digits in a valid authorization code (4-7).

Fields 2-4 Enter the digit places to be deleted (1-7).

282 Word 1 Assigns an FRL, a network access flag, and an associated extension partition to a single authorization code.

Field 1 Enter the valid authorization code (any 4-, 5-, 6-, or 7-digit number 0000-9999999). This number cannot start with a "1".

Enter the FRL associated with authorization code (0-7).

Field 3 Enter the network access flag assignment:

On-net access to off-net users not allowed

1 On-net access to off-net users allowed

Field 4 Enter the extension partition number (0-999).

283 Word 1 Displays all Authorization Codes associated with a specific FRL.

Field 1 Enter the FRL to search on (0-7).

Field 2 Enter a "3" to view Authorization Codes associated with

specified FRL.

285 Word 1 Administers the authorization code requirements for access to WCR.

Field 10 Enter the WCR authorization code access assignment:

0 Disabled

1 Enabled

AUTOMATIC CALL DISTRIBUTION

The Automatic Call Distribution (ACD) feature permits incoming trunk calls, local voice terminal calls, and attendant extended calls to terminate to specified voice terminals in the following ways:

- Linear Hunting Linear hunting starts with the first specified agent and hunts toward the last specified agent in the split. Linear hunting is most useful when a priority of answering positions is desired.
- Circular Hunting Circular hunting starts where the hunting process left of during the previous scan
 and continues through the list of agents. Circular hunting is most useful when an even balance of call
 distribution is desired.
- Most Idle Agent (MIA) MIA extends ACD calls to the available agent for whom the longest period
 of time has elapsed since the agent has finished an ACD call. MIA is most useful when the duration of
 ACD calls varies significantly.

The answering positions appear as normal voice terminals to the system and are also able to place and receive calls in the usual manner. This feature can provide an economical alternative to Direct Inward Dialing for departments that receive a high volume of similarly natured calls. Selected terminal users (agents) are organized into a split (collection of agents) to allow for balanced call distribution to the agents.

A CAS release link trunk 1-way incoming at main (type 66) may be administered to handle ACD calls.

Assignment of the ACD feature is on a per-system, per-trunk group, and a per-terminal class of service basis.

Functions Replaced by Call Vectoring:

When the Call Vectoring feature is enabled, several ACD functions are disabled; these functions and their call vectoring replacements are:

- Associating splits with trunk groups comparable service can be provided by assigning the trunk group to a VDN.
- Routing calls to ACD splits using associated extension numbers comparable service is achieved by assigning VDNs to vectors that route to ACD splits.
- Providing the first delay recorded announcement for a split comparable service is available through vector programming.
- Providing the second delay recorded announcement for the switch comparable service is available through vector programming.
- Providing intraflow from a split's queue via the Call Forwarding feature comparable service is available through vector programming.
- Providing interflow from a split's queue via the Overload Balancing function or the Call Forwarding feature comparable service is available through vector programming.
- Specifying a split number (from 1 to 60) as the final point in a coverage path a VDN can be specified instead.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Voice Terminal and Data Module Administration

Call Vectoring

If you are going to use Call Vectoring with ACD, you should administer Call Vectoring first.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Display

Call Coverage

Call Management System (CMS) (See Chapter 6, "DCIU Administration")

Look-Ahead Interflow

ACD calls may be diverted through a system by Look-Ahead Interflow.

Procedure Sequence

ADD	CHANGE	REMOVE
350 Word 2	350 Word 2	054 Word 2
354 Word 1	001 Word 1	054 Word 1
010 Word 1	275 Word 4	052 Word 1
001 Word 1	028 Word 1	028 Word 1
275 Word 4	155 Word 1	060 Word 2
028 Word 1	204 Word 1	060 Word 1
155 Word 1	026 Word 1	027 Word 1
204 Word 1	026 Word 2	027 Word 2
026 Word 1	026 Word 3	027 Word 3
026 Word 2	026 Word 4	075 Word 1
026 Word 3	075 Word 1	115 Word 1
026 Word 4	115 Word 1	026 Word 1
115 Word 1	027 Word 1	026 Word 2
027 Word 1	027 Word 2	026 Word 3
027 Word 2	027 Word 3	026 Word 4
027 Word 3	060 Word 1	155 Word 1
060 Word 1	060 Word 2	010 Word 1
060 Word 2	054 Word 1	350 Word 2
052 Word 1	054 Word 2	001 Word 1
054 Word 1	052 Word 1	028 Word 1
054 Word 2	010 Word 1	
028 Word 1	028 Word 1	

Procedure Usage

001 Word 1 Administers an associated extension number to a split supervisor's individual extension number.

Field 1 Enter the primary extension number (000-99999).

Field 2 Enter the associated extension number (000-99999).

O10 Word 1 Administers ACD membership to an agent's voice terminal class of service and agent-override to an observer's class of service. Also, use this procedure to assign ACD queue-status display to an ACD agent's class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 19 Enter the ACD queue status:

0 Disable

1 Enable

Field 20 Enter the ACD membership status:

0 Disable1 Enable

Field 22 Enter the ACD agent override status:

0 Disable

1 Enable

O26 Word 1 Administers the split size, the ICI message number, the queuing trunk group, the outflow and inflow levels, the lamp control circuit for the queue warning indicators, type of hunting to an ACD split, the type of ACD split, and machine number.

-			
Field 1	Enter the split number (1-60).		
Field 2	Enter the ICI message number: -, 0 No ICI message (use "-" for Call Vectoring) 4-63 ICI message number (see Procedure 204 Word 1 for more about ICI messages)		
Field 3	Enter the queuing trunk group number (18-999).		
Field 4	Enter the outflow level (-, 1-99). When Call Vectoring is enabled, field 4 is used to set the queue warning lamp level.		
Field 5	Enter the lamp control circuit board index number (-, 0-7).		
Field 6	Enter the lamp control circuit number (-, 0-7).		
Field 7	Enter the inflow level (-, 0-98).		
Field 8	Enter the hunt type: 0		
Field 9	Enter the split type:		

- 0 Regular
- 1 MCS
- 2 AUDIX
- 3 ISDN Gateway (number only)
- 4 ISDN Gateway (name and number)

Field 10 Enter the machine number (-, 0-8).

Split Type (Field 9)	Machine Number (Field 10)
0 (Regular)	0
1 (Message Center)	1-7
2 (AUDIX)	1-8
3 or 4 (ISDN Gateway)	1-7

O26 Word 2 Administers the split supervisor's extension number, the queue directory number, and priority extension number to a split. This procedure also assigns multiple call handling to a split and the auto available status.

- Field 1 Enter the split number (1-60).
- Field 2 Enter the supervisor extension number (000-99999).
- Field 3 Enter the queue directory number (-, 000-99999).

Field 4 Enter the priority extension number (-, 000-99999).

Field 5 Enter the multiple call handling status:
-, 0 Disabled
1 Enabled

Field 6 Enter the auto available status:
-, 0 Disabled
1 Enabled

Field 7 Enter the forced entry status:

-, 0 Disabled 1 Enabled

Field 8 Enter the CMS measurement status:

-, 0 Unmeasured by CMS 1 Measured by CMS

O26 Word 3 Administers nonsupervisory members to a split in the order in which direct or circular hunting is to take place. When most idle agent queuing is used, the order here is unimportant.

Field 1 Enter the split number (1-60).

Field 2 Enter the member number:

0-1023 If displaying numbers1-1023 If adding numbers

Field 3 Enter the member extension number (000-99999).

026 Word 4 Administers the ACD system supervisor console number and warning tone for service observing.

Field 1 Enter the system supervisor console number (1-40).

Field 2 Enter the warning tone status:

0 No warning tone while observing, microphone off

1 Warning tone while observing, microphone on

O27 Word 1 Administers the first delay recorded announcement equipment location and the timing intervals preceding the first and second delay recorded announcements to an ACD split. When Call Vectoring is enabled, use vector programming to administer announcements.

Field 1 Enter the split number (1-60).

Field 2 Enter the module number (0-30).

Field 3 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).

Field 4 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE

modules).

Field 5

Field 6 Enter the circuit number (0-3).

Field 7 Enter the first wait time:

- 0 No recorded announcement
- 1-15 Number of 2-second intervals for first recorded announcement
- Field 8 Enter the second wait time:
 - -, 0 No recorded announcement
 - 1-15 Number of 2-second intervals for second recorded announcement

The second wait time cannot be set until the second recorded announcement is administered in Procedure 027 Word 2.

O27 Word 2 Administers the ACD second recorded announcement equipment location to the system. After doing this, go back to Procedure 027 Word 1 and set the second wait time. When Call Vectoring is enabled, use vector programming to administer announcements.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $ \\$
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). $$
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-3).
Field 6	Enter the second recorded announcement trunk group number (18-999).

O27 Word 3 Administers an ACD split or trunk group for a queue-of-origin or city-of-origin recorded announcement. When Call Vectoring is enabled, use Procedure 033 Word 1 to administer origin announcements.

Field 1	Enter	the	ACD	split	or	trunk	group	number	(1-60	for	split,
	18-999	for	trunk s	group).						

- Field 2 Enter the ACD split/trunk group:
 - 0 ACD split queue-of-origin announcement
 - 1 Trunk group city-of-origin announcement
- Field 3 Enter the module number (0-30).
- Field 4 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
- Field 5 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
- Field 6 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).

Field 7 Enter the circuit number (0-3).

O28 Word 1 Busies out CMS so that changes can be made in Procedure 026 Words 1-3, Procedure 115 Word 1, Procedure 116 Word 1, Procedure 150 Word 1, Procedure 275 Word 4, and Procedure 276 Word 1.

After busying out CMS to make a change, don't forget to release CMS.

Field 1

- 0 CMS not busied out
- 1 CMS busied out.
- **052 Word 1** Administers automatic-answering line-type to an appearance (or a set of appearances) on an assigned multiappearance voice terminal used for ACD.

,	
Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 10 Enter a "2" to set the line type for auto appearance.

- **054 Word 1** Administers the ACD feature buttons to an assigned multiappearance voice terminal.
 - Field 1 Enter the module number (0-30).
 - Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
 - Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
 - Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
 - Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
 - Field 6 Enter the device type where the button will be assigned:
 - 0 Basic set
 - 1 Feature module
 - 2 Coverage module
 - 3 Display module
 - 4 ADFTC/MTCP
 - Field 7 Enter the member (button) number (0-62).

Field 8

	11010 0	Ziner une entension numeer (, eee 2222).
	Field 9	Enter a "26" for the ACD button type.
	Field 10	Enter the button subtype: 1 Release 2 Automatic in 3 Manual in 4 Auxiliary work 5 Staff 6 Repeat city-of-origin announcement 10-19 Stroke count buttons
054 Word 2	Administers the voice terminal.	service observing feature button to an assigned multiappearance
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
	Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
	Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
	Field 7	Enter the member (button) number (0-62).
	Field 8	Enter an "8" to specify the button type as "Service Observing."
060 Word 1	Assign an ACD a	gent extension to a 106B display unit.
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
	Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Enter the extension number (-, 000-99999).

	Field 6	Enter the display column (0-9).
	Field 7	Enter the ACD agent extension number (000-99999).
060 Word 2		first half of the 106B display unit (Fields 1-5) to the second half of a unit (Fields 6-10).
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
	Field 5	Enter the circuit number (0-3).
	Field 6	Enter the module number (0-30).
	Field 7	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 8	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 9	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
	Field 10	Enter the circuit number (0-3).
115 Word 1	Administers the or without ACD	termination point for an incoming trunk group to an ACD split with priority.
	Field 1	Enter the trunk group number (18-999). (The range is 18-255 for trunk groups measured by CMS)
	Field 2	Leave as "-" to set termination to an ACD split.
	Field 3	Enter the ACD split (-, 1-60).
	Field 4	Enter the ACD priority: - Non-priority ACD split termination 1 Priority ACD split termination
	Field 5	Enter the CMS/MIS type: - Group not measured by CMS 1 Outgoing measurements by CMS

With DEFINITY Generic 2.1, Issue 3.0, or later, an RLT trunk group (type 66) can terminate at an ACD split. The user operation for RLT calls is different. See the ACD user operation in *DEFINITY Communications System Generic 2 and System 85 Feature Descriptions* (555-105-103).

Incoming measurements by CMS Two-way measurements by CMS.

2

Administers the contact interface circuit for the queue warning indicators. Included are the equipment type, the board index, the equipment location, and trunk group. The warning level and lamp indicators are assigned in Procedure 026 Word 1.

Field 1	Enter a "3" to specify the equipment type as "ACD split status."
Field 2	Enter the board index (0-13).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $$
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). $$
Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 7	Enter the trunk group number (18-999)

- Field 7 Enter the trunk group number (18-999).
- 204 Word 1 Designates the desired alphanumeric display for incoming calls to a split's special queue trunk group that reach an attendant. Administered are the call type, the message number, and the message. This message number is used in Procedure 026 Word 1.
 - Field 1 Enter the trunk group (18-999).
 - Field 2 Enter the message number (4-63, whatever is available).
 - Fields 3-6 Enter the desired characters or 2-digit encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

275 Word 4 Administers ACD abandon call search to the system class of service.

350 Word 2 Administers the ACD feature dial access codes.

Field 1 Enter the feature encode:

- 70 Auto In
- 71 Aux Work
- 72 Manual In
- 73 Staffed
- 74 Member Add
- 75 Member Delete
- 76 Announcement Verify
- 77 Agent Override
- 78 Agent Override (tone)
- 79 Reload Lamp Out
- 84 Overload Balance All
- 85 Overload Overflow
- 86 Overload Balance Default
- 87 Overload Balance Cancel
- 88 Agent Log In
- 89 Agent Log Out

Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

AUTOMATIC CALLBACK

The Automatic Callback feature allows voice terminal users to call a busy extension number, activate the Automatic Callback feature, and have their calls automatically placed by the system when the called extension becomes idle. The system monitors the busy/idle status of both extensions. When both extensions are idle, the calling terminal receives distinctive 3-burst ringing. When the calling terminal goes off-hook, the called terminal rings.

With Automatic Callback, the calling party doesn't waste time and effort by repeatedly calling a busy terminal. Communication is increased by reaching the busy terminal as soon as both terminals are idle and before the called party leaves the busy terminal.

Assignment of the Automatic Callback feature is on an extension class of service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	054 Word 2	010 Word 1
054 Word 2	200 Word 1	054 Word 2
200 Word 1	350 Word 2	200 Word 1
350 Word 2		350 Word 2

Procedure Usage

010 Word 1 Administers the Automatic Callback feature to an extension class of service.

Field 1 Enter the desired class of service (1-30, 32-63). Field 3 Enter the Automatic Callback assignment:

0 Disabled1 Enabled

054 Word 2	Administers the Automatic Callback button to an assigned multiappearance voice
	terminal.

- Field 1 Enter the module number (0-30).
- Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for
 - universal and XE modules).
- Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for
 - universal and XE modules).
- Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21

for traditional modules, 0-20 for universal modules, 1-18 for XE

- modules).
- Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for
 - universal and XE modules).
- Field 6 Enter the device type where the button will be assigned:
 - 0 Basic set
 - 1 Feature module
 - 2 Coverage module
 - 3 Display module
 - 4 ADFTC/MTCP
- Field 7 Enter the member (button) number (0-62).
- Field 8 Enter a "6" to specify the button type as "Automatic Callback."

200 Word 1 Administers the don't answer timing intervals for the Automatic Callback feature. This don't answer interval is also used by Call Forwarding — Busy and Don't Answer.

- Field 4 Enter the number of ring cycles before an automatic callback is stopped (1-8).
- 350 Word 2 Administers the Automatic Callback dial access codes.
 - Field 1 Enter the feature encode:
 - 9 Automatic Callback cancel
 - 19 Automatic Callback activate
 - Field 2 Enter the first digit of the dial access code:
 - 0-9
 - 11 or *
 - 12 or #
 - Field 3 Enter the second digit of the dial access code (0-9).
 - Field 4 Enter the third digit of the dial access code (0-9).
 - Field 5 Enter the fourth digit of the dial access code (0-9).

AUTOMATIC CIRCUIT ASSURANCE

The Automatic Circuit Assurance (ACA) feature provides a means of early detection of possible trunk problems. Early detection of problems can reduce out-of-service time caused by trunks not performing up to standards.

Assignment of the ACA feature is on a per-system and on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
120 Word 1	120 Word 1	120 Word 1
203 Word 1	203 Word 1	203 Word 1
204 Word 1	204 Word 1	204 Word 1
285 Word 1	286 Word 1	285 Word 1
286 Word 1	350 Word 2	286 Word 1
350 Word 2		350 Word 2

Procedure Usage

120 Word 1 Administers the short call threshold, the long call limit, and the short call referral level for each trunk group.

Field 1	Enter the trunk group number (18-999).		
Field 2	Enter the short call threshold:		
	2-160 E	Disable short call threshold for specified number of econds (even numbers only).	
Field 3	Enter the lo	ong call limit:	
	0 D	Disable long call limit	

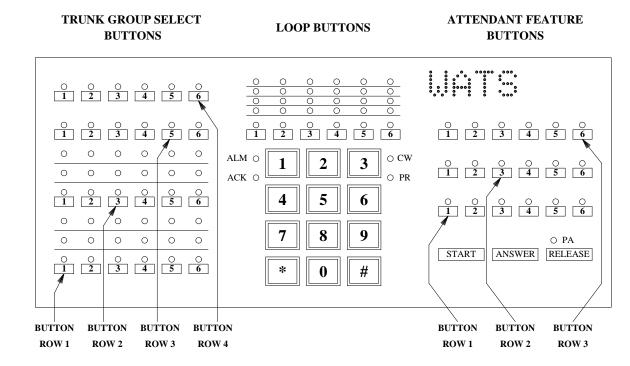
2-160 Enable long call limit for specified number of hours.

Field 4 Enter the short call referral level (0-30 in even numbers).

203 Word 1 Administers the TRK ID button to the attendant console. The buttons used for this feature are found on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number of desired button location (1-3).

Fields 2-7 Enter a "28" for the trunk id (TRK-ID) button in an available button location.



204 Word 1 Administers the desired alphanumeric display for ACA on the attendant console(s).

Field 1 Enter the call type:

2298 Short call threshold2299 Long call limit threshold

Field 2 Enter the message number (4-63, whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

285 Word 1 Administers the ACA feature to the system class of service.

Field 4 Enter the ACA status:

- O Disabled for all trunk groups
- 1 Enabled for all trunk groups.

286 Word 1 Administers the call referral characteristics of ACA. Before doing this, the console(s) must have been previously assigned.

Field 1 Enter the ACA feature status:

- O ACA not active on any trunk group
- 1 ACA active on all appropriate trunk groups

Type of referral	Field 2	Field 3
None	0	dash
Local attendant	1	1-40
CAS attendant	1	0
Remote	2	dash

Field 2 Enter the attendant/remote/off referral destination:

- 0 ACA failures are not referred to the attendant
- 1 ACA failures are referred to a local or CAS attendant
- ACA failure indicators are sent to a remote system (e.g., CSM)

Field 3 Enter the console number:

- No attendant console, or failure indicator sent to a remote system
- 0 ACA referrals are directed to CAS main system
- 1-40 ACA referrals are directed to a local system attendant

350 Word 2 Administers the ACA dial access codes used by the attendant.

Field 1 Enter the feature encode: 62 **ACA Start** 63 ACA Stop Enter the first digit of the dial access code: Field 2 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9).

AUTOMATIC IDENTIFICATION OF OUTWARD DIALING

The Automatic Identification of Outward Dialing (AIOD) feature is used by both the telephone company and the customer to provide valuable information about outgoing calls. The AIOD feature identifies, translates, and transmits the calling party's extension number and trunk access code to the serving Central Office (CO), or either the Common Control Switching Arrangement (CCSA) or Enhanced Private Switched Communications Service (EPSCS) switching office. The CO, CCSA, or EPSCS switching office uses Automatic Message Accounting (AMA) equipment for recording the information. The collected information is used by the phone company for billing their customers.

The AIOD feature is assigned on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Trunk Administration

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	000 Word 2	000 Word 2
101 Word 1	101 Word 1	101 Word 1
204 Word 1	204 Word 1	204 Word 1
275 Word 1	275 Word 1	275 Word 1

Procedure Usage

Administers whether toll calls made from an assigned extension will be billed to a common number (assigned in Procedure 275 Word 1) or will be billed to its own extension.

Field 1	Enter th	ne exten	sion	num	ber (-, 000-	99999).		
Field 3	Enter th	Enter the auxiliary ANI number assignment:						
	0	Bill t	o the	exte	ension numb	oer		
	1	Bill	to	a	common	number	administered	in
		Proce	edure	275	Word 1 fie	ld 4.		

101 Word 1 Administers an AIOD billing number to assigned trunk groups.

Field 1 Enter the trunk group number (18-999). DCS trunk groups are limited to 18-255.

Field 9 Enter the AIOD billing number (-, 0000-9999). This is the

default number used by the CO to bill the system for miscellaneous calls. Include any leading zeros that may be on

the service order.

204 Word 1 Administers a listed directory number for the attendant. This number will be used for billing outgoing calls made from the attendant console. Enter the call type, the alpha characters, and the listed directory number.

Field 1 Enter the call type (1001-1999).

Field 2 Leave blank (dash).

Fields 3-6 Enter the desired characters or encodes. These fields can also be left blank (dashed).

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L=22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Enter the LDN (0000-99999).

275 Word 1 Administers the AIOD ANI Timing Delay and Auxiliary ANI number to the system class of service.

Field 1 Enter the AIOD status assignment:

Feature not available

0 Disabled1 Enabled

Field 2 Enter the prefix digits (-, 0-99).

Field 3 Enter the ANI delay timing (-, 0-99 in 0.1-second increments).

Field 4 Enter the auxiliary ANI number (-, 0-9999). This is the number

that calls are billed to if an extension is not billed to its own

extension.

AUTOMATIC TRANSMISSION MEASUREMENT SYSTEM

The Automatic Transmission Measurement System (ATMS) feature allows the customer to measure transmission characteristics of private network and public network trunk facilities. The transmission characteristics that can be measured include loss, noise, and echo impairments. The customer can make transmission measurements on demand or set up an automatic test schedule.

Transmission measurements are made by setting up a connection between an Originating Test Line (OTL) in the customer's DEFINITY Generic 2 system (near-end system) and a Terminating Test Line (TTL) in the far-end system through the trunk to be tested.

The ATMS feature is assigned on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan, Dialing Plan — Features and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Administer a terminal test extension in Procedure 000 Word 1 with a class of service of 31 and set field 8 = 3.

The terminal type in Procedure 051 Word 1 field 6 must be administered as ADFTC (type 5) or MTCP (type 8) to use the ATMS feature.

Associate the equipment location (Procedure 051 Word 1) with the extension (Procedure 000 Word 1) in Procedure 052 Word 1 and set field 6 = 4.

Procedure Sequence

ADD	CHANGE	REMOVE
106 Word 1	106 Word 1	106 Word 1
107 Word 1	107 Word 1	107 Word 1
107 Word 2	107 Word 2	107 Word 2
107 Word 3	107 Word 3	107 Word 3
107 Word 4	107 Word 4	107 Word 4
107 Word 5	107 Word 5	107 Word 5
107 Word 6	107 Word 6	107 Word 6
107 Word 7	107 Word 7	107 Word 7
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

Displays information about trunks that have been busied out for maintenance purposes. You can search on the dial access code (Fields 1-4), the trunk group (Field 5), or the trunk group and trunk number (Fields 5-6).

```
Field 1

Enter the first digit of the trunk dial access code:

0-9

11 or *

12 or #

Field 2

Enter the second digit of the trunk dial access code (-, 0-9).

Field 3

Enter the third digit of the trunk dial access code (-, 0-9).

Field 4

Enter the fourth digit of the trunk dial access code (-, 0-9).

Field 5

Enter the trunk group number (18-999).

Field 6

Enter the trunk number (1-999).
```

107 Word 1 Administers a test line type and TTL telephone number to a trunk group.

```
Field 1 Enter the trunk group number (18-999).
```

Field 2 Enter the test line type:

- 0 Disabled
- 1 102- or old 100-type
- 2 New 100-type
- 3 LC145 or SN260A
- 4 SN260B
- 5 56A or 105-type without return loss
- 6 SN261 (A, B or C suffix), ZLC12, TN771B, or 105type with return loss

The SN261C is the current Generic 2 traditional module test pack and the TN771B is the current one for the universal module.

Fields 3-18 Enter digit 1 through digit 16 (-, 0-9).

107 Word 2 Administers the types of transmission measurements to be made to a trunk group.

```
Field 1 Enter the trunk group number (18-999).

Field 2 Enter the 1004 Hz loss maximum:

0-21 dB

91 -1 dB

92 -2 dB

Field 3 Enter the 1004 Hz loss minimum:

0-21 dB

91 -1 dB
```

Field 4 Enter the positive deviation for 404 Hz Max (-, 0-9 dB).

Field 5 Enter the negative deviation for 404 Hz Max (-, 0-9 dB).

Field 6	Enter the positive deviation for 2804 Hz Max (-, 0-9 dB).
Field 7	Enter the negative deviation for 2804 Hz Max (-, 0-9 dB).
Field 8	Enter the noise without tone (-, 15-55 dBrnC).
Field 9	Enter the noise with tone (-, 34-74 dBrnC).
Field 10	Enter the low frequency singing return loss (-, 0-40 dB).
Field 11	Enter the echo return loss (-, 0-40 dB).
Field 12	Enter the high frequency singing return loss (-, 0-40 dB).

107 Word 3 Administers the automatic testing parameters to a test schedule including the days of the week tests will be made, starting hour, duration, and weeks between tests.

```
Field 1
                Enter the schedule number (1-16).
Field 2
                Enter the test schedule:
                         Schedule is run only once
                  1-99
                         Weeks between tests
Field 3
                Enter the starting hour (0-23 - based on 24-hour clock).
Field 4
                Enter the duration:
                         Disabled
                  1-24
                         Testing duration in hours
Fields 5-11
               Enter the days of the week you want tests to run:
                         Disabled
                         Enabled
                  1
```

107 Word 4 Administers a trunk group to a test schedule number and a test type.

Field 1	Enter the schedule number (1-16).					
Field 2	Enter the	Enter the trunk group number (18-999).				
Field 3	Enter the 0 1 2 3 4	All tests All tests except return loss All 105 tests except self test All 105 tests except self test and return loss Supervision test only				

Displays the trunk groups and test types assigned to a test schedule number. Use Next Data to display the assigned tests. Up to five test schedules are displayed at a time. Fields 2-11 display the test schedule information.

Field 1 Enter the schedule number (1-16).

107 Word 6 Administers unacceptable transmission measurement thresholds for the measurements assigned in Procedure 107 Word 2, and the maximum percentage of trunks that can be automatically made maintenance busy for a trunk group.

Field 1

	Field 2	Enter the 1004 Hz loss maximum: 0-21 dB 91 -1 dB 92 -2 dB
	Field 3	Enter the 1004 Hz loss minimum: 0-21 dB 91 -1 dB 92 -2 dB
		Field 3 cannot be more than field 2.
	Field 4	Enter the positive deviation for 404 Hz Max (-, 0-9 dB).
	Field 5	Enter the negative deviation for 404 Hz Max (-, 0-9 dB).
	Field 6	Enter the positive deviation for 2804 Hz Max (-, 0-9 dB).
	Field 7	Enter the negative deviation for 2804 Hz Max (-, 0-9 dB).
	Field 8	Enter the noise without tone (-, 15-55 dBrnC).
	Field 9	Enter the noise with tone (-, 34-74 dBrnC).
	Field 10	Enter the low frequency singing return loss (-, 0-40 dB).
	Field 11	Enter the echo return loss (-, 0-40 dB).
	Field 12	Enter the high frequency singing return loss (-, 0-40 dB).
	Field 13	Enter the percent busy: 0 0% 1 25% 2 50% 3 75% 4 100%
ır		number of trunks in a trunk group that must have failed smission measurement thresholds twice before a minor alarm

Enter the trunk group number (18-999).

107 Word 7 d the u rm is ra

> Field 1 Enter the trunk group number (18-999).

Field 2 Enter the number of trunks (1-60).

350 Word 2 Administers a dial access code for the Trunk Verification — Voice Terminal feature.

> Field 1 Enter the feature encode:

> > 42 Maintenance busy a trunk

43 Maintenance release a trunk

Trunk Verification — Voice Terminal

Field 2 Enter the first digit of the dial access code:

0-9

11 or *
12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

BEARER CAPABILITY

The bearer capability feature matches the calling requirements of a specific call with the best available resources to support that call. The primary use of this feature is to reduce the number of call failures while optimizing the use of available facilities.

The bearer capability feature makes it possible to assign parameters to a facility that define the type of call traffic the facility is used for. The parameters are administered as a Bearer Capability Class of Service (BCCOS) and can be administered on:

A per-extension basis

Assigning bearer capability on a per extension basis is useful for specifying voice or data capabilities on a given extension. If an extension is administered in Procedure 000, the default BCCOS 0 is automatically assigned. If an extension is administered as a data module in Procedure 052 Word 1, the default BCCOS 1 is automatically assigned. If a special attribute of a specific class of service needs to be changed, it can easily be done in Procedure 014 Words 1 and 2, but it is recommended that a new BCCOS be created.

• A per-trunk group basis

Assigning bearer capability on a trunk group basis is useful for restricting access to a particular trunk group. For example, if a trunk group is to be used for DCP data modules, but Mode 3 calls are to be blocked, assign the trunk group to the default BCCOS 1 and change the Mode 3 bit to a "1". Use Procedure 100 Word 2 to assign BCCOS to trunk groups.

• A per-WCR preference basis

In System 85 R2V4, the bearer capability was assigned on a per-AAR/ARS pattern basis. This prevented a single trunk group from being able to handle both analog and data calls. However, it is now possible to assign a single trunk group to the first two preferences of a pattern (one preference with a voice bearer capability and the other with a data bearer capability) and still be able to complete voice and data calls. Use Procedure 318 Word 2 to assign BCCOS to WCR preference numbers.

When the calling party dials a number, the call processing determines the bearer capability of the calling party and also analyzes the BCCOS of the trunk group or preferences. The call processing then attempts to route the call over a trunk group with a bearer capability class of service that is capable of handling the call. After the analysis is finished, the call processing makes one of the following decisions:

- Circuit-switch the call (no action taken, the local system waits for the distant system to make its analysis)
- Insert a Mode 2/Analog modem pool member (a modem pool member is reserved for the call)
- Block the call (return intercept tone).

Two situations exist where an unexpected action occurs. If the call is a station to station call and the action taken is to insert a modem pool member, the call is circuit-switched. If the call is a trunk to trunk call and neither trunk is a host access trunk and the action taken is to insert a modem pool member, the call is blocked.

Default bearer capabilities are sometimes automatically assigned (see Procedure 014 Word 1) to a facility (extensions, trunk groups, and WCR preferences) when that facility is administered. It is recommended that the default bearer capability classes of service are not modified, and that new classes of service are created for any special applications.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Integrated Services Digital Network/Basic Rate Interface (ISDN/BRI)

Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI)

Bearer capability is largely based on ISDN calling requirements, but is not restricted to ISDN.

Modem Pooling

Modem Pooling operation is significantly enhanced by the bearer capability feature. Modem pooling resources are now inserted as a last resort and thus are more efficiently used.

World Class Routing (WCR)

WCR can be used in coordination with bearer capability to allow a single trunk group to handle both circuit-switched and modem pool calls.

Procedure Sequence

ADD	CHANGE	REMOVE
014 Word 1	075 Word 1	075 Word 1
014 Word 2	075 Word 2	075 Word 2
000 Word 3	014 Word 1	000 Word 3
100 Word 2	014 Word 2	100 Word 2
318 Word 2	000 Word 3	318 Word 2
	100 Word 2	
	318 Word 2	

Procedure Usage

000 Word 3 Administers the bearer capability class of service to an extension.

Field 1 Enter the extension number.

Field 5 Enter the bearer capability class of service (0-255).

Administers the bearer capability translations such as the bearer capability class of service and the action taken for a call with a particular bearer capability class of service.

Field 1 Enter the bearer capability class of service (-, 0-255).

The following table is the list of default values for each of the predefined bearer capability classes of service.

Field	Pro	edefin	ed Be	arer (Capab	ility (Class	of Ser	vice
BCCOS (1)	0	1	2	3	4	5	6	7	8
Transport (2)	0	0	0	0	0	0	0	0	0
Mode									
Channel (3)	0	0	0	0	0	0	0	0	0
Type									
Voice (4)	0	0	0	0	0	0	0	0	0
Voice Grade (5)	0	1	1	0	0	0	1	1	1
Data									
Mode 0 (6)	0	0	0	0	1	1	0	0	0
Mode 1 (7)	0	0	0	0	1	1	0	0	0
Mode 2 (8)	0	0	0	0	1	1	0	0	0
Mode 3 (9)	0	0	0	0	1	1	0	0	0
Unknown (10)	0	0	0	0	0	0	0	0	0
Digital									
Unknown (11)	0	1	0	0	0	0	1	1	1
Analog									
Mode 3/2 (12)	0	0	0	0	1	1	0	0	0
X.25 (13)	0	0	0	0	0	0	0	0	0
Transport	0	0	0	0	0	0	0	0	0
Mode (14)									
Channel	0	0	0	0	0	0	0	0	0
Type (15)									
Bearer (16)	0	2	0	6	7	5	4	1	3
Capability			1		1		1		

BCCOS 0 defaults to analog lines administered in Procedure 000 Word 1.

BCCOS 1 defaults to DCP data modules administered as lines and trunks and defaults to extensions administered for data modules in Procedure 052 Word 1. This BCCOS also defaults to trunks administered as trunk types 102-109 (host access) in Procedure 100 Word 1.

BCCOS 2 is a template for extensions administered on a BRI terminal.

BCCOS 3 defaults to AVD-like attributes as were assigned in System 85 R2V4.

BCCOS 4 defaults to WCR preferences administered in Procedure 318 Word 2 and analog trunks administered in Procedure 100 Word 1 (except for host computer access trunks).

BCCOS 5 defaults trunks administered as trunk type 101 (analog modem pool) in Procedure 100 Word 1.

BCCOS 6 defaults to Mode 0 data modules. No lines or trunks default to this class of service.

Bearer capability class of service 7 defaults to Mode 1 data modules. No lines or trunks default to this class of service.

Bearer capability class of service 8 defaults to Mode 3 data modules. No lines or trunks default to this class of service.

- Field 2 Enter the transport mode:
 - 0 Circuit-switched
 - 1 Packet-switched
 - 2 Both
- Field 3 Enter the incoming endpoint type:
 - 0 Restricted channel
 - 1 Clear channel

For fields 4-13, specify the action taken for a call with a particular bearer capability. The action taken encodes are:

- 0 Circuit-switch the call
- 1 Add a mode 2/analog modem pool to the call
- 2 Block the call
- Field 4 Enter the action taken encode for voice (0-3):
 - 0-2 See preceding "action taken" encode description.
 - 3 Convert to 3.1 kHz
- Field 5 Enter the action taken encode for voice grade data (0-3):
 - 0-2 See preceding "action taken" encode description.
 - 3 Convert to speech
- Field 6 Enter the action taken encode for mode 0 (0-2).
- Field 7 Enter the action taken encode for mode 1 (0-2).
- Field 8 Enter the action taken encode for mode 2 (0-2).
- Field 9 Enter the action taken encode for mode 3 (0-2).
- Field 10 Enter the action taken encode for unknown digital (0-3):
 - 0-2 See preceding "action taken" encode description.
 - 3 Convert to 3.1 kHz
- Field 11 Enter the action taken encode for unknown analog (0-3):
 - 0-2 See preceding "action taken" encode description.
 - 3 Convert to 3.1 kHz
- Field 12 Enter the action taken encode for mode 3/2 (0-2).

Field 13 Enter the action taken encode for X.25 (0-2).

Fields 14-16 are the default capabilities assigned by the system for an originating facility (on this system) that either doesn't have a BCCOS or an information element.

Field 14	Enter the 0	transport mode: Circuit Packet
Field 15	Enter the 0	channel type: Restricted Clear
Field 16	Enter the 0 1 2 3 4 5 6 7 8 9	default bearer capability: Voice Mode 1 Mode 2 Mode 3 Mode 0 Voice grade data Unknown digital Unknown analog Mode 3/2 X.25

014 Word 2 Administers the data characteristics for a bearer capability class of service.

Field 1 Enter the bearer capability class of service (-, 0-255).

The following table is the list of default values for each of the predefined bearer capability classes of service.

Field		Predefined Classes of Service 0-8							
Bearer Capability	0	1	2	3	4	5	6	7	8
Class of Service (1)									
64000 bps (2)	0	1	1	1	0	0	1	1	1
56000 bps (3)	0	1	1	1	0	0	1	1	1
19200 bps (4)	0	1	1	1	0	0	1	1	1
9600 bps (5)	0	1	1	1	0	0	1	1	1
4800 bps (6)	0	1	1	1	0	0	1	1	1
2400 bps (7)	0	1	1	1	0	1	1	1	1
1200 bps (8)	0	1	1	1	0	1	1	1	1
300 bps (9)	0	1	1	1	0	1	1	1	1
Low Speed (10)	0	1	1	1	0	0	0	1	1
Synchronous (11)	-	0	0	0	0	0	1	1	0
Duplex (12)	-	0	0	0	0	0	0	0	0

L .									
Clock (13)	-	-	-	-	-	-	-	-	-
Default Data	-	3	3	3	0	3	9	8	3
Rate (14)									1 1

Some of the eight predefined bearer capability classes of service (BCCOS) are automatically assigned (default) to a facility when the facility is administered in a particular procedure. Other BCCOS are not automatically assigned to a facility. The following list explains which classes of service default, and under what conditions they default.

BCCOS 0 defaults to extensions administered in Procedure 000 Word 1.

BCCOS 1 defaults to extensions administered as DCP data modules in Procedure 052 Word 1.

BCCOS 2 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering BRI terminals.

BCCOS 3 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering AVD trunk groups.

BCCOS 4 defaults to trunk groups (except host access) administered in Procedure 100 Word 1. This BCCOS is also recommended for WCR preferences (Procedure 318 Word 2).

BCCOS 5 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering modems.

BCCOS 6 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 0 data modules - 64000 bps.

BCCOS 7 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 1 data modules - 56000 bps.

BCCOS 8 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 3 data modules - packet mode.

For fields 2-10, specify whether the data rate is supported or not. The applicable encodes are:

Not supported

	1 Supported
Field 2	Enter the encode for 64 kbps (0-1).
Field 3	Enter the encode for 56 kbps (0-1).
Field 4	Enter the encode for 19.2 kbps (0-1).
Field 5	Enter the encode for 9600 bps (0-1).
Field 6	Enter the encode for 4800 bps (0-1).

0

Field 7	Enter the	encode for 2400 bps (0-1).
Field 8	Enter the	encode for 1200 bps (0-1).
Field 9	Enter the	encode for 300 bps (0-1).
Field 10	Enter the	encode for low (0-1).
Field 11	Enter the 0	synchronous/asynchronous mode: Asynchronous Synchronous
Field 12	Enter the 0	duplex mode: Full duplex Half duplex
Field 13	Enter the 0	clock mode: Internal External/slaved
Field 14	Enter the 0 1 2 3 4 5 6 7 8 9	default data rate: None Low 300 bps 1200 bps 2400 bps 4800 bps 9600 bps 19.2 kbps 56 kbps 64 kbps

075 Word 1 Displays extensions assigned to a particular bearer capability class of service.

Field 1 Enter an "8" to search for the bearer capability class of service assigned to an extension.

Enter the extension number (000-99999).

075 Word 2 Displays trunks groups and WCR preferences assigned to a particular bearer capability class of service.

Field 1 Enter a "1" to search on bearer capability class of service.

Field 2 Enter the type of display desired:

Field 3

1 Trunk group

WCR pattern or preference

Field 3 Enter the bearer capability class of service number you want to search (0-255).

100 Word 2 Administers the bearer capability class of service to a trunk group.

Field 1 Enter the trunk group (18-999).

Field 2 Enter the bearer capability class of service (-, 0-255).

318 Word 2 Administers the bearer capability class of service to an WCR preference.

Field 1 Enter the WCR pattern number (1-1023). Field 2 Enter the WCR preference number (1-16).

Field 3 Enter the bearer capability class of service (0-255). When a

trunk group is added in Procedure 318 Word 1, field 3 defaults to the BCCOS value administered for the trunk group in

Procedure 100 Word 2.

BRIDGED CALL

The Bridged Call feature allows voice terminal users *sharing an appearance* to bridge onto an existing call on that appearance. A 2-party call becomes a 3-party call.

This feature is useful for monitoring a call, note taking, or consulting by a third party. Executives, secretaries, and consultants are potential users of this feature.

The Bridged Call feature is provided whenever images (shared appearances) of an appearance are provided.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

052 Word 1 Administers the images (shared appearances) of a line appearance. The extension number and line appearance must have the same values across two voice terminals to assign bridging.

For example, at one equipment location you could have extension 2000 with line appearance 3. At another equipment location you would also have extension 2000 with line appearance 3. These would be bridged appearances.

Field 1	Enter the module number (0-30).					
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).					
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).					
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).					
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).					
Field 6	Enter the device type in use: 0 Basic set 1 Feature module 2 Coverage module 3 Display module					

ADFTC/MTCP 4

Field 7	Enter the member (button) number (0-62).						
Field 8	Enter the extension (000-99999).						
Field 9	Enter the line appearance (1-12).						
Field 10	Enter the 0 1 2	desired line type: No prime line Prime line Auto appearance					
Field 11	Enter the 0 1 2 3	ringing type: No ringing Ringing Delayed ringing Abbreviated ringing					
Field 12	Enter the 0	whether the terminal is the home terminal: Not home terminal					

Is home terminal

1

BUSY VERIFICATION OF LINES

The Busy Verification of Lines feature allows the attendant to check the status of an apparently busy extension number. This check verifies that the called extension number is busy or appears busy. The extension number can appear busy when the terminal is left off-hook or is in need of maintenance. Being able to verify whether a line is really busy increases the efficient use of time and equipment.

Before allowing the attendant to connect onto a 2-way connection, the talking parties will hear a burst of warning tone. This tone is reapplied at 15-second intervals as long as the attendant is on the connection. The first burst of tone lasts for 2 seconds. Thereafter, the duration is 1/2 second.

Assignment of the Busy Verification of Lines feature is on a per-console basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

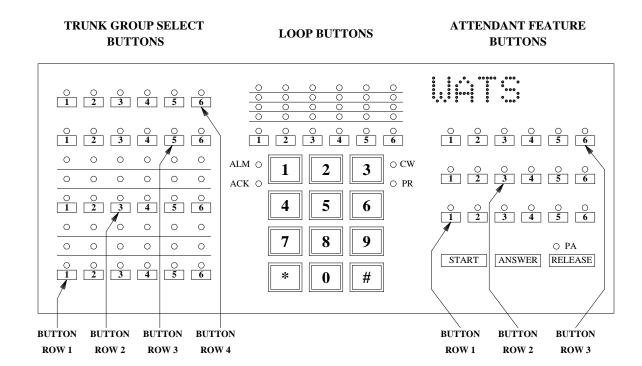
Attendant Console Administration

Procedure Usage

203 Word 1 Administers the VERFY button for the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1 Enter the row number where you want the button (1-3).

Fields 2-7 Enter a "7" for the VERFY button type to the desired location.



CALL COVERAGE

The Call Coverage feature provides alternate answering points for calls that might otherwise go unanswered. For a *principal* (user with Call Coverage active), Call Coverage provides automatic redirection of calls that meet specified conditions. Calls are redirected to a *coverage path*.

Assignment of the Call Coverage feature is defined by the coverage paths(s) and criteria for the group and then assigning the principal to a group.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Message Waiting — Automatic

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	075 Word 1	075 Word 1
010 Word 1	000 Word 2	010 Word 1
011 Word 1	010 Word 1	011 Word 1
054 Word 1	011 Word 1	054 Word 1
054 Word 4	054 Word 1	054 Word 4
275 Word 3	054 Word 4	275 Word 3
350 Word 2	275 Word 3	350 Word 2
	350 Word 2	

Procedure Usage

000 Word 2 Administers a coverage group to an assigned extension and designates whether a covering user is authorized to use coverage message retrieval.

Field 1 Enter the extension number (-, 000-99999).

Field 6 Enter the coverage group:

- No coverage 0 Not assigned 1-1999 Single path

2000-4094 Dual path (even numbers only)

Field 7 Enter the message retrieval status:

No coverage in system
 No message retrieval
 Message retrieval

010 Word 1 Administers ring-ping and Send All Calls to a voice terminal class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 17 Enter the ring ping immediate assignment:

0 Disabled1 Enabled

Field 23 Enter the send all calls assignment:

0 Disabled1 Enabled

O11 Word 1 Administers the coverage path(s) and criteria for a coverage group. The coverage criteria (Fields 2-5) are defined as follows:

- Extension active Call goes to coverage when any appearance of that extension is active.
- Extension busy Non-priority call goes to coverage when all appearances (except origination-only) of an extension are busy.
- All Non-priority call goes to coverage at all times.
- D/A Non-priority call goes to coverage if there is no answer during the Don't Answer interval.

This procedure also assigns the principal don't answer interval, the coverage point indicator, the coverage point, and the coverage point extension or ACD split.

Field 1 Enter the call coverage group:

1-1999 Single path coverage group number 2000-4095 Dual path coverage group number

Field 2 Enter the action taken when extension is active:

0 No coverage

- 1 Extension calls go to coverage
- 2 Attendant or trunk calls go to coverage
- Both extension and attendant or trunk calls go to coverage

Field 3 Enter the action taken when extension is busy:

0 No coverage

- 1 Extension calls go to coverage
- 2 Attendant or trunk calls go to coverage
- Both extension and attendant or trunk calls go to coverage
- Field 4 Enter the action taken at all times:
 - 0 No coverage
 - 1 Extension calls go to coverage
 - 2 Attendant or trunk calls go to coverage
 - Both extension and attendant or trunk calls go to coverage
- Field 5 Enter the action taken when extension doesn't answer:
 - 0 No coverage
 - 1 Extension calls go to coverage
 - 2 Attendant or trunk calls go to coverage
 - Both extension and attendant or trunk calls go to coverage
- Field 6 Enter the principal don't answer interval:
 - 0 No don't answer interval
 - 2-6 Number of ring cycles
- Field 7 Enter the coverage point indicator:
 - 0 Extension
 - 1 ACD split
 - 2 Vector directory number (VDN)
- Field 8 Enter the coverage point (1-3).
- Field 9 Enter the coverage point extension, VDN, or ACD split:

000-99999 Extension number or VDN

1-60 ACD split

Extensions assigned in this field can also have bridging assigned. This will create a "group" coverage point for a coverage path. When the call redirects to that extension, anyone on a bridged appearance can answer the call. If the call remains unanswered, the call simply redirects to the next point in the coverage path. The extension assigned for this "group" coverage should be a unique extension so the users will know where the call is being redirected from.

- **054 Word 1** Administers the Call Coverage buttons to an assigned multiappearance voice terminal.
 - Field 1 Enter the module number (0-30).
 - Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
 - Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
 - Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE

modules).

Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 6 Enter the device type where the button will be assigned:

0 Basic set

1 Feature module

2 Coverage module

3 Display module

4 ADFTC/MTCP

Field 7 Enter the member (button) number (0-62).

Field 8 Enter the extension number (-, 000-99999). This is only required with button type 29 in field 9.

Field 9 Enter the encodes to specify desired button types:

19 Send All Calls — Group of Extensions

20 Consult

23 Coverage Callback

29 Send All Calls — Extension

054 Word 4 Administers the desired display feature buttons to an assigned multiappearance voice terminal with display capabilities.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).

Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).

Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 6 Enter the device type:

0 Basic set

1 Feature module

2 Coverage module

3 Display module

4 ADFTC/MTCP

Field 7 Enter the member (button) number (0-62).

Field 8 Enter the display feature button type:

0 Normal

1 Inspect

2 Time of Day/Date

3 Message Retrieval

4 Coverage Message Retrieval

		6 Delete		
		7 Return Call		
		8 Elapsed Time		
		9 Scroll		
075 Word 1	Displays all voice	ce terminals having the same call coverage group assignment.		
	Field 1	Enter the search type:		
		4 Principal for the given coverage group (see Procedure 000 Word 2)		
		5 Coverage points for the given coverage group (see Procedure 011 Word 1)		
		6 Coverage points for the given coverage point extension (see Procedure 011 Word 1)		
		7 Call coverage groups for the given coverage point ACD split (see Procedure 011 Word 1)		
	Field 2	Enter the class of service/group (-, 1-9999). Use this field only when field 1 is 4 or 5.		
	Field 3	Enter the extension/ACD split number. Use this field only when field 1 is 6 or 7. 000-99999 Extension number 1-60 ACD split number		
275 Word 3	Specifies the Call	aller Response Interval and the Coverage Don't Answer Interval.		
	Field 3	Enter the caller response interval: 0 No interval assigned 1-5 Number of 2-second intervals		
	Field 4	Enter the coverage point don't answer interval: - Not available 2-6 Number of ring cycles before call continues to next coverage point		
350 Word 2	Administers the o	dial access codes for the Call Coverage feature.		
	Field 1	Enter the feature encode: 55 Send All Calls - activate 56 Send All Calls - cancel		
	Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #		
	Field 3	Enter the second digit of the dial access code (0-9).		

Enter the third digit of the dial access code (0-9).

Enter the fourth digit of the dial access code (0-9).

Field 4

Field 5

5

Step

CallVisorTM ASAI GATEWAY INTERFACE

The CallVisor ASAI (Adjunct/Switch Application Interface) Gateway Interface feature provides a PRI (Primary Rate Interface) D-channel between a System 85 and the ASAI Gateway. A 3B computer serves as the gateway between the switch and a customer's telemarketing application software. The application software manages and controls certain incoming and outgoing calls through the switch. Data communications between the System 85 and the ASAI gateway are routed over a maximum of four PRI D-channels. B-channels are not used between the switch and the ASAI gateway.

The following are features that can be used to route calls to the ASAI gateway and route or distribute calls from the ASAI gateway:

- ACD (Automatic Call Distribution)
- Call Vectoring

When using the Call Vectoring feature to handle ASAI gateway calls, make sure the following is administered:

- Administer a vector with a route to step to route calls to the ASAI gateway (Procedure 030 Word 3).
- Administer DNIS numbers of incoming calls and the destinations to which the ASAI gateway will route calls as VDNs (Procedure000 Word 1) and terminate these VDNs to the appropriate vectors (Procedure 031 Word 1)
- Look-Ahead Interflow
- World Class Routing (WCR)

When using the WCR feature to route ASAI gateway calls, make sure the following is administered:

- Assign an ASAI gateway trunk group as the first prefence in a WCR pattern dedicated to the ASAI gateway interface (Procedure 318 Word 1).
- Correlate an RNX (location code) with a Virtual Nodepoint Identifier (VNI) that will use WCR pattern described above. To do this, access Procedure 314 Word 1, enter the RNX in fields 1 through 3, set field 11 to "0", and field 12 to the VNI.
- Assign an RNX that will be used as the home RNX for calls routed to the PBX from the ASAI gateway. A home RNX is part of an address string that is programmed to restart in Routing Network 0 (the WCR interface to the internal dialing plan). To do this, access Procedure 314 Word 1, enter the RNX in fields 1 through 3, set field 11 to "1", and field 13 to "0".

Prerequisite Administration

Before administering this feature, make sure the following are administered:

ISDN/PRI

An ISDN/PRI link must be administered between the switch and the ASAI gateway.

Administer ASAI gateway trunk groups as network tandem trunk groups, with incoming access to AAR and infer AAR access code (Procedure 103 Word 1).

Administer trunk type 47 to all ASAI gateway trunk groups in Procedure 100 Word 1.

Administer signaling type 20 to all ASAI gateway trunk groups in Procedure 100 Word 3.

Enable trunk to trunk and tandem trunk

Procedure Sequence

CHANGE	REMOVE
276 Word 1	276 Word 1
100 Word 7	100 Word 7
000 Word 4	000 Word 4
354 Word 4	354 Word 4
	276 Word 1 100 Word 7 000 Word 4

Procedure Usage

000 Word 4

Assigns an NPA-NXX designator to a block of local extension numbers. All answering positions that might receive calls controlled through the ASAI gateway must have an NPA-NXX designator to provide connected party information to the call-center software.

Field 1	Enter the first extension (000-99999).
Field 2	Enter the last extension (001-99999).
Field 4	Enter the NPA-NXX designator (1-99). NPA-NXX designators are defined in Procedure 354 Word 3.

100 Word 7 Administers a trunk group to an ISDN circuit pack for the ASAI gateway. This procedure also allocates a specific number of records to a trunk.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7).
Field 4	Enter the carrier number (0-3).
Field 5	Enter the slot number (5 or 18).
Field 6	Enter the number of ASAI Gateway records (1-9999).

276 Word 1 Administers the ASAI gateway feature to the feature group class of service. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 10 Enter the appropriate ASAI Gateway encode:

0 Disabled1 Enabled

354 Word 3 Assigns the prefix digits (NPA-NXX-X) to the extension translation codes assigned in Procedure 000 Word 4 and Procedure 210 Word 2. These are used to provide ISDN calling number display.

Field 1 Enter the NPA/NXX designator (1-99).

Field 2 Enter the NPA (200-219, 300-319, 400-419, 500-519, 600-619, 700-719, 800-819, 900-919).

Field 3 Enter the NXX (200-999).

Field 4 Enter the thousands digit (-, 0-9).

CALL DETAIL RECORDING

The Call Detail Recording (CDR) feature collects call detail information about voice and data calls. A CDR record is generated by the system for each incoming or outgoing trunk seizure. These records contain data that system management can use for:

- Computing call expenses
- Detecting malfunctions in the system
- Detecting abuse of expensive facilities
- Optimizing network facilities.

In the past, the process of recording and processing CDR records has gone by several feature names (i.e., Variable Format Call Detail Recording [VFCDR], Station Message Detail Recording [SMDR], etc). These features are now all part of what is called the CDR feature. The old CDR feature terminology is still used to differentiate between CDR configurations. The following is a list of different CDR configurations.

- Variable Format Call Detail Recording (VFCDR)
 - The CDR generator is administered with a 15-24 word custom format and is sending records out across the Processor Communications Circuit (PCC) port to a Call Detail Recording Utility (CDRU). This configuration uses all the procedures in the "ADD" list except Procedure 253 Word 1.
- Station Message Detail Recording (SMDR)
 - The CDR generator is administered with a 15-word default format and is sending records out across the SMDR port to an SMDR adjunct. This configuration uses all the procedures in the "ADD" list except Procedure 255 Words 1 and 2, and Procedure 288 Word 2. The only difference in administration between SMDR and CMDR/NCOSS is the unit type administered in Procedure 253 Word 1 field 5.
- Centralized Message Detail Recording/Network Control Operations Support System (CMDR/NCOSS)
 - The CDR generator is administered with an 18-word default format and is sending records out across the CMDR/NCOSS ports to one or more 94A LSUs being polled by a 93B CMDR or 3B2 CDRP (Call Detail Record Poller). This configuration uses all the procedures in the "ADD" list except Procedure 255 Words 1 and 2, and Procedure 288 Word 2. The only difference in administration between CMDR/NCOSS and SMDR is the unit type administered in Procedure 253 Word 1 field 5.

The ISDN Cause Value, and the User to User Information (UUI) Element are new data items available with Generic 2. Refer to *DEFINITY* Communications System Generic 2 and System 85 Feature Descriptions (555-105-301) for details.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Procedure Sequence

ADD	CHANGE	REMOVE
275 Word 1	350 Word 2	350 Word 2
288 Word 1	275 Word 1	275 Word 1
288 Word 2	288 Word 1	288 Word 1
275 Word 1	288 Word 2	288 Word 2
651 Test 1 or 2	651 Test 1 or 2	651 Test 1 or 2
253 Word 1	253 Word 1	253 Word 1
255 Word 1	255 Word 1	255 Word 1
255 Word 2	255 Word 2	255 Word 2
651 Test 1 or 2	651 Test 1 or 2	275 Word 3
275 Word 3	275 Word 3	285 Word 1
285 Word 1	285 Word 1	286 Word 1
286 Word 1	286 Word 1	
010 Word 2	101 Word 1	
101 Word 1	010 Word 2	
350 Word 2		

Procedure Usage

010 Word 2 Administers forced account code entry to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 5 Enter the CDR account code requirements:

0 Not required

1 Required

101 Word 1 Administers CDR characteristics to assigned trunk groups.

Field 1 Enter the trunk group number (18-999). DCS trunk groups are limited to 18-255.

Field 8 Enter the CDR Activation assignment:

- O Information on this trunk group is not recorded by CDR
- 1 Information on this trunk group is recorded by CDR
- Information on this trunk group is recorded by CDR and an account code is required

Field 12 Enter the number of seconds before CDR begins recording call data on this trunk group (1-99). A dash (-) in this field relinquishes control of this timer to Procedure 275 Word 3 field 12.

253 Word 1 Administers the TN403 data channels for the SMDR or CMDR configuration. For CMDR-multiple port output (rotational output), administer the equipment locations as unit type 14. For duplicated output, administer the equipment locations as unit type 5. The TN474B PCC port which is used for the VFCDR and CDRP configurations, is administered in Procedure 255 Word 1. Type 5 (SMDR) must be administered to slot 23, circuit 15.

Field 1	Enter a "5" to specify the unit type as SMDR, or enter a "14" to specify the unit type as CMDR/NCOSS.
Field 2	Enter a "0" for the control carrier number.
Field 3	Enter the slot number (23-26).
Field 4	Enter the circuit number (0-15).
Field 5	Enter the unit or extension (000-99999 for unit type 5 or 1-8 for unit type 14).

255 Word 1 Administers the PCC (TN474) equipment location and associated data parameters for VFCDR and CDRP configurations. If administering a TN403 board for SMDR or CMDR/NCOSS, use Procedure 253 Word 1.

```
Field 1
               Enter a "1" to specify application type as CDR.
Field 2
                Enter the slot number in the common control carrier (24-26).
Field 3
                Enter the circuit number (0-1).
Field 4
               Enter the PCC link speed:
                  2
                         300 bps
                  3
                         600 bps
                  4
                          1200 bps
                  5
                         2400 bps
                  6
                         4800 bps
                         9600 bps
                  7
                  8
                          19200 bps
Field 5
               Enter the parity:
                  0
                         No parity/not assigned
                         Odd
                  1
                  2
                         Even
Field 6
                Enter the number of stop bits:
                         1 1/2
                  2
                  3
                          2
Field 7
                Enter the character length (8-bit must be assigned for BTC
```

protocol):

	1 5-bit characters
	2 6-bit characters
	3 7-bit characters
	4 8-bit characters
Field 8	Enter a "1" to set the 501-to-PCC data type to "4 hex nibbles."
Field 9	Enter the PCC-to-peripheral data type:
	1 2 Hex nibbles (default)
	2 1 ASCII characters
Field 10	Enter the low FIFO threshold out:
	0 0-999
	1 1000-1999
	2 2000-2999
	3 3000-3999
	4 4000-4999
	5 5000-5999
	6 6000-6999
	7 7000-7999
Field 11	Enter the high FIFO threshold out:
	0 0-999
	1 1000-1999
	2 2000-2999
	3 3000-3999
	4 4000-4999
	5 5000-5999
	6 6000-6999
	7 7000-7999
Field 12	Enter the low FIFO threshold in:
	0 0-999
	1 1000-1999
	2 2000-2999
	3 3000-3999
	4 4000-4999
	5 5000-5999
	6 6000-6999
	7 7000-7999
Field 13	Enter the high FIFO threshold in:
	0 0-999
	1 1000-1999
	2 2000-2999
	3 3000-3999
	4 4000-4999
	5 5000-5999
	6 6000-6999
	7 7000-7999

255 Word 2 Administers additional attributes to the CDR application and displays mismatches, if any, between system translation and circuit (TN474B) translation.

Field 1	Enter a "1" to specify application type as CDR.
Field 2	Enter the one-way communication enable (1).
Field 3	Enter the message format: 1 Message length in message 2 STX/ETX delimited (this is the recommended value) 3 Fixed message length
Field 4	Enter the message length (-, 1-128). A length must be set if field 3 is 1 or 3. If field 3 is 2, this field should be dashed.
Field 5	Enter the message protocol: 1 BTC protocol (default) 2 Direct output - 18-word format 3 Direct output - unformatted
Field 6	Enter the message failure threshold (1-15). This is the number of retries made to send a call record to the peripheral before deleting

275 Word 1 Administers the CDR features to the system class of service. Features include CDR status, account code length, and recording incoming calls. Before changes can be made in Procedure 288 Word 1, CDR must be disabled using this procedure. After making the changes in Procedure 288 Word 1, reactivate CDR using this procedure.

Field 12 Enter the CDR status:

0 Disable

the call record.

1 Enable

This field must be a "1" before any trunk calls are recorded by CDR.

Field 13 Enter the account code length (-, 1-15).

Field 14 Enter the incoming/outgoing call recording status:

- No calls recorded

Only outgoing calls are recorded

1 Both incoming and outgoing calls are recorded

275 Word 3 Administers the timing delay for the variable start timer. Used for individual trunk groups and the system default.

Field 12 Enter the CDR default variable timer:

6 seconds (default)

1-99 (in seconds)

Field 14 Enter the CDR calls blocked assignment:

O All calls are blocked

1 All calls not going to the attendant are blocked

2 No calls are blocked

Calls are blocked when the system is unable to send CDR records over the PCC.

286 Word 1 Administers whether ineffective attempts are recorded by CDR.

Field 15 Enter the desired assignment:

- 0 Ineffective attempts are not recorded by CDR
- 1 Ineffective attempts are recorded by CDR

288 Word 1 Administers the CDR record length, opcodes provided, format, and CDR message length. You must also disable CDR in Procedure 275 Word 1 field 12 before making any changes to this procedure.

Field 1 Enter the CDR record length (15-24). Field 2 Enter the opcodes provided: Not provided (if field 3 = 1) 1 Provided Field 3 Enter the CDR format: Default (if field 1 = 15 or 18) 0 1 Custom Field 4 Enter the message length: 15 15 Words (SMDR) 18 18 Words (LSU or CDRU)

288 Word 2 Allows the formatting of CDR records (to a maximum length of 24 words) by administering the starting position and field length for a data item encode. Only administrable if the CDR feature is deactivated in Procedure 275 Word 1.

If a custom format is desired, use the following diagram to plan the record layout. Once the desired data items are selected, arrange them in the order you wish them to appear on the record. Notice that each data item administered in this procedure must have a starting cell number (Field 2) and the number of cells (same as digits) it occupies (Field 3). The easiest way to do this is to enter the first data item's starting position in field 2. Determine how many cells (or digits) the data item will occupy and enter this number in field 3. Add (not an add routine) the contents of field 2 to field 3 and the total equals the first available starting cell number for the next data item. If you want space between each data item, add the number of spaces desired to the total of fields 2 and 3. The items marked with asterisks (*) are left-justified in the data record.

Field 1 Enter the data item encode:

- 0 Not used
- 1 Call duration-hours
- 2 Call duration-minutes
- 3 Call duration-tenths of a minute
- 4 Condition code
- 5 Trunk access code dialed
- 6 Trunk access code used
- 7 Dialed number (Routed number for WCR)
- 8 Calling number (*)
- 9 Account code (*)
- 10 Authorization code

- 11 Time in queue
- 12 Facility restriction level
- 13 10-thousands digit of 5-digit calling extension
- 14 Incoming circuit ID
- 15 Feature flags
- 16 Outgoing circuit ID
- 17 Outgoing circuit ID (hundreds digit)
- 18 Incoming circuit ID (hundreds digit)
- 19 Interexchange carrier code/ISDN network identifier
- 20 Time of day-hours
- 21 Time of day-minutes
- 22 Date-month
- 23 Date-day
- 24 Date-year
- 25 Incoming trunk dial access code (*)
- 26 Precedence level digit
- 27 Attendant console number
- 28 ISDN network service value
- 29 Extension partition number
- Node number
- 31 ISDN bearer capability
- 32 QDN/VDN
- 33 Agent login
- 34 ISDN cause value
- 35 User to User Information (UUI) counter
- WCR sent number
- 38 Pattern used
- 39 Preference used
- Time of day control mode (*)
- 51 Time of day plan set
- 52 1st dial access code
- 53 2nd dial access code
- 3rd dial access code
- 4th dial access code5th dial access code
- 57 6th dial access code
- 58 7th dial access code
- 59 8th dial access code
- 60 9th dial access code
- 61 10th dial access code
- 62 11th dial access code
- 63 12th dial access code
- 64 13th dial access code
- 65 14th dial access code
- 66 15th dial access code
- 67 16th dial access code
- 68 17th dial access code
- 69 18th dial access code
- 70 19th dial access code
- 71 20th dial access code

- 72 21st dial access code
- 73 22nd dial access code
- 74 23rd dial access code
- 75 24th dial access code

76-127 Spare

Field 2 Enter the starting cell number (1-96).

Field 3 Enter the item length (1-31).

Words	4 Bits 15 14 13 12	per Cell, 4 11 10 09 08	Cells per W 07 06 05 04	ord 03 02 01 00
Words 1	1	2	3	4
2	5	6	7	8
3	9	10	11	12
4	13	14	15	16
5	17	18	19	20
6	21	22	23	24
7	25	26	27	28
8	29	30	31	32
9	33	34	35	36
10	37	38	39	40
11	41	42	43	44
12	45	46	47	48
13	49	50	51	52
14	53	54	55	56
15	57	58	59	60
16	61	62	63	64
17	65	66	67	68
18	69	70	71	72
19	73	74	75	76
20	77	78	79	80
21	81	82	83	84
22	85	86	87	88
23	89	90	91	92
24	93	94	95	96

NOTE: To compose an 18-word record, disregard the lower portion of the figure, starting with word 19 (cell 73). For a 15-word record, disregard words 16-24.

Ensure that the CDRU has been administered either for opcodes or for no opcodes, corresponding to the CDR record layout you have administered on the system. Refer to the *Call Detail Recording Utility*—*Installation*, *Administration*, and *Maintenance* (555-006-110).

312 Word 1 Administers FEAC for a network.

Field 1 Enter WCR network number.

Field 3 This field assigns Forced Entry of Account Code (FEAC) on a per network basis. FEAC can also be assigned by extension class of service (Procedure 010 Word 1) or trunk group (Procedure 101 Word 1). Specify whether CDR account code is required for the

WCR network specified in field 1:

- 0 Not required
- 1 Must be dialed before WCR DAC
- 2 May be dialed before or after WCR DAC.

Administers account codes or account code prefixes for WCR. Account codes are treated as digit strings by WCR, and if more than one digit string occurs with a call, the account code must be first. If not, the switch will block the call.

To assign an account code to a network, enter the account code digits in fields 1 through 6 (use fields 7 and 8 if the code is longer than 6 digits); field 9 should match the total number of digits entered. To assign an account code prefix, enter the prefix in fields 1 through 6; field 9 specifies the total number of digits in the account code string (prefix digits + expected number of account code digits).

Fields 1-6	Enter the 1 to 18 digit string identifier (0-9)	
Field 7	Enter the segment number: 1 Digits 1-6 2 Digits 7-12 3 Digits 13-18	
Field 8	Enter the last segment identifier: 0 Segment is not the last in the string identifier 1 Segment is the last, add string to network 2 Segment is the last, add string to exception network	
	Note: The remaining fields in this word apply only to the last segment (field $8 = 1$ or 2).	
Field 9	Enter the string length (1-31).	
Field 10	Enter "1" to define the string type as an account code.	
Field 11	Enter "0"	
Field 12	Enter "0".	
Field 13	Enter the FRL associated with the account code. A "0" allows unconditional access.	
Field 14	Enter the current network number (0-7) being administered.	

350 Word 2 Administers the CDR dial access codes.

Field 5

Field 1 Enter the feature encode: 36 CDR — account code 37 CDR — start 38 CDR — stop Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9).

651 Test 1-2 Use this procedure to busy out the PCC board before making administration changes in Procedure 255 Words 1-2.

Field 1 Before making changes to Procedure 255 Words 1 and 2, select the PCC circuit to be changed by pressing the next circuit repeatedly or enter the desired equipment location. Busy out the PCC by executing busy out twice. Field 7 must equal a one before proceeding to Procedure 255. After making changes in Procedure 255, come back to this procedure and execute the release busy command. For more information, see *DEFINITY*TM

Communications System Generic 2 Maintenance Procedures (555-104-117).

Enter the fourth digit of the dial access code (0-9).

CALL FORWARDING — BUSY AND DON'T ANSWER

The Call Forwarding — Busy and Don't Answer feature redirects calls made to one extension by sending them to another specified extension or to the attendant console.

Assignment of the Call Forwarding — Busy and Don't Answer feature is on a per-terminal, class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	010 Word 1	010 Word 1
054 Word 2	054 Word 2	054 Word 2
200 Word 1	200 Word 1	200 Word 1
204 Word 1	204 Word 1	204 Word 1
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

010 Word 1 Administers Call Forwarding — Busy and Don't Answer to an extension class of service. You can have one or the other, but not both.

Field 1 Enter the class of service (1-30, 32-63).

Field 4 Enter the Call Forwarding assignment:

0 Disable
1 Enable Call Forwarding — Busy and Don't Answer
2 Enable Call Forwarding — Don't Answer

054 Word 2 Administers the Call Forwarding — Busy and Don't Answer button to an assigned multiappearance voice terminal.

Field 1 Enter the module number (0-30).

Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).	
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).	
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module	

- 3 Display module
- 4 ADFTC/MTCP
- Field 7 Enter the member (button) number (0-62).
- Field 8 Enter a "4" to specify the button type as "Call Forwarding Busy and Don't Answer."
- 200 Word 1 Administers the don't-answer timing interval for Call Forwarding. This is the number of ring cycles allowed before the call is forwarded. This interval also controls the Automatic Callback don't-answer interval.
 - Field 4 Enter the desired number of ringing cycles (1-8).
- 204 Word 1 Administers the desired alphanumeric display for calls forwarded to the attendant console(s).
 - Field 1 Enter "2290" as the Call Forwarding call type.
 - Field 2 Enter the message number (4-63, whatever is available).
 - Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L=22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

350 Word 2 Administers the feature dial access codes.

Field 1 Enter the applicable feature encode: Call Forwarding — Busy and Don't Answer 3 Call Forwarding — cancel Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9).

CALL FORWARDING — FOLLOW ME

The Call Forwarding — Follow Me feature forwards all calls from a given extension number to another selected extension number, to the attendant queue, or to a telephone in the nontoll public network. Either a voice terminal user or the attendant can activate or cancel this feature. When a call is placed to a voice terminal with Call Forwarding — Follow Me active, ring ping (a quick burst of ringing [0.1 seconds]) is provided at the forwarding terminal. This is to remind the user that the terminal is still in the forwarding mode.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	000 Word 2	000 Word 2
010 Word 1	054 Word 2	010 Word 1
010 Word 2	204 Word 1	010 Word 2
054 Word 2	350 Word 2	054 Word 2
204 Word 1		204 Word 1
350 Word 2		350 Word 2

Procedure Usage

Odo Word 2 Administers the AUDIX machine used for message taking on this extension. You can use Call Forwarding — Follow Me to forward calls to the AUDIX system. These calls are handled the same as when calls are redirected to AUDIX using Call

Coverage.

Field 1 Enter an extension (000-99999).

Field 10 Enter the AUDIX machine number that provides coverage for that extension (1-8).

010 Word 1 Administers Call Forwarding — Follow Me to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63). Field 5 Enter the Call Forwarding — Follow Me assignment: Disabled 1 Enabled 010 Word 2 Administers Call Forwarding — Off Net to an extension class of service. Field 1 Enter the class of service (1-30, 32-63). Field 4 Enter the Call Forwarding — Off Net assignment: Disabled Enabled 054 Word 2 Administers the Call Forwarding — Follow Me button on an assigned multiappearance voice terminal. Field 1 Enter the module number (0-30). Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules). Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules). Field 6 Enter the device type: Basic set Feature module 1 2 Coverage module 3 Display module ADFTC/MTCP Field 7 Enter the member (button) number (0-62). Enter a "3" to specify the button type as "Call Forwarding — Field 8 Follow Me." 204 Word 1 Administers the desired alphanumeric display for calls forwarded to the attendant console(s). Field 1 Enter "2290" as the Call Forwarding call type. Field 2 Enter an unused message number (4-63, 1-3 is reserved). Fields 3-6 Enter the desired characters or encodes.

0 = 0

A = 11

K = 21

U = 31

1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

350 Word 2 Administers the feature dial access codes.

Field 1
Enter the applicable feature encode:

1 Call Forwarding — Follow Me
3 Call Forwarding — cancel

Field 2
Enter the first digit of the dial access code:

0-9
11 or *
12 or #

Field 3
Enter the second digit of the dial access code (0-9).

Field 4
Enter the third digit of the dial access code (0-9).

Field 5
Enter the fourth digit of the dial access code (0-9).

CALL PARK

The Call Park feature is used to place a call on hold and then transfer the call to an answer-back channel. That call can then be answered on any other voice terminal within the system. The call is reanswered by dialing the answer-back access code and the answer-back channel number.

This procedure is useful when call-related information is in another area, or the call could be handled more conveniently in another area. This feature also allows the option to have music while waiting for an answer-back.

Assignment of the Call Park feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Music-on-Hold Access

Restriction — Miscellaneous Trunk Restrictions.

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	054 Word 1	010 Word 1
054 Word 1	350 Word 2	054 Word 1
275 Word 1		275 Word 1
350 Word 2		350 Word 2

Procedure Usage

010 Word 1 Administers the Conference — Three Party/Transfer to an extension class of service for use with the Call Park feature.

Field 1 Enter the class of service (1-30, 32-63).

Field 14 Enter the Conference — Three Party/Transfer assignment:

0 Disabled1 Enabled

054 Word 1 Administers a recall button to an assigned multiappearance voice terminal that doesn't have a fixed RECALL button.

Field 1 Enter the module number (0-30). Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules). Enter the circuit number (0-7 for traditional modules, 0-23 for Field 5 universal and XE modules). Field 6 Enter the device type where the button will be assigned: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP Field 7 Enter the member (button) number (0-62). Field 8 Enter the extension number (-, 000-99999).

Enter a "27" to specify button type as "Recall."

275 Word 1 Administers the Call Park feature in the system class of service. Note that changes to this data also affect Code Calling and Loudspeaker Paging.

Enabled with music

Field 7 Enter the Call Park assignment:
- Feature not available
0 Disabled
1 Enabled

2

Field 9

350 Word 2 Administers the Call Park dial access code.

Field 1 Enter a "17" as the paging answer-back feature.

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

CALL PICKUP

The Call Pickup feature allows anyone within a specified Call Pickup group to answer, at their own voice terminal, a call that is ringing at another extension within the group. This provides a simple means of answering unattended voice terminal calls.

Assignment of the Call Pickup feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	075 Word 1	075 Word 1
054 Word 2	000 Word 2	000 Word 2
350 Word 2	054 Word 2	054 Word 2
	350 Word 2	350 Word 2

Procedure Usage

000 Word 2	Administers an extension to a Call Pickup group.		
	Field 1	Enter the extension number (000-99999).	
	Field 4	Enter the Call Pickup group (0-999).	
054 Word 2	Administers the	Call Pickup button to an assigned multiappearance voice terminal.	
	Field 1	Enter the module number (0-30).	
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE	

075 Word 1

350 Word 2

Field 4

Field 5

modules). Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules). Field 6 Enter the device type: 0 Basic set Feature module 2 Coverage module 3 Display module ADFTC/MTCP Enter the member (button) number (0-62). Field 7 Enter a "7" to specify button type as "Call Pickup." Field 8 Displays the extensions assigned to a Call Pickup group. Field 1 Enter a "1" to search for Call Pickup assignments. Field 2 Enter the Call Pickup group (-, 1-999). Administers the Call Pickup dial access code. Field 1 Enter a "5" for the Call Pickup feature. Field 2 Enter the first digit of the dial access code: 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9).

Enter the third digit of the dial access code (0-9).

Enter the fourth digit of the dial access code (0-9).

CALL VECTORING

The Call Vectoring feature is an enhanced and highly flexible way of processing incoming calls to the DEFINITY Generic 2 system. Vectors are the basis of the Call Vectoring feature. These vectors are programmed using methods that resemble a "high-level" programming language. Using a vector (a discrete set of predefined call-processing steps), the customer can design appropriate and desirable ways of treating specific incoming calls.

Assignment of the Call Vectoring feature is on a per-trunk group and on a per-vector directory number basis.

When the Expert Agent Selection (EAS) feature is used, it changes the meaning of various fields in the Procedures used to administer Call Vectoring. Moreover, the bulk of EAS administration is done through Call Vectoring administration.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration") Assign blocks of extensions used for VDNs.

Trunk Administration

Besides incoming and outgoing trunk groups, Call Vectoring requires queuing and recorded announcement trunk groups.

Related Administration

The following administration is not required for this feature, but is recommended to enhance the operation:

Automatic Call Distribution (ACD)

If you want both ACD and Call Vectoring, you must coordinate the administration. Do Call Vectoring first and ACD second.

Call Coverage

Look-Ahead Interflow

Names Database (See Chapter 2, "System Administration")

Procedure Sequence

ADD	CHANGE	REMOVE
27.6 W. 1.1	010 W. 12	020 W. 12
276 Word 1	010 Word 3	030 Word 2
275 Word 4	000 Word 1	032 Word 1
010 Word 3	059 Word 1	031 Word 3
000 Word 1	059 Word 2	031 Word 2
059 Word 1	030 Word 1	031 Word 1
059 Word 2	030 Word 2	030 Word 2
030 Word 1	030 Word 3	030 Word 1
030 Word 3	030 Word 2	033 Word 1
030 Word 2	032 Word 1	000 Word 1
031 Word 1	031 Word 1	010 Word 3
031 Word 2	031 Word 2	275 Word 4
031 Word 3	031 Word 3	276 Word 1
033 Word 1	033 Word 1	
031 Word 3		
032 Word 1		
033 Word 1		

Procedure Usage

000 Word 1 Administers an extension, the class of service, and the port type as "Vector Directory Number (VDN)."

Field 1	Enter an extension (000-99999).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 5	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 6	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 7	Enter the class of service (1-30, 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.
Field 8	Enter a "4" to specify the port type as VDN.
Field 9	Leave blank.

When removing an extension, Special Error Code 85 may appear with procedure numbers display in field 11. Occurrences of this extension must be removed from

those procedures before being removed in this procedure.

010 Word 3 Assigns an FRL to a VDN's class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 23 Enter the FRL (0-7).

030 Word 1 Administers the Abbreviated Dialing group-list number to be used for Call Vectoring.

Field 1 Enter the abbreviated dialing group list number (1-9999).

Assigns vector numbers to vectors added in Word 3 and, for change operations, this Word calls vectors into the scratch-pad so that Word 3 can be used to modify the vectors. Once Word 3 has been used, a change or an add operation must be done in this Word to make the changes or additions permanent; do not do a display operation before doing a change or an add operation since doing so causes all changes to disappear. Displays the AUDIX or Message Center adjunct number associated with a vector.

Field 1 Enter the vector number (1-511). If call center features are disabled, the range is 1-128.

Programs the steps of the vector specified in Procedure 030 Word 2. Each vector may have as many as 15 individual steps. Steps entered with this Word reside in "scratch-pad" memory. Steps become permanent after an add or a change operation is executed in Word 2. For new vectors, a vector number is entered in field 1 of Word 2, then an add operation is performed. For changed vectors, the modified vector becomes permanent once all calls that entered the vector, before the Word 2 change operation, have cleared the vector. Caution: doing a display operation in Word 2 before doing an add or a change operation in Word 2 destroys the contents of the scratch-pad memory (entered with this Word).

Field 1 Enter the step number (1-15)

ACTION (Fields 2-3)

Field 2 Enter the step type:

- Not assigned
- 1 Queue-to-main-split
- 2 Check-backup-split
- 3 Route-to
- 4 Announcement
- 5 Wait
- 6 Go-to-step
- 7 Forced-disconnect

- 8 Forced-busy
- 9 Stop
- 10 Goto-Vector

For a complete description of each step type, see the *DEFINITY(TM) Communications System Generic 2 and System 85 Feature Descriptions* (555-105-301).

Field 3 Enter the destination (-, 0-609):

Step Type (Field 2)	EAS	Destination Range (Field 3)
	Active	VDN skill prefence (1-3)
1=Queue to Main Split/Skill	Active	Skill (10-609)
	Inactive	Split (1-60)
	A	VDN skill prefence (1-3)
2=Check Backup Split/Skill	Active	Skill (10-609)
	Inactive	Split (1-60)
3=Route to	Don't Care	Abbreviated dialing group list member-number (1-95, 101-195, 201-295, 301-395, 401-495)
4=Announcement	Don't Care	Announcement (1-255)
5=Wait	Don't Care	Not used (-)
6=Go to Step	Don't Care	Step (1-15)
7=Forced Disconnect	Don't Care	Announcement (1-255)
8=Forced Busy	Don't Care	Not used (-)
9=Stop	Don't Care	Not used (-)
10=Go to Vector	Don't Care	Vector (1-511)

Field 4 Enter the priority level:

- Not applicable (always use this entry for step types 4, 5, 7, 8, and 9)
- 0 Low priority
- 1 Medium priority
- 2 High priority
- 3 Top priority

Steps that test a split/skill's queue for the number of calls or for the oldest call (field 5 = 4, 5, 6, or 7) can be assigned a priority level other than 0. When this happens, the test only considers those calls in the queue at the specified priority level or above; calls with lower priority levels are not considered. To test all

calls in the queue, the priority level must be set to 0.

CRITERIA (Fields 5-6).

Field 5 Enter the condition (-, 0-9).

Enter a "-" for step types 1, 3, 4, 7, 8, and 9.

Enter one of the following encodes for step type 5:

0 Silence

1 Ring back

2 Music.

See the table following "Field 6" for step types 2, 6, and 10.

Field 6 Enter the threshold (-,0-1024).

Enter a "-" for step types 1, 3, 4, 7, 8, and 9. Specify the "wait" interval for step type 5 by entering an even number of seconds (0-998). See the following table for step types 2, 6, and 10.

Step Type (Field 2)	Condition (Field 5)	Threshold (Field 6)
	0=Queue the call if number of available agents in the destination split/skill (field 3) is greater than the threshold (field 6)	0-1023
	2=Queue the call if number of staffed agents in the destination split/skill (field 3) is greater than the threshold (field 6)	0-1023
Check Backup	5=Queue the call if number of calls queued in the destination split/skill (field 3) is less than the threshold (field 6)	1-99
Split/Skill (Encode 2)	7=Queue the call if oldest call waiting in the destination split/skill (field 3) is less than the threshold (field 6) With the EAS feature, if the destination skill is not a multiple of 10, one of the following actions is taken: - For a VDN skill preference (1-3), the skill is rounded down to the nearest multiple of 10 - For a specific skill, error code 86 is returned.	1-999

Step Type (Field 2)	Condition (Field 5)	Threshold (Field 6)
	0=Go to this step/vector (field 3) if number of available agents in the split/skill (field 7) is greater than the threshold (field 6).	
	1=Go to this step/vector (field 3) if number of available agents in the split/skill (field 7) is less than the threshold (field 6).	
	2=Go to this step/vector (field 3) if number of staffed agents in the split/skill (field 7) is greater than the threshold (field 6).	
	3=Go to this step/vector (field 3) if number of staffed agents in the split/skill (field 7) is less than the threshold (field 6).	1-1023
	4=Go to this step/vector (field 3) if number of calls queued in the split/skill (field 7) is greater than the threshold (field 6).	0-99
	5=Go to this step/vector (field 3) if number of calls queued in the split/skill (field 7) is less than the threshold (field 6).	1-99
Go to Step or Go to Vector (Encodes 6, 10)	6=Go to this step/vector (field 3) if oldest call waiting in the split/skill (field 7) is greater than the threshold (field 6). With the EAS feature, if the destination skill is not a multiple of 10, one of the following actions is taken: - For a VDN skill preference (1-3), the skill is rounded down to the nearest multiple of 10 - For a specific skill, error code 86 is returned.	0-999
	7=Go to this step/vector (field 3) if oldest call waiting in the split/skill (field 7) is less than the threshold (field 6). With the EAS feature, if the destination skill is not a multiple of 10, one of the following actions is taken: - For a VDN skill preference (1-3), the skill is rounded down to the nearest multiple of 10 - For a specific skill, error code 86 is returned.	1-999
	8=Go to this step/vector (field 3) if time-of-day is equal to or after starting time.	(use fields 8, 9, & 10)
	9=Go to this step/vector (field 3) if time-of-day is equal to or before starting time.	(use fields 8, 9, & 10)

NOTE: If a split/skill (field 7) is not specified, the split/skill the caller is currently queued to will be used. If the caller is not currently queued, the condition will always fail.

Field 7 For step types 1, 2, 3, 4, 7, 8, and 9, enter a "-" Also enter a "-" for step types 6 and 10 when field 5 is set to 8 or 9.

For step type 6 or 10, enter the VDN skill preference or skill (-, 1-3, 10-609) if the EAS feature is active; if not, enter the split (-, 1-60).

START/END TIME OF DAY (Fields 8-10)

Use these fields for step types 6 and 10 when the condition field (field 5) is set to 8 or 9. For all other conditions and step types, these fields should be set to "2".

Field 8	Enter the	e day:
	-	Not applicable
	0	Every day
	1	Monday
	2	Tuesday
	3	Wednesday
	4	Thursday
	5	Friday
	6	Saturday
	7	Sunday
Field 9	Enter the	e hour (-,0-23), e.g. 1:00 PM = 13:00
Field 10	Enter the	e minute (-,0-60):

The following table shows permissible combinations of ranges for fields 2 through 10.

2	3	4	5	6	7	8	9	10
Step	Desti-	Prior-	Condi-	Thresh-	Skill	Day	Hour	Min.
Type	nation	ity	tion	old	SKIII			
	1-60	0-3	-	-	-	-	-	-
1	10-609	0-3	-	-	-	-	-	-
	1-3	0-3	-	-	-	-	-	-
	1-60	0-3	0 or 2	0-1023	-	-	-	-
	10-609	0-3	0 or 2	0-1023	-	-	-	-
2	1-3	0-3	0 or 2	0-1023	-	-	-	-
	1-60	0-3	5	1-99	-	-	-	-
	10-609	0-3	5	1-99	-	-	-	-
	1-3	0-3	5	1-99	-	-	-	-
	1-60	0-3	7	1-999	-	-	-	-
	1-3+	0-3	7	1-999	-	-	-	-
	10-609+	0-3	7	1-999	-	-	-	-
3	1-495	-	-	-	-	-	-	-
4	1-255	-	-	-	-	-	-	-
5	-	-	0-2	0-998	-	-	-	-
	1-15	=	=	-	-	-	-	-
	1-15	-	0 or 2	0-1023	-,1-60	-	-	-
	1-15	-	0 or 2	0-1023	-,10-609	-	-	-
	1-15	-	0 or 2	0-1023	1-3	-	-	-
	1-15	-	1 or 3	1-1023	-,1-60	-	-	-
	1-15	-	1 or 3	1-1023	-,10-609	-	-	-
	1-15	-	1 or 3	1-1023	1-3	-	-	
	1-15	0-3	4	0-99	-,1-60	-	-	-
6	1-15	0-3	4	0-99	-,10-609	-	-	-
	1-15	0-3	4	0-99	1-3	-	-	-
	1-15	0-3	5	1-99	-,1-60	-	-	-
	1-15	0-3	5	1-99	-,10-609	-	-	-
	1-15	0-3	5	1-99	1-3	-	-	-
	1-15	0-3	6	0-999	-,1-60	-	-	-
	1-15	0-3	6	0-999	-,10-609+	-	-	-
	1-15	0-3	6	0-999	1-3+	-	-	-
	1-15	0-3	7	1-999	-,1-60	-	-	-
	1-15	0-3	7	1-999	-,10-609+	-	-	-
	1-15	0-3	7	1-999	1-3+	-	-	-
	1-15	-	8 or 9	-	-	0-7	0-23	0-59

(Continued)

2	3	4	5	6	7	8	9	10
Step Type	Desti- nation	Prior- ity	Condi- tion	Thresh- old	Skill	Day	Hour	Min.
7	-,1-255	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-
	1-511	-	-	-	-	-	-	
	1-511	-	0 or 2	0-1023	-,1-60	-	-	-
	1-511	-	0 or 2	0-1023	-,10-609	-	-	-
	1-511	-	0 or 2	0-1023	1-3	-	-	-
	1-511	-	1 or 3	1-1023	-,1-60	-	-	-
	1-511	-	1 or 3	1-1023	-,10-609	-	-	-
	1-511	-	1 or 3	1-1023	1-3	-	-	-
	1-511	0-3	4	0-99	-,1-60	-	-	-
10	1-511	0-3	4	0-99	-,10-609	-	-	-
	1-511	0-3	4	0-99	1-3	-	-	-
	1-511	0-3	5	1-99	-,1-60	-	-	-
	1-511	0-3	5	1-99	-,10-609	-	-	-
	1-511	0-3	5	1-99	1-3	-	-	-
	1-511	0-3	6	0-999	-,1-60	-	-	-
	1-511	0-3	6	0-999	-,10-609+	-	-	-
	1-511	0-3	6	0-999	1-3+	-	-	-
	1-511	0-3	7	1-999	-,1-60	-	-	-
	1-511	0-3	7	1-999	-,10-609+	-	-	-
	1-511	0-3	7	1-999	1-3+	-	-	-
	1-511	-	8 or 9	-	-	0-7	0-23	0-59

Remember to make these vector steps permanent by doing an add or a change operation in Procedure 030 Word 2.

Assigns a VDN termination to a vector, CMS measurement for a VDN, the VDN ICI message, the return call assignment and the VDN override flag. The machine number of the return-call adjunct is displayed in the VDN field.

Field 1 Enter the VDN (000-99999).

Field 2 Enter the vector (-, 1-511). If call center features are disabled, the range is 1-128.

Field 3 Enter the measure capabilities:

VDN is not measured by CMSVDN is measured by CMS

CONSOLE MESSAGE CHARACTERS (Fields 4-7)

Fields 4-7 Enter the desired encodes (see the following table). If one field has characters, all four fields must have characters.

0=0	8 = 8	F = 16	N = 24	V = 32
1 = 1	9 = 9	G = 17	O = 25	W = 33
2 = 2	blank = 10	H = 18	P = 26	X = 34
3 = 3	A = 11	I = 19	Q = 27	Y = 35
4 = 4	B = 12	J = 20	R = 28	Z = 36
5 = 5	C = 13	K = 21	S = 29	- = 37
6 = 6	D = 14	L = 22	T = 30	
7 = 7	E = 15	M = 23	U = 31	

Field 8 Enter the return call indicator:

-, 0 Not a return call VDN

1 Message center return call VDN

2 AUDIX return call VDN

Field 9 Enter the VDN override flag:

-, 0 Disable

1 Enable

When a call is routed to another VDN using vector processing, setting the VDN override flag to 1 allows the "routed-to" VDN name to be displayed instead of the "called" VDN name. This does not apply when the call is routed to another VDN by Call Coverage or Call Forwarding.

031 Word 2 Assign first, second, and third skill preferences to a VDN.

Field 1 Enter the VDN (-, 000-99999):

Field 2 Enter the first skill preference (10-609):

Field 3 Enter the second skill preference (10-609):

Field 4 Enter the third skill preference (10-609):

031 Word 3 Administers termination of a trunk group to a VDN.

Field 1 Enter the trunk group (-, 18-999).

The following are the valid trunk types for trunk group termination:

16 = CO 1-way in attendant completing

19 = CO 2-way attendant completing in/DOD out

20 = CO 2-way with party test atnd. completing in/DOD out

21 = FX 1-way in attendant completing

24 = FX 2-way attendant completing in/DOD out

25 = FX 2-way with party test atnd. completing in/DOD out

26 = WATS 1-way in attendant completing

35 = TIE 1-way in automatic

38 = TIE 2-way automatic in/dial repeating out

39 = TIE 2-way automatic in and out

66 = CAS release link trunk 1-way incoming at main

Type 50 (Remote Access 2-way) is available when speaker verification is enabled in Procedure 285 Word 1.

Field 2 Enter the VDN (-, 000-99999).

With DEFINITY Generic 2.2, an RLT trunk group (type 66) can terminate at a VDN or an ACD split. The user operation for RLT calls is different. See the ACD user operation in *DEFINITY Communications System Generic 2 and System 85 Feature Descriptions* (555-104-103).

O32 Word 1 Administers the vectors that queue to or check the queue of a particular split (either main or backup).

Field 1 Enter the split (1-60).

Field 2 Enter the split type:

Main split
 Backup split

Field 3 Enter the vector (-, 1-511).

Administers queue-of-origin announcements for Automatic Call Distribution (ACD) splits, city-of-origin announcements for trunk groups and VDN-of-origin announcements for VDNs.

Field 1 Enter the VDN (000-99999), trunk group (18-999), or ACD split (1-60).

Field 2 Enter the type of data in field 1:

0 ACD split1 Trunk group2 VDN

Field 3 Enter the recorded announcement (1-255). If call center features are disabled, the range is 16-99.

059 Word 1 Administers an Abbreviated Dialing group list used for Call Vectoring.

Fields 1-5 Leave blank.

Field 6 Enter a "0" as the group list type.

Field 7 Enter the group list (-, 1-9999).

Field 8 Enter the list size (-, 5-95 in increments of 5).

Field 9 Enter the group list controller:

0 Terminal not controller

1 Terminal is controller

Field 10 Enter the system list access:

0 No access

1 Access

059 Word 2 Administers Abbreviated Dialing group list items.

Fields 1-5 Leave blank.

Field 6 Enter a "0" as the group list type.

Field 7 Enter the group list (-, 0-9999).

Field 8 Enter the list item (1-95).

Field 9 Enter the segment:

1 Characters 1-4

2 Characters 5-8

3 Characters 9-12

4 Characters 13-16

5 Characters 17-20

Field 10 Enter the read/write mode:

-, 1 Read/Write - machine-used table

0 Read/Write - scratch-pad table

For a display (read) routine:

-, 1 Read list item from machine-used table.

0 Read list item from scratch-pad table.

For a change (write) routine:

1 Write list item to machine-used table.

0 Write list item to scratch-pad table.

Fields 11-14 Enter the digits of the list item (-, 0-19).

0-9

11 or *

12 or #

Do **not** enter encodes 13-16.

275 Word 4 Administers vector hold to the system class of service.

Field 12 Enter the vector hold assignment:

0 Not allowed

1 Allowed

276 Word 1 Administers call vectoring to the feature group class of service. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 5 Enter the call vectoring assignment:

0 Disable

- 1 Enable
- Field 11 Enter the EAS assignment, if appropriate:
 - 0 Disable
 - 1 Enable
- Field 13 Enter the call center assignment. When enabled, vector capacity is increased from 128 to 512, the "Go to Vector" command is supported, and the vectoring abbreviated dial list capacity is increased from 95 to 495.
 - 0 Disable
 - 1 Enable

CALL WAITING

The Call Waiting feature allows a call to a busy single-appearance voice terminal to be held waiting on the called voice terminal. The calling party hears call waiting ringback tone, and the called party hears a special tone indicating that a call is waiting. One burst of tone indicates a terminal-to-terminal call, and two bursts of tone indicate an attendant or an outside call.

Assignment of the Call Waiting feature is on a per-system and per-voice terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	010 Word 1	010 Word 1
275 Word 1	350 Word 2	275 Word 1
350 Word 2		350 Word 2

Procedure Usage

010 Word 1 Administers the Call Waiting feature to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 9 Enter the Call Waiting assignment:

0 Disabled

1 Enabled

275 Word 1 Administers the Call Waiting feature to the system class of service. Changes to this field also affect the Attendant Call Waiting feature.

Field 5 Enter the Call Waiting assignment:

0 Disabled

1 Enabled

350 Word 2 Administers the Call Waiting answer hold dial access code.

Field 1	Enter a "6" for Call Waiting — answer hold.
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

CALL WORK CODES

A CWC (Call Work Code) is a customer-defined code such as an account number, call activity code, a credit card number, or a social security number. An ACD agent using a DCP voice terminal can enter a CWC during or after an ACD call. The agent must be measured by and logged into CMS (Call Management System). The DEFINITY Generic 2 collects the CWC and sends it to a CMS adjunct for storage; the switch does not store the CWC.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Automatic Call Distribution

Only ACD agents who are measured by and logged into CMS can use the CWC feature.

Dialing Plan, and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Assign button subtype as "call work code" in Procedure 054 Word 1 field 10. ACD agent terminals must be assigned to support call work codes.

Procedure Sequence

ADD CHANGE REMOVE

276 Word 1

Procedure Usage

276 Word 1 Administers the call center assignment. Call center must be enabled for the call work codes feature to operate. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 13 Enter the call center assignment.

0 Disabled

1 Enabled

CENTRALIZED ATTENDANT SERVICE

The Centralized Attendant Service feature allows a DEFINITY Generic 2 system user served by systems at two or more locations to consolidate the attendant positions at one of these locations. At unattended branch locations, calls requiring attendant services route over RLTs (release link trunks) to the centralized (main) location.

Assignment of the CAS feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Attendant Console Administration

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration")

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration — when the SN241 contact interface ciruit pack is used, it must be assigned in Procedure 100.

Related Administration

The following administration is not required for this feature, but is recommended to enhance operation:

Force Administration Data System (FADS)

Remote Access.

Common Administration for Main and Branch Locations

Procedure Sequence

ADD	CHANGE	REMOVE
001 Word 1	155 Word 1	115 Word 1
155 Word 1	275 Word 3	155 Word 1
115 Word 1	001 Word 1	001 Word 1
275 Word 3	115 Word 1	275 Word 3

Procedure Usage

001 Word 1 Administers the associated extensions to the primary extension for uniform numbering.

Field 1 Enter the primary extension number (a valid assigned extension

number within the range of 000-99999).

Field 2 Enter the associated extension number (a valid unassigned

extension number within the range of 000-99999).

Administers the termination point for an incoming trunk group to the CAS or local attendant at a CAS branch location.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the termination point:

- Trunk group terminates on an ACD split (main administration)
- Trunk group terminates on local attendant at a branch (branch administration)
- 1 Trunk group terminates on CAS (branch administration)
- 2 Trunk group terminates on VDN (main administration)

155 Word 1 Administers the equipment location of a contact interface trunk (SN241 for traditional modules, special-ordered equipment for universal modules) to its trunk group number. The equipment type and board index must be identified.

Field 1 Enter the application type:

- 1 CAS (outgoing) status, branch
- 2 CAS (incoming) status, main

Field 2	Enter the index used to identify a board of a given type: 0-2 CAS outgoing valid range 0-13 CAS incoming valid range
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 6	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 7	Enter the contact interface trunk group assigned in Procedure 100 Word 1.

275 Word 3 Enter the DCS node number of the main location.

Field 9 Enter the CAS main system number: 1-40 CAS main system

Administration for Main Locations

Procedure Sequence

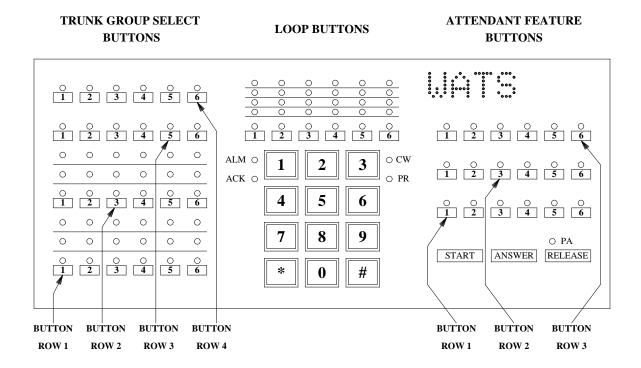
ADD	CHANGE	REMOVE
203 Word 1	203 Word 1	203 Word 1
204 Word 1	204 Word 1	204 Word 1
212 Word 1	212 Word 1	212 Word 2
212 Word 2	212 Word 2	212 Word 1
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

203 Word 1 Administers the RLT RELEASE button to the CAS consoles. The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number of control button (1-3).

Fields 2-7 Enter a "29" for the RLT RELEASE button in the desired location.



204 Word 1 Administers the desired alphanumeric display for CAS on the attendant console(s).

Field 1 Enter "2320" as the CAS call type.

Field 2 Enter the CAS branch number (1-40, whatever is available).

Fields 3-6 Enter the desired characters or encodes.

			l
0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

212 Word 1 Administers the branch number, the incoming RLT trunk group, and the branch type.

Field 1 Enter the branch number (1-40).

Field 2 Enter the incoming RLT trunk group number (18-999).

Field 3 Enter the branch type indicator:

0 Non-ESS branch

1 ESS branch

212 Word 2 Administers the branch number, the RLT equipment location, and the lamp control circuit.

Field 1 Enter the branch number (1-40).

Field 2 Enter the module number (0-30).

Field 3 Enter the cabinet number (0-7 for traditional modules).

Field 4 Enter the port carrier number (0-3 for traditional modules).

Field 5 Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules).

Field 6 Enter the circuit number (0-7 for traditional modules).

Field 7 Enter the lamp control circuit index of SN241 (0-13).

Field 8 Enter the circuit to which the lamp is connected on the above

board (0-7).

350 Word 2 Administers the CAS feature access codes.

Field 1	Enter the CAS feature access codes: 8 Attendant DAC (for local attendant console, if provided) 64 CAS main lamp test
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

Administration for a Branch Location

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 1	000 Word 1	211 Word 2
000 Word 2	000 Word 2	211 Word 1
252 Word 2	211 Word 1	000 Word 1
275 Word 4	211 Word 2	000 Word 2
211 Word 1	252 Word 2	252 Word 2
211 Word 2	350 Word 2	275 Word 4
350 Word 2		350 Word 2

Procedure Usage

000 Word 1 Administers CAS backup terminal equipment location and class of service.

Field 1	Enter the extension number (000-99999).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 5	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 6	Enter the circuit number (0-7 for traditional modules, 0-15 for
Field 7	Enter the class of service (1-30, 32-63).

000 Word 2 Administers the hunt-to assignments for the CAS backup terminal.

Field 1 Enter an extension (000-99999).

Field 2 Enter the "hunt-to" extension (000-99999).

211 Word 1 Administers the following CAS attendant features: timed reminder time, LDN tones, special queue group trunk group, and queue overflow level.

- Field 1 Enter the timed reminder time in minute increments:
 - No timed reminder
 - 1-31 Time, in minutes, after which the CAS attendant will be reminded of calls which have not been sent to the

proper destination

Field 2

Enter the LDN tone indicator:

0 ICI display is used on LDN calls

1 Special tone given to CAS attendant on LDN calls

Field 3

Enter the CAS queue group (18-999).

Field 4

Enter the CAS overflow level:

No overflow warning

Overflow warning level

211 Word 2 Administers the RLT equipment location, the backup extension number, and the start pulse. The backup extension number will receive calls which are directed to the release link trunk if the RLT is out of service or the CAS is in backup mode.

1-99

Field 1	Enter the module number (0-30).		
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).		
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).		
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).		
Field 6	Enter the extension (000-99999).		
Field 7	Enter the start pulse: 0 Disable 1 Enable (wink signaling is sent)		

252 Word 2 Administers an auxiliary tone plant (SN253 for traditional modules) for use with CAS. The equipment type, the tone plant number, and the equipment location must be administered. For universal modules, the standard tone plant (TN768) provides the auxiliary tones. No administration is required here.

Field 1	Enter the equipment type (1 or 2).
Field 2	Enter the tone plant number (0-1).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 6 Enter a "0" for the circuit number.

275 Word 4 Administers trunk-to-trunk transfer to the system class of service.

Field 3 Enter a "1" to enable trunk-to-trunk transfer.

350 Word 2 Administers the CAS feature access codes.

Field 1	Enter the feature encodes:		
	8 Attendant DAC (for local attendant console, if		
	provided)		
	45 CAS control - activate		
	46 Control of CAS backup terminal - activate		
	47 Call Answer From Any Voice Terminal (CAAVT) for		
	CAS backup - activate		
	48 CAS attendant puts remote call in hold state		
	49 Call to CAS attendant		
	50 CAS branch lamp test		
Field 3	Enter the first digit of the dial access code:		
	0-9		
	11 or *		
	12 or #		
Field 3	Enter the second digit of the dial access code (0-9).		
Field 4	Enter the third digit of the dial access code (0-9).		
Field 5	Enter the fourth digit of the dial access code (0-9).		

CODE CALLING ACCESS — TRADITIONAL

The Code Calling Access — Traditional feature allows attendants, voice terminal users, and tie trunk users to page a specific individual using coded chime signals, which are broadcast over a loudspeaker system. The paged party answers the page by dialing an answer-back code from any voice terminal within the system.

The Code Calling Access — Traditional feature is assigned on a per-system basis and can only be assigned to a system that has one or more traditional modules.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Trunk Administration — the SN253 auxiliary tone plant ciruit must be assigned in Procedure 100.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection

Restriction — Miscellaneous Trunk Restrictions.

Procedure Sequence

ADD	CHANGE	REMOVE
252 Word 2	252 Word 2	252 Word 2
275 Word 1	275 Word 4	275 Word 1
275 Word 4	350 Word 2	275 Word 4
350 Word 2		350 Word 2

Field 1

Procedure Usage

252 Word 2 Administers the auxiliary tone plant (SN253) for use with chime paging.

Enter the equipment type:

	1 CAS and tone detector only
	2 CAS and tone detector with code calling. Only 1
	assignment of this type allowed
Field 2	Enter the tone plant (0-1).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7).
Field 5	Enter the port carrier number (0-3 for).
Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21).
Field 7	Enter the circuit number (0-7).

275 Word 1 Administers the Call Park, Code Calling Access, Loudspeaker Paging features to the system class of service.

Field 7 Enter the Paging/Code Calling assignment:

- Not available
- 0 Disable
- 1 Enable with audible ring back
- 2 Active with music
- 275 Word 4 Administers the number of digits used in the Code Calling Access Traditional paging tone.
 - Field 1 Enter the traditional code calling access digits:
 - Not available
 - 0 Disable
 - 2 2-digit called party code
 - 3 3-digit called party code

350 Word 2 Administers the feature and answer-back dial access codes for code calling.

Field 1 Enter an "18" for the Traditional Code Calling answer back feature.

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

CODE CALLING ACCESS — UNIVERSAL

The Code Calling Access — Universal feature allows attendants, voice terminal users, and tie trunk users to page a specific individual using coded chime signals, which are broadcast over a loudspeaker system. The chime signals can be broadcast over one of 18 individual paging zones or over paging zones 1-5, which is called all-zones paging. The paged party answers the page by dialing an answer-back code from any voice terminal within the system.

The Code Calling Access — Universal feature is assigned on a per-system basis and can only be assigned to a system that has one or more universal modules.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Loudspeaker Paging Access.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions.

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 3	000 Word 3	000 Word 3
275 Word 1	350 Word 2	275 Word 1
350 Word 2		350 Word 2

Procedure Usage

000 Word 3 Administers the Universal Code Calling identifier

Field 1 Enter the extension number (-, 000-99999).

Field 6 Enter the universal code calling identifier (111-555).

275 Word 1 Use field 7 to administers the Code Calling Access feature to the system class of service. Field 7 also affects the Call Park and Loudspeaker Paging features.

Field 7 Enter the Paging/Code Calling assignment:

- Not available

0 Disable

1 Enable with audible ring back

2 Active with music

350 Word 2 Administers the feature and answer-back dial access codes for code calling.

Field 1 Enter the feature encode:

105 Universal Code Calling/Chime Paging — access

106 Universal Code Calling/Chime Paging — answer back

Field 2 Enter the first digit of the dial access code:

0-9 11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

CONFERENCE — ATTENDANT FIVE PARTY

The Conference — Attendant Five Party feature allows an attendant to set up a conference for up to five conferees, plus the attendant.

The Conference — Attendant Five Party feature should only be administered to a system that has only universal modules (a DEFINITY Generic 2 system).

If the Conference — Attendant Five Party feature is assigned to a system that has traditional call processing modules and universal modules, poor transmission quality could occur if trunks or voice terminals assigned to a traditional module are part of the conference.

Conferees do not need to be on the same system. External conferees can be included in a conference call.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
054 Word 1	054 Word 1	054 Word 1
100 Word 1	100 Word 1	100 Word 1
202 Word 1	202 Word 1	202 Word 1
204 Word 1	204 Word 1	204 Word 1
275 Word 3		275 Word 3

Procedure Usage

054 Word 1	Administers the recall button to an assigned multiappearance voice terminal.

Field 1	Enter the module number (0-30).	
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).	
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).	
Field 6	Enter the device type where the button will be assigned: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP	
Field 7	Enter the member (button) number (0-62).	
Field 8	Enter the extension number (-, 000-99999).	
Field 9	Enter "27" to specify button type as "Recall."	

100 Word 1 Administers a trunk ID code and trunk type.

	· -
Field 1	Enter the trunk group number (18-999).
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).
Field 6	Enter a "5" for the Attendant Conference trunk type.
Field 7	Enter either a 0 or 1. This field is ignored when using the Conference — Attendant Five Party feature.
Field 8	Enter a "0" to specify that the trunk group is not used for a Personal CO Line pickup.

202 Word 1 Administers Direct Trunk Group Selection buttons to the attendant console(s). The buttons used for this feature are on the left half of the console. The rows are numbered from bottom-to-top (1-4) and the buttons are numbered from left-to-right (1-6).

```
Field 1
                Enter the desired row number (1-4).
```

- Field 2 Enter the desired button number (1-6).
- Field 3 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

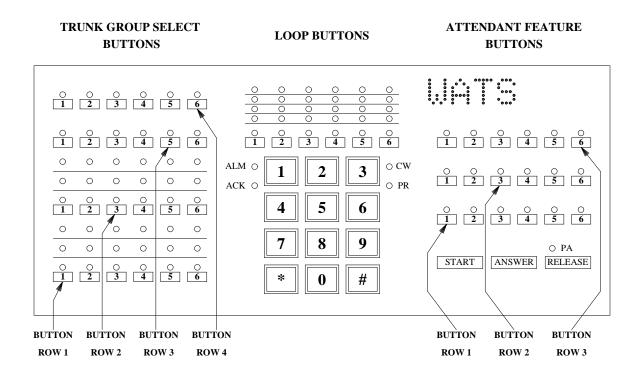
- Field 4 Enter the second digit of the dial access code (0-9).
- Field 5 Enter the third digit of the dial access code (0-9).
- Field 6 Enter the fourth digit of the dial access code (0-9).
- Enter the desired trunk group busy/warning status: Field 7
 - Busy for this trunk group only
 - 1 Busy for this trunk group and route advance trunk groups
 - 2 Busy/warning for this trunk group only
 - 3 Busy/warning for this trunk group and route advance trunk groups
- Field 8 Enter the warning lamp level (1-7). When the number of idle trunks is less than or equal to the number in this field, the applicable warning lamp will light.
- Field 9 Enter the remote flag indicator (0, 1). A "1" in this field when there is nothing in fields 10-12 means that the trunk group (DAC in fields 3-6) homes on this system but may be controlled or selected by a remote system. Having a "1" in this field when there is a DAC in fields 10-12 means that the trunk group is remote to this system, but may be controlled or selected by this system. In this case, the local DAC (Fields 3-6) will access the tie trunk to the remote system.
- Field 10 Enter the first digit of the remote dial access code:

0-9

11 or *

12 or #

- Field 11 Enter the second digit of the remote dial access code (0-9).
- Field 12 Enter the third digit of the remote dial access code (0-9).



204 Word 1 Administers the desired alphanumeric display for ACTGA on the attendant console(s).

Field 1 Enter "2295" as the conference recall call type.

Field 2 Enter the message number (4-63 whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	$\mathbf{B} = 12$	L=22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

275 Word 3 Administers the type of attendant conference to the system class of service.

Field 16 Enter a "1" for Conference — Attendant Five Party.

CONFERENCE — ATTENDANT SIX PARTY

The Conference — Attendant Six Party feature allows an attendant to set up a conference for up to six conferees, plus the attendant.

Conferees do not need to be on the same system. External conferees can be included in a conference call.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Attendant Console Administration

Trunk Administration — an SN254 attendant conference circuit must be assigned in Procedure 100.

Procedure Sequence

ADD	CHANGE	REMOVE
054 Word 1	054 Word 1	054 Word 1
202 Word 1	202 Word 1	202 Word 1
204 Word 1	204 Word 1	204 Word 1
275 Word 3		275 Word 3

Procedure Usage

054 Word 1 Administers the recall button to an assigned multiappearance voice terminal that doesn't have a fixed recall button.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules)
Field 3	Enter the port carrier number (0-3 for traditional modules)

Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules).	
Field 5	Enter "0" for the circuit number.	
Field 6	Enter the device type where the button will be assigned: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP	
Field 7	Enter the member (button) number (0-62).	
Field 8	Enter the extension number (-, 000-99999).	
Field 9	Enter a "27" to specify button type as "Recall."	

202 Word 1 Administers the Direct Trunk Group Selection buttons to the attendant console(s). The buttons used for this feature are on the left half of the console. The rows are numbered from bottom-to-top (1-4) and the buttons are numbered from left-to-right (1-6).

. 0).		
Field 1	Enter the desired row number (1-4).	
Field 2	Enter the desired button number (1-6).	
Field 3	Enter the first digit of the dial access code: 0-9 11 or * 12 or #	
Field 4	Enter the second digit of the dial access code (0-9).	
Field 5	Enter the third digit of the dial access code (0-9).	
Field 6	Enter the fourth digit of the dial access code (0-9).	
Field 7	Enter the desired trunk group busy/warning status: 0 Busy for this trunk group only 1 Busy for this trunk group and route advance trunk groups 2 Busy/warning for this trunk group only 3 Busy/warning for this trunk group and route advance trunk groups	

Field 8 Enter the warning lamp level (1-7). When the number of idle trunks is less than or equal to the number in this field, the applicable warning lamp will light.

Field 9 Enter the remote flag indicator (0, 1). A "1" in this field when there is nothing in fields 10-12 means that the trunk group (DAC in fields 3-6) homes on this system but may be controlled or selected by a remote system. Having a "1" in this field when there is a DAC in fields 10-12 means that the trunk group is remote to this system, but may be controlled or selected by this system. In this case, the local DAC (Fields 3-6) will access the tie trunk to the remote system.

Field 10 Enter the first digit of the remote dial access code:

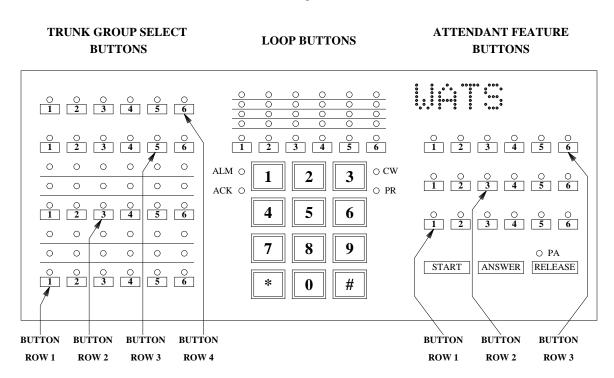
0-9

11 or *

12 or #

Field 11 Enter the second digit of the remote dial access code (0-9).

Field 12 Enter the third digit of the remote dial access code (0-9).



204 Word 1 Administers the desired alphanumeric display on the attendant console(s).

Field 1 Enter "2295" as the conference recall call type.

Field 2 Enter an unused message number 4-63 (whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

275 Word 3 Administers the type of attendant conference to the system class of service.

Field 16 Enter a "0" for Conference — Attendant Six Party.

CONFERENCE — THREE PARTY

The Conference — Three Party feature allows voice terminal users to set up 3-party conferences without attendant assistance. This is done by adding the third party to an established 2-party connection. Participants can include stations that are external to the system.

Assignment of the Conference — Three Party feature is on a per-line class-of-service basis for single-appearance terminals. Multiappearance terminals are always provided with the Conference — Three Party feature (not administrable). When required, the trunk-to-trunk transfer option is administered on a persystem basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1		010 Word 1
275 Word 4		275 Word 4

Procedure Usage

010 Word 1	Administers the Conference — Three Party feature to an extension class of ser	
	Field 1	Enter the class of service (1-30, 32-63).
	Field 14	Enter the Conference — Three Party/Transfer assignment:

Enter the Conference — Three Party/Transfer assignment:

0 Disabled

1 Enabled

275 Word 4 Administers the trunk-to-trunk transfer capability to the system class of service.

Field 3 Enter the trunk-to-trunk transfer assignment:

0 Disabled1 Enabled

DATA CALL SETUP

The Data Call Setup feature provides access to the DEFINITY Generic 2 system data services from most types of data endpoints. Data endpoints may be located on-premises or off-premises and may use either analog or digital interfaces. Standard data rates supported are:

- Low (300 bps and below)
- 300 bps
- 1200 bps
- 2400 bps
- 4800 bps
- 9600 bps
- 19.2 kbps.

The Data Call Setup feature is assigned on a line class of service (COS) basis. The data preindication, 1-button data call transfer, and return-to-voice functions of the DATA button are assigned individually on a per-button, per-voice terminal basis. Keyboard Dialing, also known as terminal dialing, is assigned on a per-data terminal or data module basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Voice Terminal and Data Module Administration

Use Procedure 051 Word 1 to administer keyboard dialing to an assigned multiappearance voice terminal (Field 13).

Use Procedure 052 Word 1 to administer voice and data line appearances to an assigned multiappearance voice terminal.

Procedure Sequence

ADD	CHANGE	REMOVE	
013 Word 3	013 Word 3	013 Word 1	
013 Word 1	013 Word 1	055 Word 2	
013 Word 2	013 Word 2	059 Word 4	
055 Word 2	055 Word 2	350 Word 2	
059 Word 4	059 Word 4		
350 Word 2	350 Word 2		

Procedure Usage

O13 Word 1 Administers the alphanumeric strings (names) for the mnemonic dialing function. These strings would be used by the user to dial a computer.

Field 1 Enter the segment (-, 1).

Fields 2-11 Enter the character string.

21 = A	53 = L	91 = W	44 = g	14 = q	00 = 0
22 = B	61 = M	92 = X	45 = h	75 = r	01 = 1
23 = C	62 = N	93 = Y	46 = i	76 = s	02 = 2
31 = D	63 = O	12 = Z	54 = j	84 = t	03 = 3
32 = E	71 = P	24 = a	55 = k	85 = u	04 = 4
33 = F	11 = Q	25 = b	56 = 1	86 = v	05 = 5
41 = G	72 = R	26 = c	64 = m	94 = w	06 = 6
42 = H	73 = S	34 = d	65 = n	95 = x	07 = 7
43 = I	81 = T	35 = e	66 = o	96 = y	08 = 8
51 = J	82 = U	36 = f	74 = p	15 = z	09 = 9
52 = K	83 = V				

013 Word 2 Assigns telephone numbers to mnemonic dialing strings entered with Procedure 013 Word 1.

Field 1	Enter the segment:	
	1	Characters 1-5
	2	Characters 6-10
	3	Characters 11-15
	4	Characters 16-20
Field 2	Enter th	e read/write mode:

Enter the read write mode.

- Machine-used tables

- 0 Scratch-pad tables
- 1 Machine-used tables

Fields 3-7 Enter the character encodes for characters 1-5:

0-9

11 or *

12 or #

- 13 Function entry
- 14 Pause (for dial tone)
- Wait (for dial tone)
- 16 Mark
- 17 Await dial tone
- Manual digit entry (must be followed by a number 1-15)
- 19 Suppress display
- 20 End of dialing character
- **013 Word 3** Displays the number of mnemonic dialing names that can still be added to the system list.
- O55 Word 2 Administers a data button to an assigned multiappearance voice terminal. Fields 1-5 specify the equipment location for the terminal equipment. Fields 8-12 specify the equipment location for the data module equipment.

For BRI terminals, the data button is in a fixed location. For the 7505 and 7506, it is button 9. For the 7507, it is button 33. This is set automatically when a data option is selected in Procedure 051 Word 1.

Field 1	Enter t	the mod	lule num	ber (0-30).
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- Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
- Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
- Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
- Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
- Field 6 Enter the device type:
 - 0 Basic set
 - 1 Feature module
 - 2 Coverage module
 - 3 Display module
 - 4 ADFTC/MTCP
- Field 7 Enter the member (button) number (0-62).

	Field 8	Enter the module number (0-30).
	Field 9	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 10	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 11	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
	Field 12 Enter the circuit number (0-7 for traditional modulus).	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
059 Word 4	Administers an push.	Abbreviated Dialing item for calling a data module with one button
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
	Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
	Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
	Field 7	Enter the member (button) number (0-62).
	Field 8	Enter the segment: 1
	Field 9	Enter the read/write mode:

- -, 1 Read/Write machine-used table
- 0 Read/Write scratch-pad table

For a display (read) routine:

- -. 1 Read list item from machine-used table
- 0 Read list item from scratch-pad table

For a change (write) routine:

- 1 Write list item to machine-used table
- 0 Write list item to scratch-pad table
- Fields 10-13 Enter the button assignments for characters 1-4. The encodes are as follows:

0-9

11 or *

12 or #

- 13 Function entry
- 14 Pause (for dial tone)
- Wait (for dial tone)
- 16 Mark
- 17 Await dial tone
- Manual digit entry (must be followed by a number from 1-15)
- 19 Suppress display
- 20 End of dialing character
- 350 Word 2 Administers the dial access code for terminal entry of default dialing (Abbreviated Dialing) list item.

Field 1 Enter the feature encode:

- 90 Dial the System List touch-tone terminal
- 91 Dial List "A" touch-tone terminal
- 92 Dial List "B" touch-tone terminal
- 93 Program auto dial number or list
- 94 Dial the System List rotary terminal
- 95 Dial List "A" rotary terminal
- 96 Dial List "B" rotary terminal
- Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

- Field 3 Enter the second digit of the dial access code (0-9).
- Field 4 Enter the third digit of the dial access code (0-9).
- Field 5 Enter the fourth digit of the dial access code (0-9).

DATA COMMUNICATIONS ACCESS

The Data Communications Access (DCA) feature provides an analog interface to local (on-premises) computer facilities. This feature is useful for host computers already set up with data sets (modems) for analog conversion. DCA can also be useful when a large percentage of calls to the supported host will be from analog facilities (analog trunk calls or analog interfaced local terminals). DCA ports are connected directly to analog tie trunk circuits on the DEFINITY Generic 2 system.

The DCA feature is administered by assigning DCA ports to equipment locations and assigning the equipment locations to one or more trunk groups. The trunk groups are then administered as DCA trunk groups.

Prerequisite Administration

To administer this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions

Restriction — Voice Terminal Restrictions

Trunk-to-Trunk Connections.

DATA PROTECTION

The Data Protection feature blocks intrusions by bridge-on features (e.g., Call Waiting, Override, Busy Verification) that would disrupt data transmissions. This protection applies to intrusions from the local system only. Unwanted tones generated by a distant system must be blocked at that end. Any signals present on an incoming data transmission are seen as data.

Data Protection — Temporary is assigned on a per-system basis. Dial access is then provided to all users provided with the access code. Data Protection — Permanent is assigned on a per-line class-of-service basis or on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 3	350 Word 2	010 Word 3
103 Word 1		103 Word 1
350 Word 2		350 Word 2

Procedure Usage

010 Word 3 Administers the Data Protection — Permanent feature to an extension class of service. Note that a "1" in field 13 will cause extensions for that class of service to receive 1-burst ringing on incoming trunk calls and attendant calls.

Field 1 Enter the class of service (1-30, 32-63).

Field 13 Enter the Data Protection (permanent) restrictions:

0 Not restricted

1 Restricted

103 Word 1 Administers the Data Protection — Permanent feature to an assigned trunk group.

Field 1 Enter the trunk group number (18-999).

Field 10 Enter the Data Protection assignment:

0 Disabled1 Enabled

350 Word 2 Administers the Data Protection — Temporary dial access code.

Field 1 Enter "13" for the Data Protection — temporary feature.

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

DEDICATED SWITCH CONNECTIONS

A Dedicated Switch Connection (DSC) acts like a hard-wired link between two ports on the system. In effect, this feature provides a full time open line between the assigned end points.

Once administered, the connection remains intact until removed. If a power failure occurs or a reinitialization of the system is required, the connection is automatically reestablished when power is restored or the initialization is complete.

The Dedicated Switch Connections feature is assigned on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 3	000 Word 3	000 Word 3
360 Word 1	360 Word 1	360 Word 1

Procedure Usage

Administers a code for a "dedicated mode" message used with some data modules. This code cannot be used with PDMs, TDMs, or MDMs. When available, the 7400 data module will use this code.

Field 3 Enter the dedicated switch connection message assignment:

0 Not supported (TDM, PDM, MDM, DTDM)

Supported (7400 or 3270 Data Module)

360 Word 1 Administers a dedicated switch connection between two line or trunk ports. Each port must first be administered as a line or a trunk.

Field 1	Enter the DSC status: 0 Off 1 On
Field 2	Enter the DSC number desired for this connection (0-1023).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 7	Enter the circuit number (0-7).
Field 8	Enter the desired I-channel assignment: - Use this if not on a GPP 0 I-channel 1 1 I-channel 2
Field 10	Enter the module number (0-30).
Field 11	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 12	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 13	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 14	Enter the circuit number (0-7).
Field 15	Enter the desired I-channel assignment: - Use this if not on a GPP 0 I-channel 1 1 I-channel 2

DIAL ACCESS TO ATTENDANT

The Dial Access to Attendant feature allows a voice terminal user to access an attendant by dialing a code, usually zero (0), or by dialing an listed directory number (LDN). In a system with multiple attendants, a specific attendant can be accessed when an individual access code is assigned.

Administration of the Dial Access to Attendant feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Attendant Console Administration

Related Administration

The following administration is not required for this feature, but is recommended to enhance operation:

Attendant Interposition Calling and Transfer.

Procedure Usage

350 Word 2 Administers the attendant dial access codes.

Field 1	Enter the feature encode:	
	8 Attendant dial access code	
	30 Extension to selected attendant	
Field 2	Enter the first digit of the dial access code:	
	0-9	
	11 or *	
	12 or #	
Field 3	Enter the second digit of the dial access code (0-9).	
Field 4	Enter the third digit of the dial access code (0-9).	
Field 5	Enter the fourth digit of the dial access code (0-9).	

DIGITAL MULTIPLEXED INTERFACE

The Digital Multiplexed Interface (DMI) feature provides digital connectivity between the DEFINITY Generic 2 system and other facilities. The DMI feature can be administered with bit oriented signaling (BOS) or message oriented signaling (MOS). DMI-BOS uses the ANN11 (TN555 for universal modules) circuit pack (same as DS1) while DMI-MOS uses the ANN35 (TN555 plus TN767 for universal modules) circuit pack (same as ISDN/PRI).

DMI-BOS is administered with the same procedures used to administer the DS1 feature. The main difference between DMI-BOS and DS1 is that DS1 has a wider range of applications than DMI-BOS. Currently, the only applications of DMI-BOS are host computer access and data connectivity to private and public networks that support DMI-BOS signaling. On the other hand DS1 is used for several trunking applications.

The DMI-MOS version is administered with the same procedures used to administer the ISDN/PRI feature. The main difference between DMI-MOS and ISDN/PRI is that DMI-MOS is only used for data connections to a host computer, while ISDN/PRI is used for several trunking applications.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions

Attendant Direct Trunk Group Selection

Bearer Capability

Defining Bearer Capability for DMI facilities can reduce the number of call failures and optimize facility use (only capable users will access defined facilities).

Route Advance

World Class Routing (WCR)

DMI trunks can be administered to WCR routing patterns.

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 4	010 Word 4	108 Word 1
010 Word 4	100 Word 2	103 Word 1
100 Word 2	100 Word 3	290 Word 1
100 Word 3	103 Word 1	290 Word 2
103 Word 1	108 Word 1	354 Word 3
108 Word 1	290 Word 1	262 Word 2
260 Word 1	290 Word 2	262 Word 1
262 Word 1	260 Word 1	260 Word 1
262 Word 2	262 Word 1	275 Word 4
354 Word 3	262 Word 2	275 Word 1
275 Word 1	354 Word 3	010 Word 4
275 Word 4		

Procedure Usage

000 Word 4 Administers the code for the ISDN calling number identification.

Field 1 Enter the extension (000-99999).

Field 4 Enter the NPA-NXX designator (1-99).

O10 Word 4 Administers the DMI-MOS (and ISDN) access and routing to an extension class of service. The DMI-MOS and ISDN access are treated as the same feature by this procedure. This procedure is not used for DMI-BOS.

Field 1 Enter the class of service (1-30, 32-63).

Field 3 Enter the DMI-MOS (ISDN) routing access assignment:

- DMI-MOS (ISDN) service is not supported
- 0 Use any facility
- 1 Use DMI-MOS (ISDN) exclusively
- 2 Use DMI-MOS (ISDN) if available, or else use any available facility

100 Word 2 Administers a bearer capability class of service to an assigned trunk group.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the bearer capability class of service (0-255).

100 Word 3 Administers the trunk types and specific signaling for DMI trunk groups.

Field 2	Enter "20" for all DMI trunk groups.	
Field 3	Enter the glare control: 0 Treat glare as a single error 1 This system is in control of glare 2 This system backs off from glare	
Field 4	Enter the retry specifications (for use with trunk types 41, 42, 43, 46, 47, and 120 that have signaling type 20): 0 Disabled 1 Enabled	
Field 5	Enter the outgoing seizure on maintenance busy out specifications: 0 Disabled 1 Enabled	
Field 6	Enter the incoming permanent seizure specifications: 0 Disabled 1 Enabled	
Field 7	Enter the failure threshold limit (only on trunk types 41, 42, 43, 46, and 47): O No failure threshold 1-99 Failure threshold limit	
Field 8	Enter the data if the optional DMI information element is included in the DMI message: - Not applicable 0 Data included in ISDN message 1 Data not included in ISDN message 2 Data and calling party number displayed; data included in ISDN messages and the calling party number for incoming DCS calls will be displayed	
Field 9	Enter the Network Service Value (1-511, 999).	
Administers the	trunk group translations for network trunks.	
Field 1	Enter the trunk group number (18-999).	
Field 14	Enter a "0" to collect all digits before outpulsing. For new trunk groups, "0" is the default.	
Administers the	e DMI-MOS (ISDN) terminating test line telephone digits.	
Field 1	Enter the trunk group number (18-999).	
Field 2	Enter the first dialed digit (0-9).	
	Field 3 Field 4 Field 5 Field 6 Field 7 Field 8 Field 8 Field 9 Administers the Field 1 Field 14 Administers the Field 1	

Enter the trunk group number (18-999).

Field 1

Fields 3-17 Enter the trailing dialed digits (-, 0-9).

260 Word 1 Administers the DMI (DS1) circuits to equipment locations and assigns signaling requirements and transmission type. When assigning the DS1 circuit pack, the slot to the right of the pack must be left unequipped or used only for packet adjunct ISDN applications.

SDN application	S.
Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).
Field 5	Enter the alarm level encode: - Conventional 0 None 1 Warning (default) 2 Minor 3 Major
Field 6	Enter the framing format encode: 0 D4 superframe 1 FE or extended superframe (ESF)
	The framing format is dependent on the equipment connected to the interface.
Field 7	Enter a "0" for DMI-BOS applications or the channel signaling encode for DMI-MOS applications: 0 23 B plus 1 D-channel 1 24 B-channels
Field 8	Enter a "0" for 24th channel signaling.
Field 9	Enter the suppression encode: 0 Zero code suppression 1 Binary-8 zero suppression
Field 10	Enter the slip enable encode: 0 Slip count off 1 Slip count on
Field 11	Enter the external loop encode: 0 Disabled 1 Enabled

- Field 12 Enter a "0" for DMI-BOS applications or the SCS equipment type encode for DMI-MOS applications:
 - 0 None
 - 1 DS1/T1 SCS
- Field 13 Enter a "0" for DMI-BOS applications or the SCS reference encode for DMI-MOS applications:
 - 0 None
 - 1 Primary source
 - 2 Secondary source
- Field 14 Enter the application type encode:
 - DMI-BOS (if this encode is chosen, don't administer Procedure 262 Word 1)
 - 5 ISDN/PRI, DMI-MOS (if this encode is chosen, administration of Procedure 262 Word 1 is required)
- Field 15 Enter the bit inversion encode for DMI-MOS applications only:
 - 0 Inversion
 - 1 No Inversion
- Field 16 Enter the transmission type encode:
 - 0 Copper
 - 1 Fiber
- Field 18 The TN767 (universal module DS1 pack) uses the loop length specified in this field to calculate loop equalization. Enter the loop length encode (distance from the carrier backplane to the cross connect field or other specified point):

Encode	Distance To Specified Point	
Elicode	24AWG	26AWG
0	0 to 133 ft. (0 to 40 m)	0 to 90 ft. (0 to 27 m)
1	134 to 266 ft. (41 to 81 m)	91 to 180 ft. (28 to 55 m)
2	267 to 399 ft. (82 to 122 m)	181 to 270 ft. (56 to 82 m)
3	400 to 532 ft. (123 to 162 m)	271 to 360 ft. (83 to 110 m)
4	533 to 655 ft. (163 to 200 m)	361 to 450 ft. (111 to 137 m)

- Field 19 Enter the E bit encode for DMI-BOS applications only (applies to universal modules only):
 - 0 Nonproprietary (BOS) signaling

1 Proprietary signaling

262 Word 1 Administers the DMI-MOS specific options such as interface type, ISDN facility test type, terminal endpoint identifier (TEI), and ISDN level 2 protocol parameters. Do not use this procedure if administering DMI-BOS.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).
Field 6	Enter the interface type: 0 For user side (to CO to other PBX) 1 For network side (to other PBX or DMI)
Field 7	Enter the ISDN facility test code: 0 None 1 Layer 2 2 Layer 3 3 Both layer 2 and layer 3
Field 8	Enter a "0" to specify a nonswitched DMI-MOS link to a host computer.
Field 9	Enter the timer T203 delay in seconds (0-255).
Field 10	Enter the timer T200 delay in tenths-of-seconds (0-255).
Field 11	Enter the Counter N200 (1-10).
Field 12	Enter the Counter K (1-7).
Field 13	Enter the DMI (PRI) Interface Identifier.

262 Word 2 Administers a backup D-channel to a primary D-channel for DMI-MOS.

Field 1 Enter the D-channel Group number (1-255).

PRIMARY D-CHANNEL EQUIPMENT LOCATION (Fields 2-5)

- Field 2 Enter the module number (0-30).
- Field 3 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
- Field 4 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 5 Enter the slot number in the port carrier (5 and 18 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).

BACKUP D-CHANNEL EQUIPMENT LOCATION (Fields 6-9)

Field 6 Enter the module number (0-30).

Field 7 Enter the cabinet number (0-7 for traditional modules, 0 for

universal and XE modules).

Field 8 Enter the port carrier number (0-3 for traditional modules, c-e for

universal and XE modules).

Field 9 Enter the slot number in the port carrier (5 and 18 for traditional

modules, 1-19 for universal modules, 1-17 for XE modules).

275 Word 1 Administers the optional tandem tie trunk and trunk-to-trunk calling features.

Field 15 Enter the tandem tie trunk option:

- Feature not available

O Tandem tie trunk disabled

1 Tandem tie trunk enabled

Field 16 Enter the trunk-to-trunk option:

Feature not available

0 Trunk-to-trunk calling disabled

1 Trunk-to-trunk calling enabled

275 Word 4 Administers the additional system class-of-service features including ISDN and DMI-MOS).

Field 14 Enter the DMI-MOS (ISDN) status:

Feature not available

0 Disabled

1 Enabled

290 Word 1 Displays DS1 trunk interface and SCS circuit equipment locations and identification information. You can display on port type (Field 1), equipment location (Fields 2-5), or both.

Field 1 Enter the DMI port type:

21 DS1 Real

22 DS1 Virtual

25 ISDN Real

26 ISDN Virtual

Field 2 Enter the module number (0-30).

Field 3 Enter the cabinet number (0-7 for traditional modules, 0 for

universal and XE modules).

Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 5	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).

290 Word 2 Displays the circuit pack identification of installed circuit packs.

Field 1	Enter the module number (0-30, 99).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).

354 Word 3 Administers the prefix digits (NPA-NXX-X) to the extension translation codes assigned in Procedure 000 Word 4 and Procedure 210 Word 2. These are used to provide DMI calling number display.

Field 1	Enter the NPA/NXX designator (1-99).
Field 2	Enter the NPA (200-219, 300-319, 400-419, 500-519, 600-619, 700-719, 800-819, and 900-919).
Field 3	Enter the NXX (200-999).
Field 4	Enter the thousands digit (-, 0-9).

DIGITAL SERVICE (DS1) INTERFACE

The Digital Service level 1 (DS1) Interface multiplexes up to twenty-four 64 kbps channels (digitized voice or data signals) onto a single carrier. This feature provides the DEFINITY Generic 2 system with digital connections to other Generic 2 systems, Systems, Systems, Systems, DIMENSION Systems (FP8, Issue 3), Central Offices (COs), or toll offices where special access arrangements are available.

The main difference between the standard version of DS1 and ISDN/PRI is signaling. DS1 uses a form of bit oriented signaling (BOS), while ISDN/PRI uses message oriented signaling (MOS).

DS1 is very similar to DMI-BOS. The main difference is that DS1 has a wider range of applications than DMI-BOS. Currently, the only application of DMI-BOS is host computer access, while DS1 is used for several trunking applications.

The DS1 feature can provide an economical alternative to analog trunking arrangements. DS1 service can replace the following types of analog facilities:

- Data communications access (computer access) facilities via the DS1/Digital Multiplexed Interface (DMI) capability
- Private network tie trunks
 - Common Control Switching Arrangement (CCSA)
 - Distributed Communications System (DCS)
 - Enhanced Private Switching Communications Service (EPSCS)
 - Electronic Tandem Network (ETN)
 - Main/Satellite/Tributary networks
- Public network CO trunks
 - Ground-start and loop-start CO trunks
 - Ground-start and loop-start foreign exchange (FX) trunks
 - Ground-start and loop-start Wide Area Telecommunications Service (WATS) trunks
 - Ground-start Remote Access trunks
 - Battery-reversal Direct Inward Dialing (DID) trunks
- Off-premises extension link.

The DS1 Interface feature is installed on a per-system basis. Administration within the system is on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

If administering host computer access, make sure the DMI trunks (types 108 and 109) have been administered, and see the Host Computer Access feature.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Bearer Capability

The Bearer Capability feature matches the calling requirements of a specific call with the best available resources to support that call. Bearer Capability default values are given to extensions and trunk groups automatically. DS1 parameters can be administered to a Bearer Capability Class of Service (BCCOS) to reduce the number of call failures.

Console Direct Trunk Group Select Buttons

Direct Trunk group select buttons can be administered to DS1 trunks.

World Class Routing (WCR)

DS1 trunks can be assigned to WCR routing patterns.

Procedure Sequence

ADD	CHANGE	REMOVE
178 Word 1	178 Word 1	178 Word 1
250 Word 1	290 Word 1	290 Word 1
260 Word 1	290 Word 2	290 Word 2
000 Word 1	250 Word 1	260 Word 1
103 Word 1	103 Word 1	000 Word 1
350 Word 2	260 Word 1	250 Word 1
	000 Word 1	

Procedure Usage

000 Word 1 Administers the voice terminal (line assignments) to DS1 ports and disables signaling for DSC applications.

Field 1 Enter the extension (000-99999).

	Field 2	Enter the module number (0-30).	
	Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
	Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
	Field 5	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).	
	Field 6	Enter the circuit number (0-3 for DS1 trunk circuit packs, 0-7 for DS1 line circuit packs).	
	Field 7	Enter the class of service (1-30, 32-63).	
	Field 8	Enter a "9" to select port type of "DS1 OPS line."	
	Field 9	Enter the signaling status for DS1 OPS line: 0 Signaling enable 1 Signaling disable	
103 Word 1	_	pecifies which World Class Routing options, and other features (such as FRL and athorization Codes), are in effect for any particular trunk group.	
178 Word 1		inistered equipment locations on a trunk group, trunk group dial equipment location basis, so that locating DS1 trunk translations is	
178 Word 2		s trunk characteristics based on trunk type, signaling type, number of trunks ak group, or number of	
250 Word 1		sters the SCS circuit to either the Module Control Carrier (single module or the Time Multiplexed Switch Carrier (multimodule system).	
	Field 1	Enter the module number (0-30, 99).	
	Field 2	Enter the cabinet number (1-2 for TMS, 0-7 for traditional modules, 0 for universal and XE modules).	
	Field 3	Enter the port carrier number (0-3 for TMS or traditional modules, a-e for universal and XE modules).	
	Field 4	Enter the carrier type:	
		 Single module configuration (universal module), module control 0 Single module configuration (universal module), module control 1 (duplicated module control only) 	

Multimodule configuration, TMS control 0

- 8 Multimodule configuration, TMS control 1 (duplicated TMS only)
- 6 Single module configuration (traditional module), module control 0
- 7 Single module configuration (traditional module), module control 1 (duplicated module control only)

260 Word 1 Administers the DS1 circuits (ANN11 circuit pack) to equipment locations and

assigns signaling requirements.			
Field 1	Enter the module number (0-30).		
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).		
Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).		
Field 5	Enter the alarm level encode: - Conventional 0 None 1 Warning (default) 2 Minor 3 Major		
Field 6	Enter the signaling format: 0 D4 (Superframe) 1 FE (Extended Superframe)		
Field 7	Enter a "0" for 23 B plus 1 D-channel.		
Field 8	Enter the signaling encode: 0 24th channel signaling 1 Robbed bit signaling		
Field 9	Enter the suppression encode: 0 Zero code suppression 1 Binary-8 zero suppression		
Field 10	Enter the slip enable encode:		

Slip count off

Slip count on

Enter the external loop encode:

Disable

Enable

1

0

1

Field 11

Field 12	Enter the SCS equipment type encode: 0 None (required for stratum 3 clock) 1 DS1/T1 SCS	
Field 13	Enter the SCS reference encode: 0 None (required for stratum 3 clock) 1 Primary 2 Secondary	
Field 14	Enter the application type encode: 0 DS1 trunks (lines mixed) 2 DS1 off premises station (OPS) 3 Remote carrier group (RCG)	
Field 16	Enter the transmission type encode: 0 Copper (T1) 1 Fiber	
Field 17	Enter the SA/FX encode: 0 FX (except Canada) 1 SA (except Canada)	
Field 18	Enter the loop length encode (applies to universal modules only): 0 0-133 feet 1 134-266 feet 2 267-399 feet 3 400-453 feet 4 534-655 feet	
Field 19	Enter the E bit encode (applies to universal modules only): 0 Nonproprietary (BOS) signaling 1 Proprietary signaling	
Displays circuit	status for assigned port circuit packs.	
Field 1	Enter the port (equipment) type: 21 DS1 Real 22 DS1 Virtual	
Field 2	Enter the module number (0-30).	
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
Field 5	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).	

290 Word 1

290 Word 2 Displays identification of installed circuit packs.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).

DIRECT INWARD DIALING

The Direct Inward Dialing (DID) feature allows calls from the public network to connect to the dialed extension without attendant assistance. The DID feature can be used to access data stations, local attendants, Centralized Attendant Service attendants, and voice terminals at remote locations without attendant assistance. Extension number steering is used to access terminals at remote locations.

Assignment of the DID feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions

Intercept Treatment.

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 3	010 Word 3	010 Word 3
275 Word 1	275 Word 1	275 Word 1

Procedure Usage

O10 Word 3 Administers the DID restrictions to an extension's class-of-service. No restrictions on DID indicate that a extension's class-of-service can receive DID calls; restrictions on DID indicate that a class-of-service extensions cannot receive DID calls.

Field 1 Enter the class of service (1-30, 32-63).

Field 14 Enter the DID restrictions:

0 Not restricted

1 Restricted

275 Word 1 Specifies the number of dial digits forwarded to the system by the serving CO. This should be the number of digits assigned in the dialing plan (Procedure 350 Word 1).

Field 9 Enter the DID/CCSA digits (-, 0, 3-5).

DIRECT OUTWARD DIALING

The Direct Outward Dialing (DOD) feature allows a user to access the public network without attendant assistance. Direct access to the public network is rapid and efficient for terminal users and reduces the attendant's work load.

Assignment of the DOD feature is on a per-system basis.

Prerequisite Administration

To administer this feature, make sure the following is administered:

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection

Intercept Treatment

Restriction — Miscellaneous Trunk Restrictions

Route Advance.

DISPLAY — VOICE TERMINAL

The Display — Voice Terminal feature makes call and message information available to voice terminal users who have a terminal with display capabilities. This information can come from the Audio Information Exchange (AUDIX) feature, Leave Word Calling (LWC) feature, or the Message Center feature.

Two different pieces of hardware can be used to display call information to voice terminals users. The standard equipment is a voice terminal with a display module or an integrated display. The other is an older calling number display unit. These will be discussed separately.

Assignment of the Display — Voice Terminal feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Use Procedure 051 Word 1 to administer an equipment location, display capabilities, and the lock/unlock option to a multiappearance voice terminal.

Names Database (See Chapter 2, "System Administration")

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

ISDN Calling Number Display

This capability is used for ISDN trunk calls only. There is no special administration for PRI using the Display-Voice terminal feature. See the ISDN/PRI feature for ISDN calling number display administration.

Integrated Voice Terminal Display Units

The integrated display units are found attached to DCP voice terminals or integrated within the body of DCP or BRI voice terminals.

Procedure Sequence

ADD	CHANGE	REMOVE
054 Word 4	054 Word 4	054 Word 4
261 Word 1	350 Word 2	261 Word 1
350 Word 2		350 Word 2

Procedure Usage

054 Word 4 Administers the desired display buttons to an assigned multiappearance voice terminal with display capabilities.

-	• •		
Field 1	Enter the module number (0-30).		
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).		
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).		
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).		
Field 6	Enter the device type:		
	0 Basic set		
	1 Feature module		
	2 Coverage module		
	3 Display module		
	4 ADFTC/MTCP		
Field 7	Enter the member (button) number (0-62).		

Field 8 Enter the display feature button type:

- 0 Normal
- 1 Inspect
- 2 Time of Day/Date
- 3 Message Retrieval
- 4 Coverage Message Retrieval
- 5 Step
- 6 Delete
- 7 Return Call
- 8 Elapsed Time
- 9 Scroll

261 Word 1 Administers the scrolling capability to AP Messaging. Scrolling must be set for every AP that has message coverage for any extensions on the system.

Field 6 Enter the scrolling specifications:

- Does not apply
- 0 Does not support n-digit scrolling
- 1 Remote supports n-digit scrolling

350 Word 2 Administers the feature dial access codes.

Field 1 Enter the feature encode:

68 Lock message retrieval

69 Unlock message retrieval

Field 2 Enter the first digit of the dial access code:

0-9 11 or *

12 or #

- Field 3 Enter the second digit of the dial access code (0-9).
- Field 4 Enter the third digit of the dial access code (0-9).
- Field 5 Enter the fourth digit of the dial access code (0-9).

Calling Number Display to Station

The Calling Number Display to Station feature uses an auxiliary number display unit to identify the extension numbers of calls made to an extension within the system.

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	253 Word 1	010 Word 1
253 Word 1		253 Word 1

Procedure Usage

O10 Word 1 Administers the calling number display feature to an extension class of service. The extension you assign in Procedure 253 Word 1 must have a class of service with this feature enabled.

Field 1 Enter the class of service (1-30, 32-63).

Field 7 Enter a "1" to enable calling number display with the auxiliary

display unit.

253 Word 1 Administers the calling number display unit to a TN403 data channel equipment location and to the desired extension number.

Field 1	Enter unit type "1".
Field 2	Enter carrier "0".
Field 3	Enter the slot number (23-26).
Field 4	Enter the circuit number (0-15).
Field 5	Enter the extension that will use the calling number display unit (000-99999).

DISTRIBUTED COMMUNICATIONS SYSTEM

The Distributed Communications System (DCS) is a service designed to meet the needs of customers with telecommunication requirements that exceed the capacity of a single system. Using a DCS allows the customer to operate and control multiple systems as if they were one system.

Assignment of the DCS feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Distributed Communications System (See Chapter 6, "DCIU Administration")

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Select Buttons

Extension Number Portability

Integrated Services Digital Network / Primary Rate Interface (ISDN/PRI)

To get transparency using ISDN/PRI trunks make sure you set Procedure 010 Word 4 field 3 to a "1" (use ISDN exclusively).

Main/Satellite Tributary

Restriction — Miscellaneous Trunk Restrictions

World Class Routing (WCR).

Procedure Sequence

ADD CHANGE REMOVE

276 Word 1	354 Word 1	275 Word 3
354 Word 1	010 Word 2	261 Word 1
010 Word 2	261 Word 1	354 Word 1
261 Word 1	275 Word 3	276 Word 1
275 Word 3	202 Word 1	

Procedure Usage

010 Word 2 Administers the Call Forwarding — Off Net to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 4 Enter the Call Forwarding — Off Net capabilities:

0 Disable1 Enable

261 Word 1 Provides the translation between an internal AP or AUDIX number and the network AP or AUDIX number. Included are the local adjunct, the local adjunct number, the local adjunct type, the version number, digit format, scrolling, and network adjunct number.

Field 1 Enter "3" for DCS.

Field 2 Enter the DCS node number (1-63).

Field 3 Enter the local adjunct type:

4 System 75 PBX

5 System 85 Release 1

6 System 85 Release 2 or DEFINITY Generic 2 system

7 Enhanced DIMENSION PBX

Field 4 Enter the version number (-, 0-999).

275 Word 3 Administers the multi-machine type, the local system number, and the CAS main system number.

Enter the "-" for DCS.

Field 7

Field 7

Enter the multi-machine type:

1 DCS system number

3 Both DCS and number portability

Field 8

Enter the local system number:

- No DCS

1-63 DCS system number (with/without number portability)

Field 9

Enter the CAS main system number:

0 DCS; No CAS

276 Word 1 Administers the DCS to a feature-group class of service. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 3 Enter the DCS assignment:

0 Disable

1 Enable

354 Word 4 Maps a DCS node number to a World Class Routing (WCR) Virtual Nodepoint Identifier (VNI).

Field 1 Enter the node number (1-999).

Field 2 Enter the VNI (0-1023).

EXPERT AGENT SELECTION

The Expert Agent Selection (EAS) feature allows the Call Vectoring and the Automatic Call Distribution (ACD) features to distribute ACD-bound calls to specific subsets of ACD agents within splits by matching skills assigned to the call with skills that agents possess. Call vectoring assigns call-handling skill requirements to ACD-bound calls. Both ACD calls and ACD agents may have one or more skills active. A call that has one or more skills active can only be delivered to an available agent if the call and the agent have at least one skill in common.

Agent skills, such as familiarity with a specific product or the ability to speak Spanish, are represented by skill numbers which agents activate via dial access codes. Skill numbers are a synthesis of the ACD split number and a single digit representing a skill. For example, skill 3 in split 45 is represented as 453. This numbering scheme means that each split can have up to ten skills. Since there can be up to 60 splits, the range for agent skill numbers is 10 through 609.

The EAS feature can only be used with ACD splits that use the Most Idle Agent (MIA) call distribution (hunting) algorithm. Therefore, when EAS is active, calls are distributed based on the MIA distribution algorithm, a call's skill requirements, and an agent's call-handling skills.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Automatic Call Distribution

The EAS feature requires ACD splits with the MIA call distribution algorithm.

Call Vectoring

The EAS feature uses the call vectoring feature to assign skill requirements to call vectoring steps and to VDNs.

Procedure Sequence

ADD	CHANGE	REMOVE
276 Word 1	031 Word 2	031 Word 2
031 Word 2	030 Word 2	030 Word 2
030 Word 3	030 Word 3	350 Word 2
030 Word 2	030 Word 2	276 Word 1
350 Word 2	350 Word 2	

Procedure Usage

- 030 Word 2 Assigns vector numbers to vectors added in Word 3 and, for change operations, this Word calls vectors into the scratch-pad so that Word 3 can be used to modify the vectors. Once Word 3 has been used, a change or an add operation must be done in this Word to make the changes or additions permanent; do not do a display operation before doing a change or an add operation since doing so causes all changes to disappear.
- 030 Word 3 Programs the steps of the vector specified in Procedure 030 Word 2. With this Procedure, a call vector can be programmed to activate a VDN skill preference (1-3) or a skill number (10-609) for an incoming call. Instructions for using this Procedure are given in the call vectoring chapter.
- 031 Word 2 Assigns first, second, and third skill numbers to a vector directory number (VDN) in order of preference.

Field 1 Enter the VDN (-,000-99999).

VDN Skill Preferences:

Enter the first skill number (-,10-609) Field 2 Field 3 Enter the second skill number (-,10-609) Field 4 Enter the third skill number (-,10-609)

276 Word 1 Activates EAS, call vectoring, and call center software. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

> Field 5 Enter a "1" to activate call vectoring.

Enter a "1" to activate EAS. EAS will not work without call Field 11

vectoring and call center being activated.

Field 13 Enter a "1" to activate call center.

350 Word 2 Assigns the "Agent Skill Entry" dial access code.

> Enter "107" Field 1

Field 5

Dial Access Code (Fields 2 through 5)

Field 2 Enter Digit 1 (0-9, 11 for *, 12 for #) Field 3 Enter Digit 2 (-, 0-9) Field 4 Enter Digit 3 (-, 0-9) Enter Digit 4 (-, 0-9)

EXTENSION NUMBER PORTABILITY

The Extension Number Portability feature allows a user in a private network to move from one node to another (i.e., system-to-system) without changing extensions. Portability is ideal in a Distributed Communications System (DCS) environment as it provides added transparency. It can also be used in an Electronic Tandem Network (ETN) or Automatic Voice Network (AUTOVON) arrangement. Not only does the user's extension remain unchanged, but the ETN, AUTOVON, and Direct Inward Dialing (DID) numbers also remain unchanged.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Extensions (See Chapter 2, "System Administration"). The dialing plan for extension numbers must be administered the same on every node in the extension number portability subnetwork.

LDNs must assigned to every node in the extension number portability subnetwork.

World Class Routing (WCR).

Procedure Sequence

ADD	CHANGE	REMOVE
276 Word 1	354 Word 1	320 Word 1
275 Word 3	354 Word 2	314 Word 1
354 Word 1	354 Word 4	101 Word 3
354 Word 2	101 Word 3	354 Word 4
354 Word 4	314 Word 1	354 Word 2
101 Word 3	320 Word 1	354 Word 1
314 Word 1		275 Word 3
320 Word 1		276 Word 1

Procedure Usage

101 Word 3 Administers trunk group prefixing.

Field 1 Enter the trunk group number (18-999).

Field 2

- Enter this encode for all non-ISDN trunk groups. For ISDN trunks, see the ISDN-PRI section for further instructions.

PREFIX (Fields 3-6)

Fields 3-6 provide up to four digits which are to be prepended to incoming calls arriving on the specified trunk group.

If deferred prefixing is designated in Procedure 104 Word 2 field 4, then this designation will prevent the prefix digits from being immediately prepended.

Field 3	Enter the first digit of the prefix: -, 0-9, 11(*), 12(#)
Field 4	Enter the second digit of the prefix: -, 0-9
Field 5	Enter the third digit of the prefix: -, 0-9
Field 6	Enter the fourth digit of the prefix: -, 0-9

Administers the machine type and the local system number. Use encode 2 or 3 in field 7 for number portability.

Field 7 Enter the system type assignment:

- 2 Number portability system
- 3 Both DCS and number portability
- Field 8 Enter the local system (node) number (1-999).

276 Word 1 Administers standard network and multipremise to the feature group class of service. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 1 Enter "1" to enable the standard network assignment.

Field 2 Enter "1" to enable the multipremise assignment.

314 Word 1 Administers the dial plan for network digit analysis

Fields 1-6 Enter the 1 to 18 digit string identifier:

0-9 Decimal digits

Wild card digit (exception SIs only)

Field 7 Enter the segment number:

- 1 Digits 1-6
- 2 Digits 7-12
- 3 Digits 13-18

Field 8 Enter the last segment identifier:

- O Segment is not the last in the string identifier
- 1 Segment is the last, add string to network
- 2 Segment is the last, add string to exception network

Note: The remaining fields in this word apply only to the last

segment (field 8 = 1 or 2). Field 9 Enter the string length (1-31). Field 10 Enter the string type encode: 1 Account code 2 Inter-exchange carrier 3 Toll prefix 4 International 5 Operator assistance 6 Address Field 11 Enter the action encode: 0 Resolve 1 Restart Field 12 Enter the action object (0-4095). The meaning of this field depends on the assignment made in field 11 (see the table following "Field 13") Field 13 Enter the action attribute (0-7). The meaning of this field depends on the assignment made in field 11 (see the following table)

Field 11	Field 12	Field 13
0 (resolve)	When field 11=0, this field specifies a Virtual Nodepoint Identifier. Zero in this field indicates that the string does not affect route selection.	When field 11=0, this field specifies a Facility Restriction Level for Unauthorized Call Control. Zero in this field allows all callers unconditional access to the dialed number.
1 (restart)	When field 11=1, this field specifies a digit modification index for the M to N conversion function. Zero in this field indicates that no modification of the string should take place.	When field 11=1, this field specifies the Network Number to restart digit analysis. Zero in this field results in an analysis restart to the internal dial plan.

Field 14 Enter the current network number (0-7) being administered.

320 Word 1 Administers the WCR-Network digit modification.

Field 1 Enter the digit modification index (0).

Field 2 Enter the digits to be deleted from the digit string:

- 0 Default
- 99 Delete all digits

Field 3 Enter the segment number encode:

- 0 No digits to insert
- 1 Digits 1-8
- 2 Digits 9-16
- 3 Digits 17-24
- 4 Digits 25-31

Fields 4-11 Enter the Insertion digit segments one through four (-, 0-9, 11, 12).

- Administers the blocks of extension numbers for a 4- or 5-digit dialing plan. This procedure is also used to identify the node where the extension number resides.
 - Field 1 Enter the first extension number in a group (any 3-, 4-, or 5-digit number ending in 0).
 - Field 2 Enter the last extension number in a group (any 3-, 4-, or 5-digit number ending in 9). The last extension number (Field 2) must be greater than the first extension number (Field 1) and both numbers must have the same number of digits.
 - Field 3 Enter a dash to define blocks of extension numbers on the local system or enter the ENP node (system) number where the extension numbers reside (1–999).
- 354 Word 2 Administers dial access codes to extensions, steering codes, and RNXs for portability on extensions outside of a local system.
 - Field 1 Enter the valid extension or steering code (000-99999).
 - Field 2 Enter "3" to indicate an extension assigned to an ENP node
 - number.
 - Field 7 Enter the node number (1-999).
- **354 Word 4** Displays all assigned ENP node numbers or the Virtual Nodepoint Identifiers (VNI) associated with these nodes. This Procedure is only used for ENP.
 - Field 1 Enter or display the ENP node number (1-999).
 - Field 2 Enter or display the VNI (0-1023).

Administration Examples

Each system in the portability subnetwork must be administered properly so that each system is capable of routing calls to the correct user, wherever in the subnetwork they may be located.

Initial Administration for the Portability Subnetwork

The following administration must be performed at each switch in the portability subnetwork.

Procedure 204, Word 1 — Console Messages and Listed Directory Numbers

Every LDN (Listed Directory Number) must be administered on every node in the portability subnetwork. This procedure is used to administer local LDNs. Remote LDNs are administered as extension numbers that reside at remote nodes (*see* Procedure 354, Word 1).

Procedure 350, Word 1—Dialing Plan - First Digit

Beginning with System 85 R2 V3, any digit 0 through 9 can be assigned as the first dialed digit of a group of extension numbers. These assignments must be common to every node in the portability subnetwork.

- First Dialed Digit: Assign the digits 0 through 9 as the first dialed digit for extension numbers. The same set (first digits) must be the same for extension numbers on all nodes of the portability subnetwork.
- Number of digits: Enter "4" or "5."
- Call type: Enter "1."

Procedure 276, Word 1—Feature Group Class of Service:

- Standard Network: Enter 1 to active standard network (required) for each switch.
- Multipremises: Enter 1 to active multipremises software (required) for each switch.

Procedure 275, Word 3 — System COS - Miscellaneous — Multimachine nodes:

- Switch Type: Enter Type 2 (Portability) or Type 3 (DCS and Portability).
- Local Switch Number: Enter a unique node number for this switch.

The following administration is required to support 4- or 5-digit dialing.

Procedure 354, Word 1 — Extension Number Groups

Each extension number in the portability subnetwork must be assigned to a node number at each node in the subnetwork. Extension numbers are initially assigned in groups. Extension number groups assigned to terminals that reside at other nodes must be assigned a node number.

• First Extension Number of the group (for example, 7000 or 70000)

- Last Extension Number of the group (for example, 7999 or 79999)
- Node Number (1 to 999). For portability subnetworks that are part of a DCS, it is recommended (but not required) that the portability subnetwork use the DCS node numbers.

Procedure 354, Word 2 — Extension Destination

Each ported extension must be associated with the appropriate node number at each node in the portability subnetwork.

- Extension or Steering Code (for example, 71234)
- Use. Enter "3."
- Node number (field 7). Enter the gaining (ported too) node number.

For calls to ported extension numbers, the dialed number is screened by the local dialing plan. Calls to ported extension numbers are identified based on translations in Procedure 354, Word 2.

Procedure 354, Word 4 — Node Number to VNI Mapping

Each node number in the portability subnetwork must be associated with its corresponding WCR VNI.

- Node Number. Enter the assigned number (range 1 through 999). One for each node in the portability subnetwork.
- Virtual Nodepoint Identifier. Enter the corresponding VNI (range 1 through 1023). A value of "0" can be assigned for a VNI, however, this is a non-routing VNI and would result in intercept. VNI 0 cannot be used for a valid destination.

Once the VNI is assigned, the ported extension number is passed to WCR network 0 for further processing.

Procedure 101, Word 3 — Trunk Group Characteristics — Prefixing

One of the WCR routing networks (networks 2 through 7) is used to support the portability subnetwork. This network processes all incoming calls on tie trunks from other nodes of the portability subnetwork. These incoming calls are directed to the supporting WCR network through trunk group prefixing. When call reaches the local switch over one of these tie trunks, the assigned prefix is added to the beginning of the address digits. When this prefix is the WCR dial access code for the supporting network, it insures that the incoming call is processed correctly for a subnetwork call.

- Field 1 Enter the trunk group number for the portability subnetwork tie trunk group.
- Field 2 Enter a dash (-) for non-ISDN—PRI trunk groups. For ISDN—PRI trunk groups (signaling type 20), enter the address type code for the form of address expected on incoming calls as follows:
 - 0 Unknown (any address form may be possible)
 - 1 International address format

- 2 National (NANP 10-digit) address format
- 3 Not defined
- 4 Subscriber (private network UDP, 7-digit) address format
- 5 Not defined
- 6 Abbreviated (special) address format
- 7 Not defined.
- Fields 3-6 Enter the network dial access code for the WCR network used to support Extension Number Portability.
- Field 7 Enter the appropriate signaling type for the trunk group.

Procedure 314, Word 1 — Network Digit Analysis and Dialing Plan

Home Location Codes:

As with earlier switches, each location code used in the portability subnetwork must be defined as a "home location code" on each node in the subnetwork. For Generic 2.2 switches, this is done in the WCR network that supports the portability subnetwork, using Procedure 314, Word 1, and constitutes the dialing plan for that network.

• Setting Up the Dialing Plan in the Portability Network:

In the WCR network used for extension number portability, each home location code must be defined by a string identifier. This may require defining the complete set of location codes or, if the first, or first and second digits of all the location codes are common, it may be possible to use a 1- or 2-digit string identifier. This must be done on each switch in the portability subnetwork.

Fields 1-3	Enter the digits of the home location codes as necessary.
Field 7	Enter"1."
Field 8	Enter "1."
Field 9	Enter "7." Generally, a WCR network address will have seven digits. However, if additional digits are needed indicate the total number of digits in a network address.
Field 10	Enter "6."
Field 11	Enter "1."
Field 12	Enter the appropriate digit modification index number from Procedure 320, Word 1.
Field 13	Enter "0."
Field 14	Enter the network number (range 2 through 7) for the WCR network used for the portability subnetwork.
Field 12 Field 13	Enter the appropriate digit modification index number from Procedure 320 Word 1. Enter "0." Enter the network number (range 2 through 7) for the WCR network used for

The restart action will pass the received digits to digit modification using the digit modification index number entered in field 12, Action Object.

Dialing Plan:

The dialing plan for the portability subnetwork must be defined and associated with the WCR routing network used for portability (one of seven routing networks). This requires that a network dialing plan be translated in one of the routing networks (2 through 7) and in network 0.

• Setting Up the Dialing Plan in Network 0:

In network 0, each extension number group must be defined by a string identifier. This corresponds to the extension number group assignments made in Procedure 354, Word 1. Usually one or two digits will be sufficient to identify each block of extension numbers. This is done at system setup time.

Field 1	Enter the first (and if necessary second) digit of the extension number group.
Field 7	Enter"1."
Field 8	Enter "1."
Field 9	Enter "4" or "5" as appropriate.
Field 10	Enter "6."
Field 11	Enter "1."
Field 12	Enter the appropriate digit modification index number from Procedure 320, Word 1.
Field 13	Enter the network number (range 2 through 7) for the WCR network used for the portability subnetwork. (This field is ignored for Extension Number Portability.)
Field 14	Enter "0."

The restart action will pass the dialed digits to digit modification using the digit modification index number entered in field 12, Action Object.

Procedure 320, Word 1 — Network Digit Modification

Once an extension number has been identified as ported extension or an incoming tie trunk call as belonging to a home location code, digit modification performs the digit deletion and/or insertion required for network or extension number addressing as appropriate. For outgoing calls in extension number format, digit modification inserts the digits necessary (usually the location code) to form a WCR network address. For incoming tie turk calls, digit modification is used to correct the network address (usually by deleting the location code) to an extension number for the home location code. Procedure 320 provides the instructions for this digit deletion and/or insertion.

- Digit Modification Index Number. This number is used by the switch to locate a particular set of digit modification instructions. The number from this field is entered in field 12 of Procedure 314, Word 1.
- Digits to Delete: For assignment of a "home location code" and for modification of incoming (tie trunk) calls, this will usually be "3" to convert the network address to an extension number.

For outgoing calls to ported extensions this will usually be "0." However, this may be "1," if the first digit of the extension number does not match the first digit of the location code.

3. Segment Number: For assignment of a "home location code" this will usually be:

"0" for 4-digit extension numbers indicating no digits to insert.

or

"1" for 5-digit extension numbers.

For a ported extension number, this will usually be "1."

4. INSERTION DIGIT SEGMENTS ONE THROUGH FOUR

- a. For assignment of a "home location code," fields 4 through 11 are not usually used for 4-digit extension numbers. For 5-digit extension numbers the prefix (leading) digit of the extension number must be added in field 4.
- b. For a ported extension number, usually only fields 4, 5, and 6 are used to insert the location code (for construction of the network address). Enter the network location code for the ported extension number (new node).

For incoming calls (tie trunk), when digit modification is completed, the call is restarted in network 0 which passes it to the internal dial plan for processing.

For ported extension numbers, when digit modification is complete, the call is passed to generalized route selection. Reanalysis in the network specified in field 13, Procedure 314, Word 1 is not required as the VNI was assigned previously in Procedure 354, Word 4.

Porting an Extension Number to a Different Node

Whenever an extension is moved to a different node, each node must be administered in one of three ways:

- As the node which presently homes the extension
- As the new home node
- As an uninvolved node.

The only administration required at an uninvolved node is the assignment of the extension to a node. The individual extension, rather than a group, is assigned to a new node in Procedure 354 Word 2.

At the old home node, the extension must be removed from all line, feature, and group assignments; and the node assignment must be changed from the old node to the new node in Procedure 354 Word 2.

At the new home node, the node assignment for the extension is changed to the local node; and the extension is assigned to features, restrictions, etc.

FACILITIES RESTRICTION LEVEL

The Facilities Restriction Level (FRL) feature provides access control and protection from unauthorized use for private system and network facilities. Each originating facility (voice and data terminals, incoming trunk, remote access trunks, and attendant positions) is assigned an FRL. Each trunk group in an World Class Routing (WCR) pattern is also assigned an FRL. However, since a particular trunk group can be assigned to more than one routing pattern, its FRL may be different in different routing patterns. To illustrate, a public network trunk group may have an FRL of five in a one WCR pattern and an FRL of two in another WCR pattern.

Assignment of the Facilities Restriction Level is on a per-line class of service and per-trunk group basis.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions

World Class Routing (WCR).

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 3	283 Word 1	283 Word 1
103 Word 1	010 Word 3	010 Word 3
200 Word 1	103 Word 1	103 Word 1
203 Word 1	200 Word 1	200 Word 1
286 Word 1	203 Word 1	203 Word 1
309 Word 1	286 Word 1	286 Word 1
321 Word 1	309 Word 1	309 Word 1
	321 Word 1	321 Word 1

Procedure Usage

010 Word 3 Administers the miscellaneous trunk restriction groups to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 23 Enter the FRL (0-7, 0 being most restrictive and 7 being least restrictive).

103 Word 1 Administers an FRL to an assigned trunk group.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the FRL (0-7, 0 being most restrictive and 7 being least restrictive).

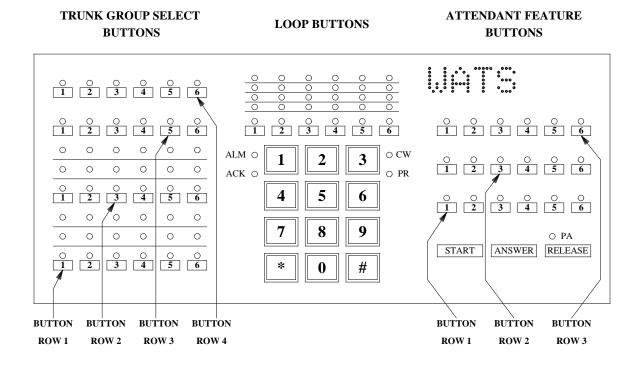
200 Word 1 Administers an FRL to an attendant console.

Field 12 Enter the FRL (0-7, 0 being most restrictive and 7 being least restrictive).

Administers the Alternate FRL button to the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter a "19" for the Alternate FRL button type.



283 Word 1 Displays the extensions, trunk groups, or authorization codes associated with a specific FRL.

Field 1 Enter the FRL (0-7).

Field 2 Enter the type:

- Search for extension number
 Search for trunk group number
- 3 Search for authorization code

286 Word 1 Administers the alternate FRLs. The alternate FRLs are activated by the attendant.

Field 4 Enter the alternate FRL status:

0 Disable1 Enable

Fields 5-12 Enter the alternate FRLs (0-7). The values entered here change the standard meanings for FRLs 0-7.

318 Word 1 Administers an FRL to an assigned WCR pattern.

Field 1 Enter the pattern number (1-640).

Field 2 Enter the preference number (1-16).

Field 4 Enter the FRL (0-7, 0 being the most restrictive, 7 being the least

restrictive).

330 Word 1 Administers the threshold and raised to FRLs for trunk Queuing on outgoing calls.

Field 1 Enter the queuing status:

0 Not active1 Active

Field 3 Enter the threshold FRL (0-7).

Field 4 Enter the raised FRL (0-7).

FORCE ADMINISTRATION DATA SYSTEM

The Force Administration Data System (FADS) feature collects and stores traffic-related information for Centralized Attendant Service (CAS). This information allows the customer to intelligently adjust the make-up of the CAS attendants to suit the call-load requirements.

Assignment of this feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

System Clock (Time of Day) (See Chapter 2, "System Administration")

Procedure Sequence

ADD	CHANGE	REMOVE
253 Word 1	253 Word 1	253 Word 1
426 Word 1	426 Word 1	426 Word 1

Procedure Usage

253 Word 1 Administers the FADS unit type to a data channel circuit of a TN403 circuit pack.

Field 1 Enter "13" to indicate the FADS for CAS unit type.

Fields 2-4 Enter the equipment location for a data channel in the common

control carrier (carrier 0, slots 23-26, circuits 0-15).

Field 5 Leave blank.

426 Word 1 Administers the feature characteristics for FADS.

Field 1 Enter the FADS assignment: 0 FADS not active

1 FADS active

Field 2 Enter the auto print assignment:

O Auto print not active

1 Auto print active

Field 3 Enter the number of minutes after the hour when print jobs will be done automatically (0-55 in 5-minute increments).

FOREIGN EXCHANGE ACCESS

The Foreign Exchange (FX) Access feature provides connectivity to central office (CO) trunks from areas outside of the local service area where the System 85 R2V4 is located. This feature provides the same functionality to the FX CO service area as is provided by local CO trunks in the local dialing area. This includes use of features such as Direct Inward Dialing (DID), Direct Outward Dialing (DOD), Listed Directory Number (LDN), Remote Access, and Personal CO Line.

Assignment of the FX Access feature is on a per-system and per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection

Attendant Display

Intercept Treatment

Restriction — Miscellaneous Trunk Restrictions

Route Advance.

Procedure Sequence

ADD	CHANGE	REMOVE
103 Word 1	103 Word 1	103 Word 1
115 Word 1	115 Word 1	115 Word 1

Procedure Usage

103 Word 1 Specifies which World Class Routing options, and other features (such as FRL and Authorization Codes), are in effect for any particular trunk group.

115 Word 1 Administers an incoming termination point to a trunk group (if desired).

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the trunk group termination point:

- Trunk group terminates in an ACD group
- Trunk group terminates on local attendant
- 1 Trunk group terminates on CAS
- 2 Trunk group terminates on VDN

HOLD

The Hold feature allows a voice terminal user to hold incoming, outgoing, or intraoffice calls. This frees the same extension number to originate another call, activate a feature, or return to a previously held call. This last capability also allows a user to alternate between two calls, holding one while connected to the other. Additionally, an existing call can be placed on hold to prevent the held party from overhearing office discussions.

Assignment of the Hold feature is on an extension class-of-service and then on a per-line basis. On multiappearance voice terminals, the hold button is fixed and cannot be changed (Procedure 054 Word 3). On single-appearance voice terminals, the Hold feature is used and all other procedures in this chapter must be used.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1 350 Word 2	350 Word 2	010 Word 1 350 Word 2

Procedure Usage

010 Word 1 Administers the Hold feature to an extension class-of-service.

Field 1 Enter the class of service (1-30, 32-63).

Field 6 Enter the Hold assignment:

0 Disable1 Enable

350 Word 2 Administers the Hold dial access code.

Field 1	Enter a "4" for the Hold feature.
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

HOST COMPUTER ACCESS

The Host Computer Access feature provides switched digital access between data endpoints with Digital Communications Protocol (DCP) interface to a DEFINITY Generic 2 and a host computer. Host computers are connected to a general purpose port (GPP) or digital line on the system through a data module or directly to an EIA port circuit or a data line circuit (DLC). The data module or EIA port converts the EIA RS-232C signals from the host computer to the DCP format of the Generic 2 and vice versa. Both formats are digital, but the communications and signaling channels differ. Generic 2 terminals can also interface to data modules. Another digital host access arrangement is provided by the Digital Multiplexed Interface (DMI) feature.

Assignment of the Host Computer Access feature is on a system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Bearer Capability

Restriction — Miscellaneous Trunk Restrictions

Route Advance.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 5	100 Word 5	100 Word 5
103 Word 1	103 Word 1	103 Word 1

Procedure Usage

100 Word 5 Administers the data line circuit (DLC) trunk group port parameters for ports administered as EIA or ISN data trunk groups.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the keyboard dialing option: 0 Disable 1 Enable
Field 3	Enter the configuration option: 0 Disable 1 Enable
Field 5	Enter the busy out option: 0 Disable 1 Enable
Field 5	Enter the auto adjust option: 0 Disable 1 Enable
Field 6	Enter the permit mismatch option: 0 Disable 1 Enable
Field 7	Enter the dial echo option: 0 Disable 1 Enable
Field 8	Enter the answer text option: 0 Disable 1 Enable
Field 9	Enter the disconnect sequence option: One break greater than two seconds Two breaks within one second
Field 10	Enter the connected indication option: 0 CONNECTED is not sent to DTE 1 CONNECTED is sent to DTE
Field 11	Enter the desired parity: 0 Space 1 Mark 2 Even 3 Odd

Fields 12-18 Enter a "1" in the fields corresponding to the data rate desired.

103 Word 1 Administers Data Protection to an assigned trunk group.

Field 1 Enter the trunk group number.

Field 10 Enter the Data Protection encode:

0 Disable1 Enable

HOT LINE

The Hot Line feature provides automatic dialing of a predesignated number by going off-hook. Either single-line analog voice terminals or data modules administered for default dialing can be assigned as Hot Line stations. An analog voice terminal is used for Hot Line voice service. The voice terminal is assigned a personal abbreviated dialing list (see the Abbreviated Dialing feature). When administered as a Hot Line station, the first entry in the "A" list is dialed automatically when the terminal goes off-hook. The Hot Line number can have up to 20 digits. This provides Hot-Line service to either on- or off-premises destinations. Any other entries in the list are ignored with this arrangement, and it is not generally possible to activate other calling features and services from a Hot Line station. Unless separately restricted, Hot Line stations can receive incoming calls normally.

Assignment of the Hot Line feature is on a per-station basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Attendant Console Administration

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 3	059 Word 1	000 Word 3
059 Word 1	059 Word 2	059 Word 1
059 Word 2	059 Word 4	
059 Word 4		

Procedure Usage

000 Word 3 Administers the Hot Line service to a voice terminal or data module extension number.

Field 1 Enter an extension (000-99999).
Field 2 Enter the Hot Line assignment:

- 0 This extension is not a hot line
- 1 This extension is a hot line

059 Word 1 Administers a personal abbreviated dialing list to an equipment location of a voice terminal.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $ \\$
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter a "1" to specify access to "List A."
Field 7	Enter the group list number (1-9999).
Field 8	Enter "5" for list size.
Field 9	Leave blank.
Field 10	Leave blank.

059 Word 2 Administers list item number one for a voice terminal used for Hot Line service.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter a "1" to specify access to "List A."
Field 7	Leave blank.
Field 8	Enter a "1" for personal list item 1.

Field 9	Enter the segment number:	
	1 Characters 1-4	
	2 Characters 5-8	
	3 Characters 9-12	
	4 Characters 13-16	
	5 Characters 17-20	
Field 10	Enter the read/write mode:	
	-, 1 Read/Write - machine-used table	
	0 Read/Write - scratch-pad table	
	For a display (read) routine:	
	-, 1 Read list item from machine-used table	
	0 Read list item from scratch-pad table	
	For a change (write) routine:	
	Write list item to machine-used table	
	0 Write list item to scratch-pad table	
Fields 11-14	Enter the characters and special functions that will be dialed	
	when the list item is selected:	
	0-9	
	11 or *	
	12 or #	
	Function entry	
	Pause (wait for dial tone)	
	Wait (wait for dial tone)	
	16 Mark	
	17 Await dial tone	
	Manual digit entry (followed by a number from 1-15)	
	19 Suppress display	
	20 End of dialing character	
Administers a Ho	ot Line assignment for calls to a data module.	
Field 1	Enter the module number (0-30).	
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).	
	,	
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).	
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).	
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for	

universal and XE modules).

059 Word 4

Field 6	Enter "0" for basic set device type.	
Field 7	Enter the member (button) number (0-62).	
Field 8	Enter the segment number: - Assign automatic dialing button 1 Characters 1-4 2 Characters 5-8 3 Characters 9-12 4 Characters 13-16 5 Characters 17-20	
Field 9	Enter the read/write mode: -, 1 Read/Write - machine-used table 0 Read/Write - scratch-pad table For a display (read) routine: -, 1 Read list item from machine-used table 0 Read list item from scratch-pad table	
	For a change (write) routine: Write list item to machine-used table Write list item to scratch-pad table	
Fields 10-13	Enter the additional characters and special functions: 0-9 11 or * 12 or # 13 Function entry 14 Pause (wait for dial tone) 15 Wait (wait for dial tone) 16 Mark 17 Await dial tone 18 Manual digit entry (must be followed by a number from 1-15) 19 Suppress display 20 End of dialing characters	
	End of dialing character	

HUNTING

The Hunting feature routes calls directed to a busy terminal to other terminals in a predetermined group (hunt group). The status (busy or idle) of extensions within the group is checked in order. If an extension is busy, the call routes (hunts) to the next extension. This hunting process continues until an idle extension is found or the hunt group has been exhausted, depending on the type of hunting that is used. There are two types of hunting or search patterns that can be used: circular or linear.

Assignment of Hunting is on a per-extension basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	000 Word 2	000 Word 2
010 Word 1		010 Word 1

Procedure Usage

000 Word 2	Administers a hunt-to extension to an extension in a hunt group.	
	Field 1	Enter an extension that you want to hunt from.
	Field 2	Enter an extension that you want to hunt to.
010 Word 1	Administers "stop hunt" to an extension class of service.	
	Field 21	Enter the stop hunt assignment:
		0 Hunting
		1 No hunting

INFORMATION SYSTEMS NETWORK INTERFACE

The Information Systems Network (ISN) Interface is a packet-switched Local Area Network (LAN) that connects digital processors and devices in an asynchronous distributed processing system. The distribution system and carrier medium can be all-wire or a combination of wire and optical fiber. The ISN Packet Controller is a high-speed packet switch that moves packets of information from one network component to another. A single packet controller can service as many as 1920 asynchronous data devices (ISN stations). Additional information on the ISN can be found in *An Introduction to ISN* (555-300-020).

The trunk ports that connect the DEFINITY Generic 2 system to the ISN are assigned on a per-trunk basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Extension Number Portability

Restriction — Miscellaneous Trunk Restrictions

Route Advance.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 5	100 Word 5	260 Word 1
260 Word 1	260 Word 1	100 Word 5

Procedure Usage

100 Word 5 Administers the data-line circuit trunk group port parameters for ports administered as EIA or ISN data trunk groups.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the keyboard dialing option: 0 Disable 1 Enable
Field 3	Enter the configuration option: 0 Disable 1 Enable
Field 5	Enter the busy out option: 0 Disable 1 Enable
Field 5	Enter the auto adjust option: 0 Disable 1 Enable
Field 6	Enter the permit mismatch option: 0 Disable 1 Enable
Field 7	Enter the dial echo option: 0 Disable 1 Enable
Field 8	Enter the answer text option: 0 Disable 1 Enable
Field 9	Enter the disconnect sequence option: One break greater than two seconds Two breaks within one second
Field 10	Enter the connected indication option: 0 CONNECTED is not sent to DTE 1 CONNECTED is sent to DTE
Field 11	Enter the desired parity: 0 Space 1 Mark 2 Even 3 Odd

Fields 12-18 Enter a "1" in the fields corresponding to the data rate desired.

Administers the interface characteristics. 260 Word 1

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the alarm level encode: - Conventional 0 None 1 Warning (default) 2 Minor 3 Major
Field 6	Enter the framing format encode: 0 D4 (superframe) 1 FE (extended superframe)
Field 7	Enter a "0" for 23 B plus 1 D-channel signaling.
Field 8	Enter a "0" to specify "24th channel signaling."
Field 9	Enter the suppression encode: 0 Zero code suppression 1 Binary-8 zero code suppression
Field 10	Enter a "0" to disable slip count.
Field 11	Enter the external loop encode: 0 Disable 1 Enable
Field 12	Enter a "0" to specify no equipment type.
Field 13	Enter a "0" to specify there is no SCS reference.
Field 14	Enter a "
Field 16	Enter the transmission medium: - Not applicable 0 Copper (T1) 1 Fiber optics

INTEGRATED SERVICES DIGITAL NETWORK/BASIC RATE INTERFACE

The primary advantage of the Integrated Services Digital Network/Basic Rate Interface (ISDN/BRI) feature is that it provides end-to-end digital connectivity. Another advantage of ISDN/BRI is that the interface provides high-speed digital line connectivity between the DEFINITY Generic 2 system and the BRI terminals. With ISDN/BRI service, each BRI station has its own interface that sends and receives control and signaling messages. ISDN/BRI stations can be set up in three different configurations (same as DCP terminals):

- Voice terminal only
- Data terminal only
- Both voice and data terminals.

Remote Groups do not support ISDN/BRI.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration
See the "Administering AT&T BRI Terminals and Data Modules" section.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Bearer Capability

Defining a Bearer Capability Class of Service (BCCOS) for ISDN facilities can reduce the number of call failures and optimize facility use (only capable users will access defined facilities).

Procedure Sequence

ADD CHANGE REMOVE

010 Word 4	010 Word 4	010 Word 4
262 Word 1	262 Word 1	262 Word 1
262 Word 3	262 Word 3	262 Word 3
275 Word 4		275 Word 4

Procedure Usage

010 Word 4 Administers ISDN access and routing to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 3 Enter the ISDN routing access:

- ISDN service is not supported
- 0 Use any facility
- 1 Use ISDN exclusively
- 2 Use ISDN if available or else use any available facility

262 Word 1 Administers ISDN board parameters for ISDN/BRI terminals.

- Field 2 Enter the cabinet number (0 for universal and XE modules).
- Field 3 Enter the port carrier number (c-e for universal and XE modules).
- Field 4 Enter the slot number in the port carrier (1-20 for universal

modules and 1-18 for XE modules).

- Field 5 Enter the circuit number $(0, 2, 4, 6, \dots 22)$.
- Field 9 Enter the Timer T203 encode (0-255 in increments of 1 second).
- Field 10 Enter the Timer T200 encode ((0-255 in increments of 0.1

second).

- Field 11 Enter the Counter N200 encode (1-10).
- Field 12 Enter the Counter K encode (1-7).

262 Word 3 Administers ISDN/BRI hyperactivity management.

Field 1	Enter the module n	umber (0-30).
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- Field 2 Enter the cabinet number (0 for universal and XE modules).
- Field 3 Enter the port carrier number (c-e for universal and XE modules).
- Field 4 Enter the slot number in the port carrier (1-20 for universal

modules and 1-18 for XE modules).

Field 5 Enter the circuit number (0, 2, 4, 6, . . . 22 for BRI links).

Field 7 Enter the hyperactivity management encode.

- No BRI circuit assigned
- 0 Not assigned
- 1 Assigned

275 Word 4 Enables the ISDN feature.

Field 14 Enter the ISDN feature activation:

Feature not available

0 ISDN not active

1 ISDN active

INTEGRATED SERVICES DIGITAL NETWORK/PRIMARY RATE INTERFACE

The Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI) feature provides system-to-system ISDN capability to the DEFINITY Generic 2 system. The PRI, while not extending ISDN connectivity to the terminal level for Digital Communication Protocol (DCP) terminals, does provide signaling and service advantages between systems and improved informational services available at the terminal level. The PRI feature does provide external connections for ISDN Basic Rate Interface (BRI) terminals and in this case, ISDN End-to-End Connectivity is possible.

With PRI, individual stations work within the network provided by the local system. Generally, these do not have direct ISDN connectivity. The features and services available to each station are provided by the local system and not by the ISDN. The North American arrangement corresponds to the North American DS1 format with common channel signaling.

In the North American version, the main difference between ISDN/PRI and the standard version of DS1 is signaling. ISDN uses Message Oriented Signaling (MOS), while standard DS1 uses a form of Bit Oriented Signaling (BOS). ISDN/PRI is very similar to DMI-MOS, the main difference being ISDN/PRI has a larger message set than DMI-MOS.

A new arrangement called Non-Facility Associated Signaling (NFAS) is now available with ISDN/PRI. NFAS uses one D-channel to do the signaling for several B-channels (up to 255).

The ISDN/PRI feature is assigned on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

NFAS is an arrangement of ISDN/PRI that is administered a little differently than standard ISDN/PRI. NFAS requires that Procedure 262 Word 1 and Procedure 262 Word 2 are administered immediately after Procedure 260 Word 1. Standard ISDN/PRI doesn't have this requirement.

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

The Trunk Administration section contains a subsection called digital trunks. The digital trunks section includes trunk administration of ISDN/PRI.

World Class Routing (WCR)

Calls placed over ISDN/PRI trunk facilities must use the WCR feature.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Display

This feature allows the attendant to display incoming call identification (ICI) information over incoming ISDN trunks.

Administers LDNs to attendant consoles and associated partitions. For ISDN, each attendant console must be assigned an LDN for use in the outgoing call message when an ISDN call is placed from the attendant console.

Bearer Capability

Defining a Bearer Capability Class of Service (BCCOS) for ISDN facilities can reduce the number of call failures and optimize facility use (only capable users will access defined facilities).

Display-Voice Terminal

Voice terminals with ISDN/PRI access can use this feature to display the calling and connected parties name and number over a trunk call. The calling number display function can be used on ISDN/PRI calls to send the calling number over the trunk, this capability is administered in this feature (Procedure 354 Word 3).

Restriction-Miscellaneous Trunk Restrictions

Restriction-Voice Terminal Restrictions

Route Advance

Trunk Verification — Attendant

Trunk Verification — Voice Terminal.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 3	100 Word 3	100 Word 3
103 Word 1	290 Word 1	290 Word 1
260 Word 1	290 Word 2	000 Word 4
262 Word 1	260 Word 1	354 Word 3
262 Word 2	262 Word 1	262 Word 3
262 Word 3	262 Word 2	262 Word 2
279 Word 1	262 Word 3	262 Word 1
210 Word 2	354 Word 3	103 Word 1
354 Word 3	000 Word 4	354 Word 3

000 Word 4	010 Word 4	000 Word 4
010 Word 4	279 Word 1	210 Word 2
275 Word 4	210 Word 2	279 Word 1
280 Word 1	010 Word 4	280 Word 1
	275 Word 4	275 Word 4
	279 Word 1	
	280 Word 1	

Procedure Usage

000 Word 4 Administers the single terminal translations, including a code for the NPA-NXX designator used with ISDN calling number identification. (See also Procedure 354 Word 3.)

Field 1 Enter an extension (000-99999).

Field 4 Enter the NPA-NXX (1-99).

010 Word 4 Administers the ISDN access and routing to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 3 Enter the ISDN routing access:

- ISDN service is not supported

0 Use any facility

1 Use ISDN exclusively

2 Use ISDN if available or else use any available facility

100 Word 3 Administers the trunk types and specific signaling for ISDN trunk groups.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter a "20" for all ISDN trunk groups.

Field 4 Enter the retry specifications (for use with trunks 41, 42, 43, 46,

47, and 120):

0 Disabled

1 Enabled

Field 5 Enter the outgoing seizure on maintenance busy out

specifications:

0 Disabled

1 Enabled

Field 6 Enter the incoming permanent seizure specifications:

0 Disabled

1 Enabled

Field 7 Enter the failure threshold limit (only on trunk types 41, 42, 43,

46, and 47):

0 No failure threshold

1-99 Failure threshold limit

Field 8 Enter the encode if the optional ISDN information is included in

the ISDN message:

- Not applicable — ISDN service is not available

0 Data included in ISDN message

Data not included in ISDN message incoming DCS

calls to be displayed.

Data and calling party number displayed; data included in ISDN messages and the calling party number for incoming DCS calls will be displayed

Field 9 Enter the Network Service Value (1-511, 999).

103 Word 1 Administers the network translations for assigned trunk groups.

Field 1 Enter the trunk group number (18-999).

Field 14 Enter a "0" to collect all the digits before outpulsing. For new trunk groups, "0" is the default.

108 Word 1 Administers the ISDN Terminating Test Line telephone digits.

Field 1 Enter the trunk group number (18-999).

Fields 2-17 Enter the test line dialed digits (-, 0-9).

210 Word 2 Administers an NPA-NXX designator to an attendant console for use with the ISDN Calling Number Display function.

Field 1 Enter the console number (1-40).

Field 5 Enter the NPA-NXX designator (-, 1-99).

260 Word 1 Administers the ISDN interface circuits with signaling and SCS parameters. The ISDN circuit pack for a traditional module is the ANN35, and for the universal module it's the TN767 supported by the TN555.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).

Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4 Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).

Field 5 Enter the alarm level encode:

- Conventional
- 0 None
- 1 Warning (default)
- 2 Minor
- 3 Major

Field 6 Enter the framing format encode:

- 0 D4 (superframe)
- 1 FE (extended superframe)
- Field 7 Enter the channel signaling specification:
 - 0 23 B plus 1 D-channel (standard PRI)
 - 1 24 B-channel (NFAS)

If administering NFAS, at least one board in an NFAS group must be administered for 23 B plus 1 D-channel to supply signaling.

- Field 8 Enter a "0" to specify "24th channel signaling."
- Field 9 Enter the suppression encode:
 - 0 Zero code suppression
 - 1 Binary-8 zero code suppression
- Field 10 Enter a "0" to disable slip count.
- Field 11 Enter the external loop encode:
 - 0 Disabled
 - 1 Enabled
- Field 12 Enter a "1" to specify that this circuit is receiving the incoming synchronization source from an SCS on another system.
- Field 13 Enter the SCS reference for this circuit pack. Make sure this SCS reference is coordinated between the central office and the network your system is connected to. If this circuit pack is administered as the primary SCS reference, make sure the circuit pack on the other end of the interface is administered with a "0" in this field (no SCS reference).
 - 0 No SCS reference
 - 1 Primary SCS reference
 - 2 Secondary SCS reference
- Field 14 Enter a "5" to specify the application type as "ISDN/PRI, DMI-MOS."
- Field 15 Enter the encode for bit inversion.
 - Not applicable
 - 0 Bit inversion
 - 1 No bit inversion
- Field 16 Enter the transmission type.
 - Not applicable
 - 0 Copper (T1)
 - 1 Fiber
- 262 Word 1 Administers specific ISDN board options such as interface type, ISDN facility test type, Terminal Endpoint Identifier (TEI), and ISDN level 2 protocol parameters.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4	Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-19 for universal modules, 1-17 for XE modules).
Field 5	Enter the circuit number (- for PRI link, 0-11 for BRI circuit).
Field 6	Enter the interface type: 0 For user side (to CO to other PBX) 1 For network side (to other PBX)
Field 7	Enter the ISDN facility test type: 0 None 1 Level 2 2 Level 3 3 Both level 2 and level 3
Field 8	Enter a "0" as the assigned terminal endpoint identifier for use with Procedure 648.
Field 9	Enter the timer delay in seconds (0-255, default is 30).
Field 10	Enter the timer delay in tenths-of-seconds (0-255, default is 10).
Field 11	Enter the number of retransmissions allowed (1-10, default is 3).
Field 12	Enter the maximum number of outstanding data packets to be transmitted (1-7, default is 7).
Field 13	Enter the PRI interface identifier (0-31).
262 Word 2 Administers a ba	ackup D-channel to a primary D-channel for ISDN/PRI.
Field 1	Enter the D-channel group number (1-255).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 5	Enter the slot number in the port carrier (5 and 18 for traditional
	modules, 1-19 for universal modules, 1-17 for XE modules).
Field 6	modules, 1-19 for universal modules, 1-17 for XE modules). Enter the module number (0-30).
Field 6 Field 7	
	Enter the module number (0-30). Enter the cabinet number (0-7 for traditional modules, 0 for

262 Word 3 Administers the ISDN link parameters for codeset and codepoint mapping and BRI/PRI terminal hyperactivity management.

Field 1 Enter the module number (0-30). Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). Field 4 Enter the slot number in the port carrier (5 and 18 for traditional modules, 1-19 for universal modules, 1-17 for XE modules). Field 5 Enter the BRI circuit number (-, 0-7 for traditional modules, 0 for universal and XE modules). Field 6 Enter the codeset map number: Unassigned and PRI applications 0-15 Assigned Field 7 Enter the Hyperactivity Management control: Disabled 1 Enabled

275 Word 4 Administers the ISDN status for the system class of service.

Fields 5-11

Field 14 Enter the ISDN feature activation:

Feature not available

0 ISDN not active

1 ISDN active

279 Word 1 Administers the ISDN network specific facility (NSF) value used by the ISDN message creation for NSF information element (IE). This information element is used to indicate which network facilities are invoked. The facilities that can be identified are listed under field 4 (facility coding value).

Field 1 Enter the ISDN Network Service Value (-, 1-511).

Field 2 Enter the parameterized or binary encode:

0 Parameterized
1 Binary

Field 3 Enter the feature or service encode.

0 Feature
1 Service

Field 4 Enter the facility coding value (-, 0-31).

Enter the parameters (-, 0-12, 14-15, 17-96)

280 Word 1 Administers the ISDN codeset mapping translations. This allows the system to send and receive the correct ISDN codesets for telephone display messages. For instance, codeset 7 in System 85 R2V4 must be mapped to codeset 6 in Generic 2.

Use the following mappings for codesets between System 85 R2V4 and Generic 2:

Field 1	Field 2	Field 3	Field 4	Field 5	Field 6
1	0	7	1	6	64
1	0	7	2	6	62
1	0	7	4	6	26
1	0	7	8	6	8
1	0	7	40	6	40
2	1	6	64	7	1
2	1	6	62	7	2
2	1	6	26	7	4
2	1	6	8	7	8
2	1	6	40	7	40

- Field 1 Enter the codeset map number (-, 0-15).
- Field 2 Enter incoming or outgoing encode:
 - 0 Mapping for incoming messages
 - 1 Mapping for outgoing messages
- Field 3 Enter the codeset encode:
 - 0 Basic information elements
 - 1-5 Reserved for future standards
 - 6 Local serving network information elements
 - 7 User-specific information elements
- Field 4 Enter the information element opcode (-, 0-127).

This administers the "mapped from" codeset/information element. The information element opcodes differ depending on the codeset (field 3). If you want all information elements mapped between codesets, enter a dash in field 4. If disabling a codeset, enter dashes in fields 4, 5, and 6.

Field 5 Enter the codeset encode:

- Codeset in field 3 is disabled
- 0 Basic information elements
- 1-5 Reserved for future standards
- 6 Local serving network information elements
- 7 User-specific information elements
- Field 6 Enter the information element opcode (-, 0-127).

This administers the "mapped to" codeset/information element. The information element opcodes differ depending on the codeset (field 3). If you want all information elements mapped between codesets, enter a dash in field 6. If disabling a codeset, enter dashes in fields 4, 5, and 6.

290 Word 1 Displays DS1 trunk interface and SCS circuit equipment locations and identification information.

Field 1 Enter the port type:

25 ISDN Real

26 ISDN Virtual

290 Word 2 Displays the circuit pack identification of installed circuit packs.

Field 1 Enter the module number (0-30, 99).

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for

universal and XE modules).

Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for

universal and XE modules).

Field 4 Enter the slot number in port carrier (0-3, 5-8, 13-16, 18-21 for

traditional modules, 1-19 for universal modules, 1-17 for XE

modules).

354 Word 3 Administers the prefix digits (NPA-NXX-X) to the extension translation codes assigned in Procedure 000 Word 4 and Procedure 210 Word 2. These are used to provide ISDN calling number display.

Field 1 Enter the NPA/NXX designator (1-99).

Field 2 Enter the NPA (200-219, 300-319, 400-419, 500-519, 600-619,

700-719, 800-819, 900-919).

Field 3 Enter the NXX (200-999).

Field 4 Enter the thousands digit (-, 0-9).

INTERCEPT TREATMENT

The Intercept Treatment feature provides consistent treatment for calls that cannot complete in the normal manner.

Assignment of the Intercept Treatment feature is on a per-call type basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Procedure Sequence

ADD	CHANGE REM		
204 Word 1	204 Word 1	204 Word 1	
289 Word 1	289 Word 1	289 Word 1	
350 Word 2	350 Word 2	350 Word 2	

Procedure Usage

204 Word 1

Administers the console messages for the three classes of intercepted calls: vacant dial access code, restricted feature or facility, or recently disconnected extension. This procedure also administers a message for attendant diversion to recorded announcement. You need the call type, the message number, and the message characters.

Field 1	Enter the	Enter the call type:					
	2305	Calls to vac	ant dial acce	ess co	ode		
	2306	Calls to res	tricted featur	res or	trunks		
	2307	Calls to rec	ently discon	necte	d extension	S	
	2308	Attendant	diversion	to	recorded	to	recorded
		announcem	ent				

Field 2 Enter an unused message number (4-63, whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

Administers the intercept treatment for calls from the public network, a private network, or from extensions. Set the source, the intercept treatment, and the recorded announcement number (only if the intercept treatment is to use a recorded announcement). If field 1 is "0", you must have a "1" in field 2.

Field 1 Enter the intercept type:

- O Attendant diversion to recorded announcement independent of source
- 1 Calls from a public network to a vacant DAC
- 2 Calls from a public network to restricted features or trunks
- 3 Calls from a public network to recently disconnected extensions
- 9 Calls from a private network to a vacant DAC
- 10 Calls from a private network to restricted features or trunks
- 11 Calls from a private network to recently disconnected extensions
- 17 Calls from an extension to a vacant DAC
- 18 Calls from an extension to restricted features or trunks
- 19 Calls from an extension to recently disconnected extensions

Field 2 Enter the intercept treatment:

- O Appropriate tone (reorder or intercept depending on source)
- 1 Recorded announcement
- 2 Diversion to the attendant
- 3 Recorded announcement followed by diversion to the attendant

Field 3 Enter the recorded announcement number (1-15).

350 Word 2 Administers the feature dial access codes for diverting attendant calls to recorded announcement.

Field 1	Enter the feature encode: 80 Divert attendant calls to recorded announcement - activate
	81 Divert attendant calls to recorded announcement - cancel
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

INTERCOM — AUTOMATIC

The Automatic Intercom feature provides the equivalent of a dedicated talking path between two multiappearance voice terminals. One of six different ringing patterns can be used to alert the called terminal when the calling terminal goes off-hook. This choice of ringing is made on a per-system basis and is used for both Automatic and Dial Intercom.

Assignment of the Intercom feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
056 Word 1	056 Word 1	056 Word 1
061 Word 1	061 Word 1	

Procedure Usage

056 Word 1 Administers the intercom type and ring rate for an assigned multiappearance voice terminal.

Field 1	Enter a "0" for the automatic intercom type.
Field 2	Enter the intercom number (1-300).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).

Field 7 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 8	Enter the	e device type:
	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
Field 9	Enter the	e member (button) number (0-62).
Field 10	Leave b	lank.
Field 11	Enter a '	"1" for the automatic signal type.

061 Word 1 Specifies the six possible intercom ringing patterns.

Field 1 Enter the intercom ringing pattern:

0 Ring 1

1 Ring 2

2 Ring 3

3 Ring-ping

4 Buzz 1

5 Buzz 2

INTERCOM — DIAL

The Dial Intercom feature allows multiappearance voice terminal users to gain rapid access to 27 other multiappearance voice terminal users in the same intercom group. There is a choice of six different ringing patterns that the called party can receive when reached. This choice of ringing is made on a per-system basis, and is used for both Dial and Automatic Intercom. The selected pattern lets the called party know that someone within the intercom group is calling. This feature also reduces dialing time.

Assignment of the Intercom feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
056 Word 1	056 Word 1	056 Word 1
061 Word 1	061 Word 1	

Procedure Usage

056 Word 1 Administers the intercom type, dial code, and signal type for an assigned multiappearance voice terminal.

Field 1	Enter a "1" for the dial intercom type.
Field 2	Enter the intercom number (1-280).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE

modules).

Field 7 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 8	Enter the device type:	
riciu o	Effici the device type.	
	0 Basic set	
	1 Feature module	
	2 Coverage module	
	3 Display module	
	4 ADFTC/MTCP	
Field 9	Enter the member (button) number (0-62).	
Field 10	Enter the terminal's unique intercom-dial code	(-, 00-99).
Field 11	Leave blank.	

061 Word 1 Specifies the six possible intercom ringing patterns.

Field 1 Enter the intercom ring rate:

0 Ring 1

1 Ring 2

2 Ring 3

3 Ring-ping

4 Buzz 1

5 Buzz 2

INTERCOM — MANUAL

The Manual Intercom feature allows a multiappearance terminal user to access other multiappearance terminals assigned to the same intercom group. At any one time, up to three users in the group can be connected to a single call.

Assignment of the Intercom feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE	
053 Word 1	053 Word 1	053 Word 1	
056 Word 1	056 Word 1	056 Word 1	

Procedure Usage

053 Word 1 Administers a signaling and a signaled terminal for Manual Signaling. The first equipment location is for the signaling terminal (Fields 1-7). The second equipment location is for the signaled terminal (Fields 8-12).

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

	Field 6	Enter the device type: 0 Basic set 2 Coverage module
	Field 7	Enter the member (button) number (0-62).
	Field 8	Enter the module number (0-30).
	Field 9	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 10	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 11	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
	Field 12	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
056 Word 1	Administers the terminal.	intercom type and features to an assigned multiappearance voice
	Field 1	Enter a "0" for the manual intercom type.
	Field 2	Enter the intercom number (1-300).
	Field 3	Enter the module number (0-30).
	Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
	Field 7	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
	Field 8	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
	Field 9	Enter the member (button) number (0-62).
	Field 10	Leave blank.

Field 11 Enter a "0" for the manual signal type.

INTEREXCHANGE CARRIER ACCESS

The Interexchange Carrier (IXC) Access feature allows customers to specify the particular interexchange carrier vendor (e.g., AT&T, MCI, Sprint, etc.) to be used for calls to a given dialing destination. The IXC feature is assigned on a per-system basis and can use the World Class Routing (WCR) feature to route calls to administratively selected long distance service vendors. This feature is transparent to the system user.

As is the case in Generic 2.1, an IXC can be automatically specified by assigning an IXC facility to a trunk group. In addition, the WCR feature can be administered to ignore a dialed IXC access code, send a dialed IXC access codes, or substitute a dialed IXC access code with another IXC code.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

When used with WCR, the WCR feature must be administered first.

Procedure Sequence

ADD	CHANGE	REMOVE
321 Word 1	321 Word 1	321 Word 1

Procedure Usage

321 Word 1 Administers WCR digit sending translations.

Field 7	Enter the	e "send IXC" flag:
	0	Do not send any IXC (default)
	1	Send dialed IXC or else send no IXC
	2	Send dialed IXC or else send assigned IXC
	3	Send assigned IXC.

CIC DIGITS (Fields 8-11):

Use fields 8-11 to enter the carrier identification code (CIC) that WCR uses to create the administered IXC. WCR creates the administered IXC by taking the CIC and prepending the digits "10", except when the CIC is four digits long. In that case, the digits "101" are prepended.

For example, AT&T's CIC is 288. WCR would prepend the digits "10" to form the AT&T IXC access code (10288). (Hopefully, this example is academic since AT&T would be the designated carrier rather than an alternate.)

Field 8	Enter the first digit (-,0-9)
Field 9	Enter the second digit (-,0-9)
Field 10	Enter the third digit (-,0-9)
Field 11	Enter the fourth digit (-,0-9)

INTERPARTITION ACCESS

The Interpartition Access (IPA) feature provides greater calling flexibility in a partitioned DEFINITY Generic 2 system. Using IPA, a voice terminal user in one extension partition can call a voice terminal user in another extension partition, provided *both* partitions belong to the same partition group. See the chapter on "Tenant Services" in this manual for more information on partitioning.

Assignment of the Interpartition Access feature is on a per-extension partition basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Tenant Services.

Procedure Usage

270 Word 1 Administers an extension partition to a partition group.

Field 1 Enter the extension partition (0-999).

Field 2 Enter the attendant partition (-, 0-40).

Field 3 Enter the partition group (-, 1-500).

LAST NUMBER DIALED

The Last Number Dialed (LND) feature enables a voice terminal user to easily redial the last internal or external call. This function is primarily used for (one button) redialing a busy number. It also frees the user from repeatedly locating telephone numbers in the directory.

Assignment of the LND feature is on a per-system, per-trunk group, and per-voice terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Procedure Sequence

ADD	CHANGE	REMOVE	
054 Word 2	054 Word 2	054 Word 2	
101 Word 2	101 Word 2	101 Word 2	
350 Word 2	350 Word 2	350 Word 2	

Procedure Usage

054 Word 2 Administers the LND feature button to an assigned multiappearance voice terminal.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 6 Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP Field 7 Enter the member (button) number (0-62). Field 8 Enter a "1" to specify the button type as "LND."

Administers the LND redial delay timer to a trunk group. Any CO or tie trunk group that are directly accessed through LND should have a redial timer set. This interval is between 0 and 5 seconds in 0.1-second increments (with a default of 0 seconds).

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the redial delay time in tenths-of-seconds (0-50). Try using 30 (3 seconds) and adjust the length as necessary.

350 Word 2 Administers the LND dial access code.

Field 1 Enter a "59" for the LND feature.

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

LEAVE WORD CALLING

The Leave Word Calling (LWC) feature allows internal callers (internal to the local system or the Distributed Communications System) to leave messages for internal principals (the called parties) without the assistance of a secretary or Message Center agent.

Assignment of LWC is on a line class-of-service basis. Assignment of the message-storage destination is on a per-voice terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

LWC on an AP or on AUDIX (See Chapter 6, "DCIU Administration")

Message Waiting — Automatic

Names Database (See Chapter 2, "System Administration")

Display — Voice Terminal.

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	063 Word 2	000 Word 2
010 Word 2	000 Word 2	010 Word 2
051 Word 1	054 Word 1	051 Word 1
054 Word 1	054 Word 2	054 Word 1
054 Word 2	261 Word 1	054 Word 2
261 Word 1	350 Word 2	063 Word 2
275 Word 3		261 Word 1
350 Word 2		275 Word 3
		350 Word 2

Procedure Usage

Administers the LWC destination and the adjunct assigned for LWC messages. The LWC destination may be one of three possible destinations: AP, AUDIX, or the system. If LWC on the system is administered, none of the DCIU procedures must be administered (Procedures 256, 257, and 258).

Enter the AP destination: Field 8 0 Not assigned to an AP 1-7 Assigned to an AP Field 9 Enter the LWC destination: Not assigned 1 Switch (system) 2 AP 3 **AUDIX** Field 10 Enter the AUDIX destination: Not assigned 0 1-8 Assigned to AUDIX

010 Word 2 Administers LWC originating and LWC terminating to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 2 Enter the LWC originating:

0 Disable1 Enable

Field 3 Enter the LWC terminating:

0 Disable1 Enable

051 Word 1 Administers the lock/unlock option and the LWC — global retrieval capability to an assigned multiappearance voice terminal with display capabilities.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 12 Enter the lock/unlock availability:

0 Not available

1 Available

Field 14 Enter the LWC global retrieval assignment:

0 LWC global retrieval not allowed

1 LWC global retrieval allowed

054 Word 1 Administers the LWC — activate button to an assigned multiappearance voice terminal. It is recommended that you assign this feature to a button that has a status lamp. This allows the user to get better feedback on LWC status.

T. 114	E 1 11 1 (0.00)	
Field 1	Enter the module number (0-30).	

- Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
- Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
- Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
- Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
- Field 6 Enter the device type where the button will be assigned:
 - 0 Basic set
 - 1 Feature module
 - 2 Coverage module
 - 3 Display module
 - 4 ADFTC/MTCP
- Field 7 Enter the member (button) number (0-62).
- Field 8 Enter the extension number (-, 000-99999).
- Field 9 Enter a "22" to specify the button type as "LWC activate."
- **054 Word 2** Administers the LWC cancel button to an assigned multiappearance voice terminal.
 - Field 1 Enter the module number (0-30).
 - Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
 - Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter a "0" to specify the button type as "LWC — cancel."

063 Word 2 Searches and displays message waiting coverage (AP or AUDIX) for extension numbers.

Field 1	Enter the extension number (000-99999).
Field 2	Enter the AP number (-, 1-7).
Field 3	Enter the AUDIX number (-, 1-8).
Field 4	Enter the audible automatic message waiting assignment:
	- Not assigned
	1 Assigned

Provides the translation between an internal AP or AUDIX number and the network AP or AUDIX number. Included are the local adjunct, the local adjunct number, the local adjunct type, the version number, digit format, scrolling, and network adjunct number.

Field 1	Enter the local adjunct:	
	1	AP
	2	AUDIX
	3	DCS
Field 2	Enter the	e local adjunct number:
	1-7	AP
	1-8	AUDIX
	1-63	DCS node
Field 3	Enter the	e local adjunct type:
	1	AP 16
	2	3B5 AP or 3B2
	3	AUDIX

	4 5 6 7	System 75 or DEFINITY Generic 1 system System 85 Release 1 System 85 Release 2 or DEFINITY Generic 2 system Enhanced DIMENSION PBX
Field 4	Enter the	version number (-, 0-999).
Field 5	Enter the - 0 1	N-digit format: Does not apply Remote does not support N-digit format Remote supports N-digit format
Field 6	Enter the - 0 1	N-digit scrolling: Does not apply Does not support N-digit scrolling Supports N-digit scrolling
Field 7	Enter the	network adjunct number (-, 1-99).
Administers the	e demand pri	nt password activation.
Field 11	Enter the 0	demand print password activation: No password Password required
Administers the	e feature dial	access codes.
Field 1	Enter the 10 14 66 67 68 69	feature encode: Demand Printing Demand Print-Accessed LWC - activate LWC - cancel Lock Message Retrieval Unlock Message Retrieval
Field 2	Enter the 0-9 11 or * 12 or #	
Field 3	Enter the	second digit of the dial access code (0-9).

Enter the third digit of the dial access code (0-9).

Enter the fourth digit of the dial access code (0-9).

275 Word 3

350 Word 2

Field 4

Field 5

LINE LOCKOUT

The Line Lockout feature places a voice terminal in a lockout condition when the user goes off-hook and does not dial within 10 seconds or pauses for more than 10 seconds while dialing. This feature frees switching facilities for other calls. When the user's extension number is taken out of service, the system returns intercept tone for 10 seconds as a warning to the user. Going on-hook for 0.3 seconds restores service.

Procedure Usage

The Line Lockout feature is always provided. Feature administration is not required.

LINE/FEATURE STATUS INDICATION

The Line/Feature Status Indication feature provides a visual indication of a call's status and/or a feature's status (activated or deactivated) for each button on a multiappearance voice terminal. The visual indication is provided by lamps located beside the button they monitor. This feature reduces the likelihood of inadvertent call interruption and serves as a reminder of what features are active.

Procedure Usage

The Line/Feature Status Indication feature is provided automatically when an appearance or feature button is assigned to a multiappearance voice terminal.

LOOK-AHEAD INTERFLOW

The Look-Ahead Interflow feature is primarily used to interflow ACD calls to remote systems that back-up ACD splits and other answering locations. If a call comes into a local ACD split and cannot be answered, the call is routed to a remote location on a conditional basis. That is, if the call can be serviced within the customer's criteria.

To benefit from all the capabilities of Look-Ahead Interflow, the systems at both ends of the interflowed calls must have this feature administered.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Call Vectoring

Call Vectoring is required at the sending and receiving system. The sending system uses vectoring processing to decide whether or not a call is interflowed to a receiving system. The receiving system uses vector processing to decide if the call is to be accepted or rejected.

Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI)

In order to query the receiving system, the sending system must use an ISDN/PRI trunk group. In order for the the receiving system to respond, it must also use an ISDN/PRI trunk group. The ISDN routing class of service (Procedure 010 Word 4 field 3) should be set for off-net routing.

World Class Routing (WCR)

In order to route intertandem tie trunk calls, WCR must be administered on the sending system and WCR or Automatic Alternate Routing (AAR) must be administered on the receiving system. If a routing pattern is selected that does not use ISDN facilities (which is required to transmit the information elements), Look-Ahead Interflow call processing drops out of the call and the call is routed unconditionally. That is, no checking can be done to ensure the call will complete successfully.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Automatic Call Distribution (ACD)

ACD calls may be diverted through a system by Look-Ahead Interflow. Typically, calls routed with Call Vectoring terminate at ACD splits.

Procedure Sequence

ADD	CHANGE	REMOVE	
276 Word 1	276 Word 1	276 Word 1	
100 Word 3	100 Word 3	100 Word 3	

Procedure Usage

100 Word 3 Allows the Look-Ahead Interflow feature to be used on ISDN trunks.

Field 1 Enter the trunk group (18-999).

Field 8 Enter "0".

276 Word 1 Administers the Look-Ahead Interflow feature. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 9 Enter the Look-Ahead Interflow assignment:

0 Disable1 Enable

LOUDSPEAKER PAGING ACCESS

The Loudspeaker Paging Access feature allows attendants and voice terminal users to make announcements over a voice paging system. This simplifies contacting a given party by reducing the need for a messenger or repeated dialing. Paging is also useful for announcements during safety or emergency situations.

Assignment of the Loudspeaker Paging Access feature is on a per-system class-of-service and a per-line class of service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 1	100 Word 1	100 Word 1
101 Word 1	101 Word 1	101 Word 1
102 Word 1	102 Word 1	102 Word 1
103 Word 1	103 Word 1	103 Word 1
150 Word 1	150 Word 1	150 Word 1
010 Word 1	010 Word 1	010 Word 1
010 Word 3	010 Word 3	010 Word 3
054 Word 1	054 Word 1	054 Word 1
203 Word 1	203 Word 1	203 Word 1
275 Word 1		275 Word 1
350 Word 2		350 Word 2

Procedure Usage

010 Word 1 Administers priority paging to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 13 Enter the Priority Paging assignment:

- 0 Disable
- 1 Enable
- **010 Word 3** Administers the miscellaneous trunk restriction groups to an extension class of service.
 - Field 1 Enter the class of service (1-30, 32-63).
 - Fields 2-9 Enter the miscellaneous trunk restriction groups assignment:
 - O This COS is not denied access to trunk groups in this restriction group
 - 1 This COS is denied access to trunk groups in this restriction group
 - Field 10 Enter the miscellaneous trunk restrictions "group" assignment:
 - 0 Restrictions are determined by the values of fields 2-9
 - This COS is denied access to all trunk restriction groups assigned in Procedure 102 Word 1
- **054 Word 1** Administers the recall button to an assigned multiappearance voice terminal that doesn't have a fixed recall button.
 - Field 1 Enter the module number (0-30).
 - Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
 - Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
 - Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
 - Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
 - Field 6 Enter the device type where the button will be assigned:
 - 0 Basic set
 - 1 Feature module
 - 2 Coverage module
 - 3 Display module
 - 4 ADFTC/MTCP
 - Field 7 Enter the member (button) number (0-62).
 - Field 8 Enter the extension number (-, 000-99999).
 - Field 9 Enter a "27" to specify button type as "RECALL."

100 Word 1 Assign the trunk group dial access code and the loudspeaker paging interface trunk type to a trunk group number.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

Field 6 Enter "54" for loudspeaker paging interface trunk type.

101 Word 1 Feedback can occur when all-zones paging is used in three or more zones. To eliminate this problem, assign the trunk circuits serving zones 1 through 5 to their own trunk group with Procedure 100 Word 1, then use Procedure 101 Word 1 field 13 to set the pad group to "6" for that trunk group. Trunk circuits serving zones 6 through 18 should remain in a separate trunk group — do *not* use field 13 for this separate trunk group.

Field 1 Enter the trunk group number (18-999).

Field 13 Enter "6".

102 Word 1 Assign a loudspeaker paging trunk group dial access codes to a miscellaneous trunk restriction group.

Field 1 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 2 Enter the second digit of the dial access code (0-9).

Field 3 Enter the third digit of the dial access code (0-9).

Field 4 Enter the fourth digit of the dial access code (0-9).

Fields 5-12 Enter the groups to be restricted from dialing the access code in

fields 1-4:

0 Not restricted from dialing the access code in fields 1-4

1 Restricted from dialing the access code in fields 1-4

103 Word 1 Administers network trunk group parameters.

Field 1 Enter the trunk group number (18-999).

Field 7 If all-zone paging is desired, enter "1" to allow bridge-on.

150 Word 1 Administers analog trunks to a trunk group.

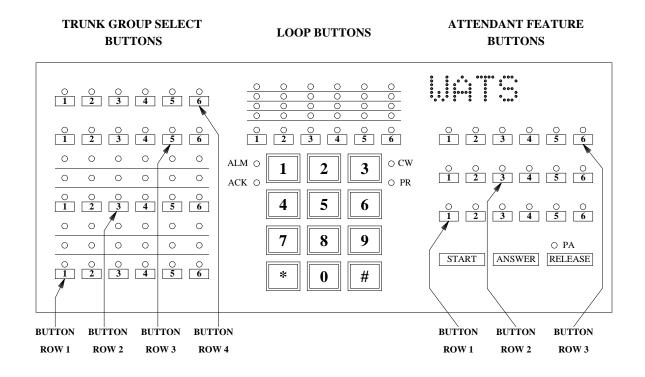
Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). $ \\$
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7).
Field 6	Enter the trunk group number (17-999).
Field 9	Enter the paging zone number (1-18).

203 Word 1 Administers the paging buttons on the attendant console. The buttons used for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter the button types in the desired location:

10 All zones 11 Regular zone 1 12 Regular zone 2 13 Regular zone 3 Regular zone 4 14 15 Regular zone 5 16 Regular zone 6 21 Priority zone 1 22 Priority zone 2 23 Priority zone 3 24 Priority zone 4 25 Priority zone 5 Priority zone 6 26



275 Word 1 Administers Loudspeaker Paging Access to the system class of service. Use of encode 2 requires that music-on-hold be administered.

Field 7 Enter the Paging/Code Calling assignment:

- 0 Disable
- 1 Paging with ringback
- 2 Paging with music-on-hold

350 Word 2 Administers the answer-back dial access code.

Field 1 Enter a "17" for paging answer-back.

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

MAIN/SATELLITE/TRIBUTARY

A Main/Satellite/Tributary configuration (see Figure 80-2) is an independent private network configuration that can also function as an Electronic Tandem Network access arrangement. For a Main/Satellite configuration, attendant positions and public network trunk facilities are concentrated at the main, and calls to or from satellite locations pass the main. To a caller outside the Main/Satellite complex, the system appears to be a single system with one listed directory number. A tributary location is similar to a satellite location with the following exceptions: (1) a tributary has one or more attendant positions, and (2) a tributary has its own listed directory number.

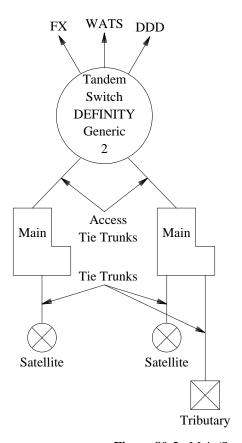


Figure 80-2. Main/Satellite and Main/Tributary Configuration

A small business can start with a single Main/Satellite or Main/Tributary complex and add trunk and switching facilities as the business grows. Figure 80-3 illustrates a Main/Satellite configuration in which tie trunks connect the main locations within an urban area and the public network carries intercity call traffic.

This arrangement favors a medium-sized organization or one that has small isolated locations where intercity traffic volume is not heavy enough to justify the cost of tie trunks. In a partially connected network such as this, private network features are only available between systems connected by tie trunks.

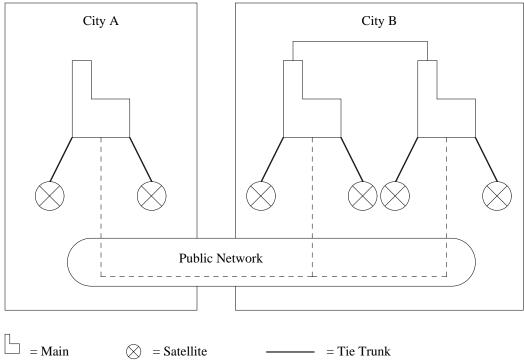


Figure 80-3. Partially Connected Main/Satellite Configuration

Assignment of the Main/Satellite/Tributary feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Extension Number Portability

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

World Class Routing (WCR)

Also, see the "Interactions With Other Features" section in the "Main/Satellite/Tributary" feature of the *DEFINITY* Communications System Generic 2 Feature Descriptions (555-105-301).

Procedure Sequence

ADD	CHANGE	REMOVE
276 Word 1	275 Word 1	276 Word 1
275 Word 1	104 Word 1	275 Word 1
275 Word 4	104 Word 2	275 Word 4
104 Word 1		104 Word 2
104 Word 2		104 Word 1

Procedure Usage

104 Word 1 Administers the Main/Satellite status, remote dial transfer, and ETA trunk group.

Field 1	Enter the Main/Satellite status:	
	0	Non-Main/Satellite system
	1	Satellite system
	2	Main system
Field 2	Enter the remote dial transfer activation:	
	0	Remote dial transfer not active
	1	Remote dial transfer active
Field 3	Enter the	e extended trunk access trunk group (18-999).

104 Word 2 Administers the trunk group parameters for Main/Satellite trunk group access, number of digits sent, defer prefix digit, transfer action type, and the prefix digits.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the trunk group parameters for Main/Satellite trunk group access: 0 Not in Main/Satellite service 1 In Main/Satellite service
Field 3	Enter the number of digits to be sent: - 1-way incoming trunks 1-4 4-digit dialing 2-5 5-digit dialing
Field 4	Enter the defer prefix requirements:

- 0 Defer prefix not required
- 1 Defer prefix immediately

Field 5 Enter the transfer action type:

- 0 No transfer action
- 1 Attendant transfer
- 2 Dial transfer

275 Word 1 Administers the number of digits in the extension numbering plan and tandem tie trunk access.

> Field 9 Enter the number of digits sent by the local CO or CCSA system (-, 0, 3-5).

Field 15 Enter the tandem tie trunk access:

> Feature is not available 0 Tandem tie trunk disable 1 Tandem tie trunk enable

275 Word 4 Administers trunk-to-trunk transfer.

> Field 3 Enter the trunk-to-trunk transfer assignment:

> > Not available

0 Disable

1 Enable

276 Word 1 Administers the multipremises feature group for Main/Satellite. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

> Field 2 Enter the assignment for multipremises feature group for Main/Satellite:

> > Disable 0

1 Enable

MALICIOUS CALL TRACE

The Malicious Call Trace (MCT) feature allows the customer to obtain information that may identify the calling party of a malicious call. This feature is useful for tracing the source of bomb threats, menacing calls, and obscene calls, and is especially desirable when these types of calls are more than a rare occurrence. Organizations that may wish to use the Malicious Call Trace feature include airlines, corporations, government agencies, and universities.

The Malicious Call Trace feature is assigned on a per-voice terminal and voice terminal class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Voice Terminal and Data Module Administration

Attendant Console Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Interposition Calling and Transfer.

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 2	010 Word 2	010 Word 2
054 Word 2	054 Word 2	054 Word 2
203 Word 1	203 Word 1	203 Word 1
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

010 Word 2 Activates Malicious Call Trace on an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 6 Enter the malicious call trace control:

O Cannot be used with this class of service
Can be used with this class of service

054 Word 2 Administers the EMERGNCY button to an assigned multiappearance voice terminal.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).

Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for

universal and XE modules).

Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21

for traditional modules, 0-20 for universal modules, 1-18 for XE

modules).

Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for

universal and XE modules).

Field 6 Enter the device type:

0 Basic set

1 Feature module

2 Coverage module

3 Display module

4 ADFTC/MTCP

Field 7 Enter the member (button) number (0-62).

Field 8 Enter a "9" to specify the button type as "Malicious Call Trace

(EMERGNCY)."

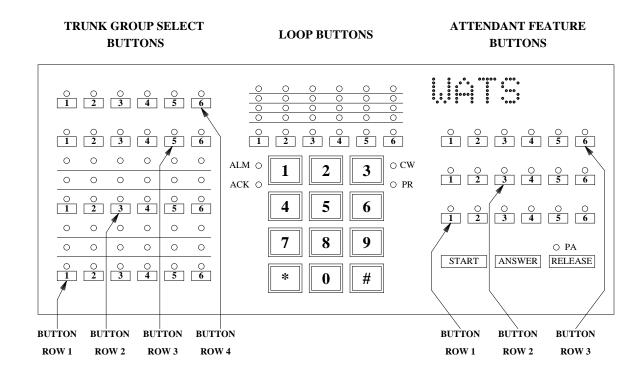
203 Word 1 Administers the MCT — Activate and the MCT — Control buttons to the attendant console(s). The buttons for these features are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left-to-right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter the button types in the desired location:

48 MCT — Activate

49 MCT — Control



350 Word 2 Administers the Malicious Call Trace dial access codes.

Field 1 Enter the feature encode: MCT — cancel 99 100 MCT — activate Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Field 3 Enter the second digit of the dial access code (0-9). Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9).

MANUAL SIGNALING

The Manual Signaling feature allows a multiappearance terminal user to signal a preselected multiappearance terminal. Each button press at the calling terminal causes one short beep at the called terminal. This feature may be used with the Manual Intercom feature to provide signaling.

Manual Signaling can also be used to signal a preselected *group* of voice terminals. In this way, a message can be quickly and effectively conveyed (e.g., "Departmental meeting is convening") to an organized group of individuals.

Assignment of the Manual Signaling feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

O53 Word 1 Administers the association between a signaling and a signaled terminal for Manual Signaling. The first equipment location is for the signaling terminal (Fields 1-7). The second equipment location is for the signaled terminal (Fields 8-12).

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type: 0 Basic set 1 Feature module

	 Coverage module Display module ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter the module number (0-30).
Field 9	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 10	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 11	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 12	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

MEGACOM® SERVICE ACCESS

The MEGACOM Service Access feature can provide the users of the System 85 R2V4 with cost-effective access to the AT&T long-distance network.

Using "special access" to an AT&T 4 ESS™ switch, MEGACOM Service provides *outward* calling to any telephone number (outside the LATA) throughout the mainland, Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands.

The MEGACOM 800 Service provides a similar, but separate, service for *incoming* calls.

Incoming MEGACOM 800 Service calls can be directed to the attendant queue, to an ACD, EUCD, or UCD/DDC split, to a specific System 85 extension, or to a remote location using the Remote Access feature.

Assignment of the MEGACOM Service Access feature is on a per-system and per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions

Attendant Direct Trunk Group Selection.

Procedure Usage

Specifies which World Class Routing options, and other features (such as FRL and Authorization Codes), are in effect for any particular trunk group.

MESSAGE CENTER

Message Center is an answering service for redirected calls from the called party to an agent in the Message Center. Agents enter messages from the caller at a 500 BCT, 515 BCT, PC 6300, or PC 7300 running 513 BCT emulation. The called party can retrieve their messages later by printing the message at a nearby printer, through a digital display module, calling the Message Center agent, or through a text mail service.

Message Center is assigned on a per-system and per-voice terminal basis. The Message Center feature uses ACD or Call Vectoring to route calls to Message Center agents. An ACD split must be set up before administering Message Center.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Message Center (See Chapter 6, "DCIU Administration")

Message Waiting — Automatic

Automatic Call Distribution (ACD)

Display — Voice Terminal.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Leave Word Calling (LWC).

Procedure Sequence

ADD	CHANGE REM		
000 Word 2	000 Word 2	000 Word 2	
051 Word 1	051 Word 1	051 Word 1	
261 Word 1	261 Word 1	261 Word 1	

Q1	2

MESSAGE CENTER

 275 Word 3
 275 Word 3
 275 Word 3

 350 Word 2
 350 Word 2
 350 Word 2

Procedure Usage

000 Word 2 Administers the extension number to its Message Center AP, the LWC destination, and AUDIX messaging. You can have either Message Center on an AP or AUDIX messaging, but not both.

Field 1 Enter the extension number (000-99999). Field 8 Enter the AP destination: 0 Not assigned 1-7 Assigned to an AP Field 9 Enter the LWC destination: 0 Not assigned 1 Switch (system) 2 AP 3 **AUDIX** Field 10 Enter the AUDIX destination: Not assigned 1-8 Assigned to AUDIX

051 Word 1 Administers an equipment location and the lock/unlock option to a multiappearance voice terminal with display capabilities.

Field 1 Enter the module number (0-30). Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules). Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules). Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules). Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules). Field 12 Enter the lock/unlock option: 0 Not available 1 Available

261 Word 1 Provides the translation between an internal AP or AUDIX number and the network AP or AUDIX number. Included are the local adjunct, the local adjunct number, the local adjunct type, the version number, digit format, scrolling, and network adjunct number.

Field 1 Enter "1" for AP.

275 Word 3

350 Word 2

Field 2	Enter the	local AP number (1-7).		
Field 3	Enter the 1 2	local adjunct type: AP 16 3B5 AP or 3B2		
Field 6	Enter the - 0 1	message scrolling option: Does not apply Does not support N-digit scrolling Supports N-digit scrolling		
Field 7	Enter the	network adjunct number (-, 1-99).		
Administers the	demand prin	nt password activation:		
Field 11	Enter the	demand print password activation:		
	0	No password required		
	1	Password required		
Administers the Message Center dial access codes.				
Field 1	Enter the	feature encode:		
	10	Demand Printing		
	14	Demand Print-Accessed		
	68	Lock Message Retrieval		
	69	Unlock Message Retrieval		
Field 2	Enter the 0-9 11 or *	first digit of the dial access code:		

12 or #

Field 3

Field 4

Field 5

Enter the second digit of the dial access code (0-9).

Enter the third digit of the dial access code (0-9).

Enter the fourth digit of the dial access code (0-9).

MESSAGE WAITING — AUTOMATIC

The Message Waiting — Automatic feature provides two ways of notifying a user that a message is waiting to be retrieved from one or more of the DEFINITY Generic 2 system messaging services. As there are several different messaging services, and not all voice terminals have the same alerting facilities, Message Waiting — Automatic is available in two different forms that should meet the needs of most Generic 2 users.

Assignment of the Message Waiting feature is on a voice terminal basis. When using Message Waiting — Automatic without an adjunct (AP or AUDIX), the only administration required are Procedures 063 Words 1-2 and 000 Word 2.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Voice Terminal and Data Module Administration

Message Center, if required (See Chapter 6, "DCIU Administration")

AUDIX, if required (See Chapter 6, "DCIU Administration")

Procedure Sequence

ADD	CHANGE REM	
000 Word 2	063 Word 2	063 Word 2
000 Word 3	000 Word 2	000 Word 2
063 Word 1	063 Word 1	000 Word 3
		063 Word 1

Procedure Usage

000 Word 2 Administers where the LWC will be stored (AUDIX, AP, or Switch). Also administers if facilities other than LWC can control the Message Waiting Lamp administered in Procedure 063 Word 1.

Field 8 Enter the AP assignment:

0 Not assigned

1-7 Assigned to Message Center

Field 9 Enter the LWC Destination assignment:

Not assigned

1 Switch (system)

2 AP

3 AUDIX

Field 10 Enter the AUDIX assignment:

0 Not assigned

1-8 Assigned

000 Word 3 Administers audible Message Waiting — Automatic to an extension.

Field 1 Enter the extension number (000-99999).

Field 4 Enter the desired assignment:

0 Disabled1 Enabled

O63 Word 1 Administers the Message Waiting — Automatic lamp to assigned voice terminal extension numbers. A message waiting lamp is not necessarily assigned to a voice terminal where the extension is also assigned.

Field 1 Enter the extension number (000-99999).

Field 2 Enter the module number (0-30).

Field 3 Enter the cabinet number (0-7 for traditional modules, 0 for

universal and XE modules).

Field 4 Enter the port carrier number (0-3 for traditional modules, c-e for

universal and XE modules).

Field 5 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21

for traditional modules, 1-20 for universal modules, 1-18 for XE

modules).

Field 6 Enter the circuit number (0-7 for traditional modules, 0-23 for

universal and XE modules).

Field 7 Enter the device type:

-, 0 Basic set

1 Feature module

2 Coverage module

3 Display module

Field 8 Enter the member (button) number (-, 0-62).

063 Word 2 Searches and displays message waiting coverage (AP or AUDIX) for extension numbers. This is helpful when changing message waiting assignments.

Field 1	Enter the extension number (000-99999).		
Field 2	Enter the AP number (-, 1-7).		
Field 3	Enter the AUDIX number (-, 1-8).		
Field 4	Enter the audible automatic message waiting assignments: - Not assigned 1 Assigned		

MESSAGE WAITING — MANUAL

The Message Waiting — Manual feature enables a multiappearance voice terminal user to light the green status lamp at another preassigned multiappearance voice terminal by pressing a manual message waiting button. The status lamp lights at both terminals and can be turned off by either voice terminal.

The Message Waiting feature normally indicates a need to contact the activating party. The status lamp could also indicate to a secretary DO NOT DISTURB or NOT AVAILABLE while lighted. In these cases, the user should relabel the lamps.

Assignment of the Message Waiting feature is on a voice terminal basis for multiappearance voice terminals.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

053 Word 2 Administers the buttons for the controlling and signaled voice terminals. Fields 1-7 are for the controlling terminal. Fields 9-15 are for the signaled terminal.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type (0-4).
Field 7	Enter the member (button) number (0-62).

Field 9	Enter the module number (0-30).
Field 10	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 11	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 12	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 13	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 14	Enter the device type (0-3).
Field 15	Enter the member (button) number (0-62).

MODEM POOLING

The Modem Pooling feature provides a "pool" of conversion resources that is available on an as needed basis to convert analog data signals to the Digital Communications Protocol (DCP) used with the DEFINITY Generic 2 system.

Assignment of the Modem Pooling feature is on a per-system basis. Assignment within the system is made on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Bearer Capability.

Procedure Sequence

ADD	CHANGE	REMOVE
100 Word 2	100 Word 2	180 Word 1
180 Word 1	180 Word 1	100 Word 2

Procedure Usage

100 Word 2 Administers the Bearer Capability Class-of-Service (BCCOS) and modem pooling characteristics.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the BCCOS (0-255).
Field 3	Enter the originate mode assignment:

- Originate mode not active Originate mode active 0
- 1

Field 4	Enter the 0	answer mode assignment: Answer mode not active Answer mode active
Field 5	Enter the 0	modem type assignment Modem can only operate in one mode Modem can operate in both modes
Field 6	Enter a '	'1' if this is a first choice modem pool.
Field 7	Enter the	desired test type:
	0	Disable digital facility testing
	1	No EIA loop back control
	2	EIA local loop back control
	3	EIA local and EIA remote loop back control

180 Word 1 Administers the digital circuits to analog circuits in pairs. An SN270 or TN754 cannot have both analog and digital trunks assigned on the same circuit pack.

Field 1	Enter the digital trunk group number (-, 18-999).
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 6	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 7	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 8	Enter the analog trunk group number (-, 18-999).
Field 9	Enter the module number (0-30).
Field 10	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 11	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 12	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 13	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

The following table lists data attributes for some AT&T analog data sets:

Modem	Duplex	Sync/ Async	Speed (bps)	Answer Mode	Originate Mode
103JR	full	async	up to 300	yes	yes
201CR	half	sync	2400	yes	yes
202SR	half	async	1200	yes	yes
208BR	half	sync	4800	yes	yes
212AR	full	async	low, 1200	yes	yes
212AR	full	sync	1200	yes	yes
2224A	full	async	300, 1200, 2400	yes	yes
2224A	full	sync	1200, 2400	yes	yes
2224G	full	async	300, 1200, 2400	yes	yes
2224G	full	sync	1200, 2400	yes	yes
2248A	full	async	4800	yes	yes
2296A	full	async	4800, 9600	yes	yes

MULTIAPPEARANCE PRESELECTION AND PREFERENCE

The Multiappearance Preselection and Preference feature provides multiappearance voice terminal users with options for placing (originating) or answering (terminating) calls on selected appearances.

- Preselection Allows voice terminal users to manually select an appearance by pressing the appropriate button before going off-hook. All appearance preference options are overridden.
- Ringing Appearance Preference* Automatically selects a ringing appearance for voice terminal users upon going off-hook.
- Calling Appearance Preference* Automatically selects an appearance with an incoming call whether that line is ringing or not. Calling Appearance Preference or Preselection can be used to answer calls that would otherwise go unanswered from an appearance on another voice terminal.
- Idle Appearance Preference† Automatically connects voice terminal users to an idle appearance upon going off-hook.
- Prime Appearance Preference† Automatically selects the terminal's primary appearance for a voice terminal user going off-hook. Prime Appearance Preference can be used when a particular appearance is preferred for toll or interfacility calling. This operation serves to improve the recognition of calling costs
- No Appearance Preference: The voice terminal user must manually select an appearance to place or answer a call.
- Last Appearance Preference† The last appearance used is selected automatically (actually remains in use) when going off-hook to place a call or when a call terminates on the line.

Assignment of the Multiappearance Preselection and Preference feature is on a per-multiappearance basis.

Prerequisite Administration

To administer this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Use Procedure 051 Word 1 to specify the desired type of originating and terminating preference for a multiappearance voice terminal (Fields 10 and 11).

^{*} This is a "terminating" preference.

[†] This is an "originating" preference.

[†] This is a "terminating" and "originating" preference.

Use Procedure 052 Word 1 to administer a prime appearance (prime line) to a multiappearance voice terminal (Field 10).

MULTIPLE LISTED DIRECTORY NUMBERS

The Multiple Listed Directory Numbers feature helps the attendant identify the purpose of incoming public network calls. It does this through the Incoming Call Identification (ICI) display. With only a single Listed Directory Number (LDN), the ICI display shows only that the call is an LDN call. This situation does not provide much feedback for the attendant of a large, diversified DEFINITY Generic 2 system. Using multiple LDNs, the attendant can then determine something about the purpose of an LDN call before the call is even answered.

Assignment of the Multiple Listed Directory Numbers feature is on a system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
204 Word 1	204 Word 1	204 Word 1
275 Word 2	275 Word 2	275 Word 2

Procedure Usage

204 Word 1 Administers the LDNs and the ICI displays for the LDNs. For a Direct Inward Dialing (DID) LDN, assign a call type, the alpha characters, and the LDN.

For a non-DID LDN, assign an attendant-completing trunk group number, a message number, and the alpha characters.

Field 1 Enter the call type (1001-1999).

Field 2 Enter an unused message number (4-63, whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Enter the LDN. This number is assigned by the local serving office.

275 Word 2 Allows one trunk group to be shared for LDNs and Remote Access.

Field 10 Enter the shared trunk group feature assignment:

- Feature not available
- 0 Disable
- 1 Enable

MUSIC-ON-HOLD ACCESS

The Music-on-Hold feature provides music to a held party. Music assures the held party that the connection is still in effect.

Assignment of the Music-on-Hold Access feature is on a per-system class-of-service basis, on a per-system or per-module basis, and on a per-trunk group basis.

Music sources can be assigned one per system or one per module (not every module has to have a music source). If you administer more than one music source, the music given on hold depends on which modules have a music source. When an extension in a module places a call on hold, music is added to the held party's time slot by that module's music source (if provided). Otherwise, music is added to the time slot using the music source attached to the *lowest numbered module* that does have a music source. Therefore, assign your primary music source to module 0. This will give most users access to that music source.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Trunk Administration

Procedure Usage

275 Word 1

Administers Music-on-Hold to the system class of service. Music-on-Hold can also be used with Code Calling Access and Loudspeaker Paging Access answer-back channels.

Field 11 Enter the music-on-hold assignment:

- Feature not available
- 0 Disable
- 1 Enable

OFF-PREMISES DATA-ONLY EXTENSIONS

The Off-Premises Data-Only Extension feature provides switched access to data equipment at a remote location (greater than 5000 feet) from a DEFINITY Generic 2 system using analog or digital private line facilities that do not compete with voice traffic. This feature is used for data communications when a significant volume of data is exchanged between a Generic 2 and a remote host computer or cluster of data terminals. Operation of this feature is transparent to all users. The users of the remote terminal cluster can access Generic 2 data endpoints using data terminal (keyboard) dialing. Unless specifically restricted, any terminal on the system that can originate data calls can access a remote data endpoint as though it were onpremises.

Assignment of the Off-Premises Data-Only Extensions feature is on a per-line basis as a data module with keyboard dialing capabilities.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Use Procedure 051 Word 1 to administer an off-premises data-only extension as a TDM with keyboard dialing.

Procedure Sequence

ADD	CHANGE	REMOVE	
000 Word 1	000 Word 1	000 Word 1	
010 Word 3	010 Word 3	010 Word 3	

Procedure Usage

000 Word 1 Administers the extension characteristics for off-premises extensions.

Field 1	Enter an extension (000-99999).
Field 2	Enter the module number (0-30).
Field 3	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).

Field 4	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 5	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 6	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 7	Enter the class of service (1-30, 32-63). Features associated with a class of service are administered in Procedure 010 Words 1-4.
Field 8	Enter the appropriate port type: - Extension is administered in Procedure 052 Word 1 2 Off-premises extension (OPS) 6 OPS with terminal balance 9 DS1 OPS line
Field 9	Enter the desired assignment for a DS1 OPS lines: - Non-DS1 OPS line 0 Signaling enable for DS1 OPS line 1 Signaling disable for DS1 OPS line

When removing an extension, Special Error Code 85 may appear with procedure numbers display in field 11. Occurrences of this extension must be removed from those procedures before being removed in this procedure.

010 Word 3 Administers Data Protection to an extension class of service.

- Field 1 Enter the class of service (1-30, 32-63).
- Field 13 Enter the data protection (permanent) capabilities:
 - 0 Not restricted
 - 1 Restricted

OVERRIDE

The Override feature permits authorized multiappearance voice terminal users to interrupt other terminal users who are on a 2-party connection. Only terminal users who require the ability to contact other terminal users on a preemptive basis should be assigned this feature.

Assignment of the Override feature is on a per-terminal class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	054 Word 2	010 Word 1
054 Word 2	350 Word 2	054 Word 2
350 Word 2		350 Word 2

Procedure Usage

010 Word 1	Administers	override to	an extension	class of service.
utu wora t	Administers	overriae to	an extension	class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 10 Enable or disable override:

0 Disable1 Enable

054 Word 2 Administers the override button to an assigned multiappearance voice terminal.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for

universal and XE modules).

Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter a "5" to specify the button type as "Override."

350 Word 2 Administers the Override dial access code.

Field 1	Enter an "11" for the Override feature.
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (-, 0-9).
Field 4	Enter the third digit of the dial access code (-, 0-9).
Field 5	Enter the fourth digit of the dial access code (-, 0-9).

PERSONAL CENTRAL OFFICE LINE

The Personal Central Office Line feature provides a multiappearance voice terminal user with direct access to dedicated central office (CO) trunks. Typical users are executives, dispatchers, or buyers with a high volume of calls going outside the system. Businesses with specialized incoming traffic (such as a service department) can also benefit from these dedicated circuits.

Assignment of the Personal CO Line feature is on a per-voice terminal and a per-appearance button basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Trunks (See Chapter 2, "System Administration")

Trunk Administration

Voice Terminal and Data Module Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Trunk Verification — Attendant.

Procedure Sequence

ADD	CHANGE	REMOVE
057 Word 1	057 Word 2	057 Word 2
	057 Word 3	057 Word 3
	057 Word 1	057 Word 1

Procedure Usage

057 Word 1 Administers a Personal CO Line appearance to a button on an assigned multiappearance voice terminal button and sets the ringing option.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
Field 7	Enter the member (button) number (3-12).
Field 8	Enter the module number (0-30).
Field 9	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 10	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 11	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 12	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 13	Enter the ringing type: 0 No ringing 1 Ringing

057 Word 2 Searches for Personal CO Line assignments based on a trunk equipment location. Fields 1-5 contain the trunk equipment location. Fields 6-10 displays the terminal equipment location.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

057 Word 3 Searches for Personal CO Line assignments based on a trunk group number. The trunk type and equipment locations are displayed in fields 2-8.

Field 1 Enter the trunk group number (18-999).

PC INTERFACE

The Personal Computer (PC) Interface feature consists of the PC/PBX and PC/ISDN product family referred to as *Data Interface Products*. These products provide users of AT&T PCs and other IBM* compatible PCs fully integrated voice and data work station capabilities.

Configurations

Several different configurations are available for the PC Interface feature. For convenience in referencing, these break down into three groups. Groups 1 and 2 use the Digital Communications Protocol (DCP) while Group 3 uses the ISDN Basic Rate Interface (BRI) protocol.

Configuration Group 1

Group 1 consists of those DCP PC/PBX configurations that use a PC Cartridge in a 7404D voice terminal (manufacture discontinued) to communicate with the switch. This group was formerly called package 1 (now Release 3.0X) and package 2.

Configuration Group 2

Group 2 consists of those DCP PC/PBX configurations that use the PC/PBX Interface Card (formerly DCP expansion card) in the PC itself to provide the communications interface with the switch. Group 2 was formerly called packages 3, 4, 5, and 6, now combined as Release 3.0X.

Configuration Group 3

Group 3 consists of those configurations that use the ISDN/BRI for communications. Connectivity to the switch is provided by the PC/ISDN Interface Card installed in the PC itself. Possible arrangements in this group include the PC as a stand alone terminal (PC only), or with from one to four voice terminals, hand sets, or headsets.

To fully understand the use, installation, and administration of the PC Interface configurations, refer to the following documents:

^{*} Registered trademark of the IBM Corporation.

• 555-016-715, PC/PBX Connection

Documentation Set for the DCP versions (Groups 1 and 2) using the PC/PBX Connection software package.

• 555-016-101, PC/PBX Platform

Installation and Reference manual for PC/PBX Platform.

• 555-016-102, PC/ISDN Platform

Installation and Reference Manual for the PC/ISDN Platform (Group 3).

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

054 Word 1 Administers the wait for principal button to an assigned multiappearance voice terminal. This is the only button that is unique for the PC Interface feature.

Field 1	Enter the module number (0-30).		
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).		
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).		
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).		
Field 6	Enter the device type where the button will be assigned: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP		
Field 7	Enter the member (button) number (0-62).		
Field 8	Enter the extension number (-, 000-99999).		
Field 9	Enter a "30" to specify the button type as "wait for principal."		

POWER FAILURE TRANSFER

The Power Failure Transfer feature provides service during a local power failure for selected voice terminals on the system by directly connecting (transferring) these terminals to predesignated Central Office (CO) trunks. These selected terminals are sometimes referred to as Power Failure Transfer terminals.

Procedure Usage

The Power Failure Transfer feature is provided by hardware and requires no administration.

PRECEDENCE CALLING

Precedence Calling is the interface to Automatic Voice Network (AUTOVON). However, Precedence Calling can be adapted for use with any private network that uses a 'star' or hub-like configuration. Two capabilities are provided: *preemption* and automatic *diversion to attendant assistance*. These capabilities help to ensure the rapid completion of important calls. Precedence Calling is specifically designed for national defense and emergency calling situations. On a DEFINITY Generic 2 system, the Precedence Calling feature enables the system to interface effectively with the AUTOVON environment and can extend this ability to an associated Distributed Communications System (DCS) network.

Precedence Calling is assigned on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Tone Plants (See Chapter 2, "System Administration")

Intercept Treatment

Voice Terminal and Data Module Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Route Advance

Attendant Direct Trunk Group Selection

Distributed Communications System (DCS)

If used with DCS, the DCS administration section should be consulted.

Procedure Sequence

ADD	CHANGE	REMOVE	
276 Word 1	204 Word 1	204 Word 1	
350 Word 2	203 Word 1	203 Word 1	
103 Word 1	010 Word 4	010 Word 4	
101 Word 3	356 Word 1	356 Word 1	
275 Word 3	305 Word 1	305 Word 2	
275 Word 4	305 Word 2	305 Word 1	
305 Word 1	275 Word 3	275 Word 4	
305 Word 2	275 Word 4	275 Word 3	
356 Word 1	101 Word 3	101 Word 3	
010 Word 4	103 Word 1	103 Word 1	
203 Word 1	350 Word 2	350 Word 2	
204 Word 1		276 Word 1	

Procedure Usage

010 Word 4 Administers the maximum precedence level to an extension class of service.

Field 1	Enter the class of service (1-30, 32-63).		
Field 2	Enter the maximum precedence level:		
	- Precedence calling not allowed		
	0 Flash override		
	1 Flash		
	2 Immediate		
	3 Priority		
	4 Routine		
Field 3	Enter the ISDN routing:		
	- ISDN service is not supported		
	0 Use any facility		
	1 Use ISDN exclusively. If precedence calling is		
	desired, do not select this encode.		
	2 Use ISDN if available, else use any available facility		

101 Word 3 Administers trunk group prefixing.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter "-" for all AUTOVON trunk groups.

PREFIX (Fields 3-6)

If desired, fields 3-6 may be used to specify up to four digits to be prepended to incoming calls arriving on the trunk group specified in

field 1. In some applications, the prefix digits are DACs that serve to start digit analysis in specific WCR networks. Do not specify prepending digits in cases where the prefix is contained in the incoming digit stream. Digits should be prepended when call processing needs a prefix but one is not provided in the digit stream.

If deferred prefixing is designated in Procedure 104 Word 2 field 4 then this designation will prevent the prefix digits from being immediately prepended.

Field 3	Enter the first digit of the prefix: -, 0-9, 11(*), 12(#)
Field 4	Enter the second digit of the prefix: -, 0-9
Field 5	Enter the third digit of the prefix: -, 0-9
Field 6	Enter the fourth digit of the prefix: -, 0-9

103 Word 1 Specifies which World Class Routing options, and other features (such as FRL and Authorization Codes), are in effect for any particular trunk group.

Field 1	Enter the trunk group number (18-999).
---------	--

Field 2 Enter the FRL (0-7) for the trunk group.

Field 5 Enter the incoming trunk type assignment (this only applies to tie trunks and APLT trunks):

The trunk group is an incoming tie trunk going to WCR, or the trunk group is an APLT trunk. Enter this encode if administering for AUTOVON.

Field 10 Enter the Data Protection assignment:

0 Data Protection disable

Administers the Precedence Calling buttons to the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter the button types in the desired location:

- 28 Trunk ID
- 43 Manual Preemption
- 44 Display Call Precedence Level
- 45 Display Called Number
- 46 Flash
- 47 Set Precedence

204 Word 1 Administers the Precedence Calling identification and ICI for trunk groups to attendant console ICI field. You must assign the trunk group or call type, the

message number, and the alpha characters.

Field 1 Enter the call type:

2300 Flash Override

2301 Flash

2302 Immediate

2303 Priority

2304 Routine

Field 2 Enter an unused message number (4-63, whatever is available).

Fields 3-6 Enter the desired characters or encodes:

0 = 0	A = 11	K = 21	U = 31
1 = 1	$\mathbf{B} = 12$	L=22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	- = 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

275 Word 3 Administers the dial 1 for toll, home NPA, and the local system number. This administration must be coordinated with the AUTOVON dialing plan if AUTOVON access is involved.

Field 1 Enter the dial 1 for toll:

0 Not required

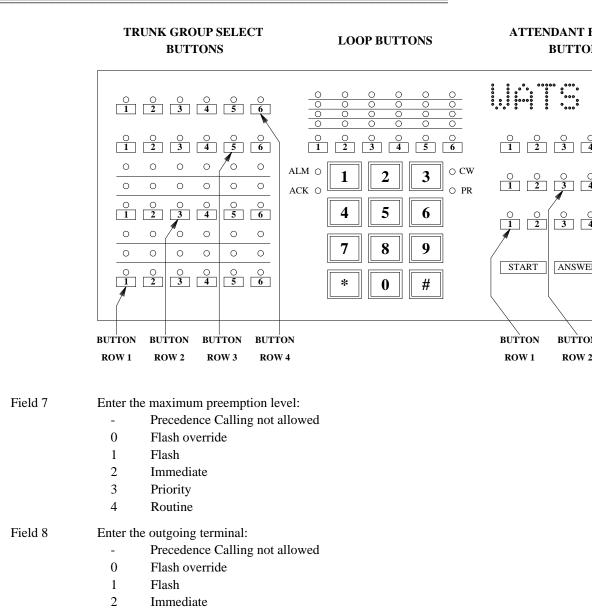
Field 2 Enter the home NPA (200-219, 300-319, 400-419, 500-519,

600-619, 700-719, 800-819, 900-919).

Field 8 Enter the local system number (1-999).

275 Word 4 Administers the default recent disconnect interval, the incoming preemption level, the outgoing voice terminal preemption level, the outgoing attendant preemption level, and the AUTOVON interface system number.

Field 6 Enter the default recent disconnect interval (1-511).



Field 9 Enter the outgoing attendant:

3

4

- Precedence Calling not allowed
- 0 Flash override

Priority

Routine

- 1 Flash
- 2 Immediate
- 3 Priority
- 4 Routine

Field 10 Enter the AUTOVON interface system number (1-40).

276 Word 1 Administers the Precedence Calling feature to the system. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 4 Enter the Precedence Calling assignment:

0 Disable1 Enable

305 Word 1 Administers the Precedence Calling destination node for a trunk group and specifies the maximum precedence level of each Precedence Calling trunk group.

Field 1 Enter the Precedence Calling destination node:

0 AUTOVON system

1-40 System node (administered in Procedure 275 Word 3 on destination system)

Field 2 Enter the outgoing trunk group number (18-999).

Field 3 Enter the maximum precedence level:

- Non-precedence (routine only)

0 Flash override

1 Flash

2 Immediate

3 Priority

4 Routine

305 Word 2 Displays and assigns Precedence Calling destination node numbering including home office code/NNX. A thousand's digit selects 1000 numbers within the office code to which Precedence Calling calls can route, or a dash (-) allows call routing to all 10000 numbers. The number in fields 2 and 3 (NNXD) homes on the PBX number in field 1. In field 4, use 0-9 for home PBX and a 5-digit dialing plan; if not applicable, enter a dash (-).

Field 1 Enter the Precedence Calling destination node:

0 Precedence Calling system

1-40 PBX node

Field 2 Enter the Precedence Calling NNX (220-999).

Field 3 Enter the thousand's digit (-, 0-9).

Field 4 Enter the first digit (0-9 Home system and/or 5-digit plan).

350 Word 2 Administers the Precedence Calling dial access codes.

Field 1 Enter the feature encode:

61 WCR Network 2 Access

82 AUTOVON - Precedence Calling

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

356 Word 1 Administers a dialed digit to each precedence level.

Field 1 Enter the flash override assignment:

0-9 Dialed digit

11 or *

12 or #

Field 2 Enter the flash assignment:

0-9 Dialed digit

11 or * 12 or #

Field 3 Enter the immediate assignment:

0-9 Dialed digit

11 or * 12 or #

Field 4 Enter the priority assignment:

0-9 Dialed digit

11 or * 12 or #

Field 5 Enter the routine assignment:

0-9 Dialed digit

11 or * 12 or #

PRIORITY CALLING

The Priority Calling feature allows a user to use distinctive 3-burst ringing to call an idle single-appearance terminal or an idle appearance of a multiappearance terminal.

NOTE

There is no correlation between the term "Priority" as used in this feature and "Priority Precedence" as used in the Precedence Calling feature.

Priority Calling also allows the user to signal a busy single-appearance terminal. When signaled, the party at the busy single-appearance terminal receives a 3-burst tone. The 3-burst tone is three 0.1-second, 400-hertz beeps. The user can answer the priority call immediately by using the Hold feature or by finishing the call and going on-hook.

Assignment of the Call Waiting feature enables the Priority Calling feature within the system. Assignment of the Priority Calling feature is on a per-terminal class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE	
010 Word 1	054 Word 2	010 Word 1	
054 Word 2	350 Word 2	054 Word 2	
275 Word 1		275 Word 1	
350 Word 2		350 Word 2	

Procedure Usage

010 Word 1 Administers Priority Calling to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 8 Enter the Priority Calling assignment:

0 Disable1 Enable

054 Word 2 Administers the Priority Calling button to an assigned multiappearance voice terminal.

Field 1 Enter the module number (0-30).

Field 2 Enter the cabinet number (0-7 for traditional modules, 0 for

universal and XE modules).

Field 3 Enter the port carrier number (0-3 for traditional modules, c-e for

universal and XE modules).

Field 4 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21

for traditional modules, 0-20 for universal modules, 1-18 for XE

modules).

Field 5 Enter the circuit number (0-7 for traditional modules, 0-23 for

universal and XE modules).

Field 6 Enter the device type:

0 Basic set

1 Feature module

2 Coverage module

3 Display module

4 ADFTC/MTCP

Field 7 Enter the member (button) number (0-62).

Field 8 Enter a "2" to specify the button type as "Priority Calling."

275 Word 1 Administers Call Waiting to the system class of service. Changes to this field also affects the availability of the Attendant Call Waiting feature.

Field 5 Enter the Call Waiting assignment:

0 Disable

1 Enable

350 Word 2 Administers the Priority Calling dial access code used on a single-appearance voice terminal.

Field 1 Enter a "7" for the Priority Calling feature.

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

PRIVACY — ATTENDANT LOCKOUT

The Privacy — Attendant Lockout feature prevents the attendant from reentering (bridging onto) a 2-party connection held on the console, unless recalled by a voice terminal user.

Assignment of the Privacy — Attendant Lockout feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Procedure Usage

200 Word 1 Administers the Privacy — Attendant Lockout feature.

Field 6 Enter the lockout feature assignment:

0 Disable1 Enable

Field 7 Enter the privacy feature assignment. When privacy is enabled,

you must also enable lockout (Field 6).

0 Disable1 Enable

PRIVACY — MANUAL EXCLUSION

The Privacy — Manual Exclusion feature prevents other terminal users with an image of the same appearance from bridging onto an active call on that appearance. Activating manual exclusion does not interrupt the call in progress.

Assignment of the Privacy — Manual Exclusion feature is on a per-terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

054 Word 1 Administers the exclusion button to an assigned multiappearance voice ter	minal.	
---	--------	--

diffinisters the e	Actusion button to an assigned manuappearance voice terminar.
Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter the extension number (-, 000-99999).
Field 9	Enter an "8" to specify button type as "Manual Exclusion."

QUEUING

When all the accessible trunk groups for a particular call are busy, the system automatically places the call in queue. A queue is a space in memory where information about these calls is stored. During periods of high call volume, queuing improves caller efficiency by reducing or eliminating repeat dialing attempts. It can also improve trunk utilization by maintaining high trunk group occupancy, allowing fewer trunks to carry the same call volume.

Queuing can be assigned to intertandem tie trunks, access tie trunks, central office trunks, foreign exchange trunks, and Wide Area Telecommunications Service trunks. Each trunk group has its own queue that is either ringback or off-hook. With ringback queuing, the caller goes on-hook (hangs up) and waits for a ringback call from the system when an idle trunk becomes available. If a main or satellite location has ringback queuing, the caller must dial his/her extension number to receive the ringback call. With off-hook queuing, the calling party waits off-hook for the next available trunk. As an option, music or a recorded announcement can be provided while the calling party waits off-hook.

Assignment of the Queuing feature is on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature, but is recommended to enhance operation:

Music-on-Hold.

Procedure Sequence

ADD	CHANGE	REMOVE		
330 Word 1	330 Word 1	330 Word 2		
330 Word 2	330 Word 2	330 Word 1		
350 Word 2	350 Word 2	350 Word 2		

Procedure Usage

Administers the system and trunk group queuing parameters, including priority and nonpriority queue lengths, time-in-queue-limits for ringback and off-hook queues, threshold and raised FRL values for WCR calls, and ringback queue restrictions.

Field 1	Enter the queuing encode: 0 Queuing not active 1 Queuing active
Field 2	Enter the number of queue records active (0-999).
Field 3	Enter the threshold FRL (1-7).
Field 4	Enter the raised FRL (1-7).
Field 5	Enter the terminal queue type: Off-Hook Queuing non-priority for terminal Off-Hook Queuing priority for terminal Ringback Queuing for terminal
Field 7	Enter the pattern queuing preference level. 0, 1 Pattern queuing is inactive 2-16 Number of preferences to search

Administers the system and trunk group queuing parameters, including priority and nonpriority queue lengths, time-in-queue-limits for ringback and off-hook queues, threshold and raised FRL values for WCR calls, and ringback queue restrictions.

Field 1	Enter the trunk group number (18-999).
Field 2	Enter the queuing activation: 0 Not active 1 Active
Field 3	Enter the non-priority queue length (0-63).
Field 4	Enter the priority queue length (0-63).
Field 5	Enter the non-priority off-hook queuing: No limit 1-79 Wait time in 0.1-minute increments
Field 6	Enter the priority off-hook queuing: No limit 1-79 Wait time in 0.1-minute increments
Field 7	Enter the ringback queuing: - No limit 1-60 Wait time in one-minute increments
Field 8	Enter the ringback queuing restriction: 0 RBQ not restricted 1 RBQ restricted 2 Change RBQ to OHQ
Field 10	Enter the incoming trunk queue data:

- See Special Error Code 81
- 0 OHQ nonpriority
- 1 OHQ priority
- 2 RBQ two digits in dial code of terminals
- 3 RBQ three digits in dial code of terminals
- 4 RBQ four digits in dial code of terminals
- 5 RBQ five digits in dial code of terminals
- 6 No queue

350 Word 2 Administers the dial access code used on a single-appearance voice terminal.

Field 1 Enter a "9" for the Queuing - cancel feature.

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

RADIO PAGING ACCESS

The Radio Paging Access feature allows users to page a person over a radio receiver. The paged party must be carrying a radio receiver that is set to the radio paging system. The paged party can answer the page by using a voice terminal and dialing an answer-back channel. Remote Access trunk users can also use this feature.

Assignment of the Radio Paging Access feature is on a per-system basis. This feature will be administered after you have completed the Prerequisite Administration and, if desired, the Related Administration.

Prerequisite Administration

To administer this feature, make sure the following are administered:

Trunk Administration

You must assign at least two circuits; one for the paging access and one for the answer-back.

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions

Attendant Direct Trunk Group Selection.

RECALL SIGNALING

The Recall Signaling feature allows a single-appearance voice terminal user who is busy on a 2-party call to place the second party on hold and obtain recall dial tone. The voice terminal user can then call another party or activate a feature.



This feature does not apply to multiappearance voice terminals that have a fixed recall button. Multiappearance voice terminal users can use the Conference, Hold, or Transfer features to achieve the same results.

The Recall Signaling feature is provided on a per-system basis.

Procedure Usage

The Recall Signaling feature is provided automatically and requires no administration.

RECORDED TELEPHONE DICTATION ACCESS

The Recorded Telephone Dictation Access feature permits voice terminal users within the system and at remote locations to access customer-provided dictation equipment. The following functions are provided:

- Start function (voice or dial activated)
- Stop function (voice or dial activated)
- Playback (dial activated)
- Corrections (dial activated).

Easy access to dictation equipment enhances and simplifies the customer's dictation services. Thus, the feature reduces secretarial requirements and facilitates word processing.

Assignment of the Recorded Telephone Dictation Access feature is on a per-trunk group basis. Terminal access to a Recorded Telephone Dictation trunk is assigned on a per-extension class-of-service basis (Restriction — Miscellaneous Trunk Restrictions). This feature will be administered after you have done the Prerequisite Administration and, if desired, the Related Administration.

Prerequisite Administration

To administer this feature, make sure the following are administered:

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Restriction — Miscellaneous Trunk Restrictions.

REMOTE ACCESS

The Remote Access feature allows external touch-tone dialing users to access the DEFINITY Generic 2 system through the public network, and then use many features and services of the system as though they were Generic 2 station users.

Remote Access service can be provided using local central office (CO), foreign exchange (FX), or WATS (800 Service) facilities. For Generic 2, special access facilities such as MEGACOM service can also be used.

Assignment of the Remote Access feature is on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Class of Service — Extensions (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Authorization Codes

Automatic Call Distribution (ACD)

If the Speaker Verification option of Remote Access is desired, you can use ACD to route the call to the speech verification unit.

Bearer Capability

Call Vectoring

If the Speaker Verification option of Remote Access is desired, you can use Call Vectoring to route the call to the speech verification unit.

Restriction — Miscellaneous Trunk Restrictions.

Procedure Sequence

ADD	CHANGE	REMOVE	
275 Word 4	103 Word 1	103 Word 1	
103 Word 1	285 Word 1	275 Word 2	
275 Word 2	286 Word 1	285 Word 1	
285 Word 1	350 Word 2	286 Word 1	
286 Word 1		275 Word 4	
350 Word 2		350 Word 2	

Procedure Usage

103 Word 1 Specifies which World Class Routing options, and other features (such as FRL and Authorization Codes), are in effect for any particular trunk group.

263 Word 1 Administers alarm checks for the Speech Processing Adjunct (SPA).

Field 1

Enter the alarm type:

0

Major alarm on the common control

1

Minor alarm on the common control

Field 2

Enter the unit type:

63

SPA considered external equipment
64

SPA considered external processor

Field 3

Enter the unit number (1-32).

275 Word 2 Administers the shared use of Remote Access trunks.

Field 10 Enter the assignment for shared use of trunks by Remote Access and LDNs:

- Feature not available

0 Disable

1 Enable

275 Word 4 Administers disable remote access to the system class of service.

Field 3



Do not set this field to "1" unless you are absolutely sure that is what you want. Once this field is set to "1" it cannot be changed back to "0" without paying AT&T to do it for you.

Enter the disable remote access assignment:

0 Remote access enabled

1 Remote access disabled

285 Word 1 Specifies the type of Remote Access security for the system.

Field 1 Enter the Remote Access code requirements:

- No barrier code required (WCR not required on remote access)
- 1 Barrier code required (WCR required on remote access)
- 2 Authorization code required
- 3 Speaker verification required
- 4 Barrier and authorization code required
- 5 Barrier and authorization code required; do not prompt for authorization code

286 Word 1 Administers where calls via Remote Access will route to after timeout

Field 16 Enter the remote access routing after timeout:

0 Intercept after timeout

1 Remote access to local attendant after timeout

2 Remote access to CAS attendant after timeout

350 Word 2 Administers the dial access code allowing an attendant to change the barrier code.

Field 1 Enter the appropriate encode:

26 Remote Access - change barrier code

101 Speaker verification request

102 Speaker verification fail

103 Unadministered authorization code entered

No authorization code entered.

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

RESTRICTION — ATTENDANT CONTROL OF VOICE TERMINALS

The Restriction — Attendant Control of Voice Terminals feature allows an attendant to activate or cancel restrictions for specific extension numbers or groups of extension numbers. The system returns Intercept Treatment when a call restricted by this feature is attempted.

Assignment of the Attendant Control of Voice Terminals feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Attendant Console Administration

Intercept Treatment.

Procedure Sequence

ADD	CHANGE	REMOVE
000 Word 2	075 Word 1	075 Word 1
204 Word 1	000 Word 2	000 Word 2
350 Word 2	204 Word 1	204 Word 1
	350 Word 2	350 Word 2

Procedure Usage

000 Word 2	Administers a controlle	d restriction group	in niimber to an	extension number

Field 1	Enter the	e extension number (-, 000-99999).
Field 5	Enter the	e attendant control of voice terminal group:
	0	Extension is not part of a controlled restriction group
	1-63	Extension belongs to this controlled restriction group

O75 Word 1 Searches and displays extension numbers and voice terminal equipment locations assigned to attendant controlled restriction groups (assigned in Procedure 000 Word 2). The results are displayed in fields 3-8.

Field 1 Enter a "3" for the attendant controlled restriction groups.

Field 2 Enter the controlled restriction group (-, 1-63).

204 Word 1 Administers the desired alphanumeric display for restricted calls.

Field 1 Enter "2293" as the Attendant Control of Voice Terminals call type.

Field 2 Enter an unused message number (4-63, whatever is available).

Fields 3-6 Enter the desired characters or encodes.

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	$\mathbf{M} = 23$	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	-= 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Field 7 Leave blank.

350 Word 2 Administers the feature dial access codes.

Field 1 Enter the feature encode:

27 Single extension control28 Group of extensions control

28 Group of extensions control

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

RESTRICTION — CODE RESTRICTION

The Restriction — Code Restriction feature allows restriction of calls by selected extension numbers to areas defined by specific area codes and/or office codes. The feature designates the 3-digit area codes, 3-digit office codes, and 6-digit combinations of area codes and office codes that a restricted voice terminal user is allowed to access. The system returns intercept tone whenever the caller dials a code that is not allowed to the caller.

Each of the 63 extension classes of service is assigned a code restriction level of 1, 2, 3, or 0. Likewise, each selected code is assigned a level of 1, 2, 3, or 0. The level "1" is the most restricted, and the level "0" is the least restricted. For example, a voice terminal user with an extension number assigned as level 2 can access any code with a restriction level of 1 or 2. An extension number assigned as level 0 can access any of the specified codes.

The following table shows the code restriction levels that are allowed.

Voice	Area Code or Area Code and Office Code			
Terminal	1 2 3 (
1	Х			
2	X	x		
3	x	x	x	
0	X	x	х	х

Assignment of the Code Restriction feature is on a per-line class of service and per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
302 Word 1	010 Word 3	302 Word 1
301 Word 1	301 Word 1	301 Word 1
301 Word 2	301 Word 2	301 Word 2
301 Word 3	301 Word 3	301 Word 3
301 Word 4	301 Word 4	301 Word 4
010 Word 3	302 Word 1	010 Word 3

Procedure Usage

010 Word 3 Administers a Code Restriction level to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 12 Enter the code restriction level:

- 0 Least restrictive
- 1 Most restrictive
- 2 More restrictive
- 3 Restrictive

301 Word 1 Administers the Code Restriction trunk group, type, dial 1 for toll calls, and the trunk group home NPA.

- Field 1 Enter the trunk group number (18-999).
- Field 2 Enter code restriction group assignment:
 - 1 Primary code restriction group
 - 2 Secondary code restriction group
- Field 3 Enter the "Dial 1" specifications for toll calls:
 - 0 "1" is not dialed for toll calls
 - 1 "1" must be dialed for toll calls requiring as NPA code
 - 2 "1" must be dialed for all toll calls
- Field 4 Enter the home NPA (200-219, 300-319, 400-419, 500-519, 600-619, 700-719, 800-819, 900-919).

301 Word 2 Administers the CO digit absorption treatment by a trunk group.

- Field 1 Enter the trunk group number (18-999).
- Field 2 Enter the digit (2-9).
- Field 3 Enter the treatment of digit:
 - 0 Digit in field 2 not absorbed
 - 1 Digit in field 2 absorbed repeatedly
 - 2 Digit in field 2 absorbed once
 - 3 Digit in field 2 absorbed only if it is the first digit dialed
 - 4 Digit in field 2 absorbed only if it is the second digit dialed
 - 5 Digit in field 2 absorbed only if it is the first or second digit dialed

301 Word 3 Administers a Code Restriction level to an office or area code.

Field 1 Enter the code (100-999).

Field 2 Enter the code type:

- 1 Office code
- 2 NPA code
- Field 3 Enter the code restriction level:
 - O Code accessible to class of service with code restriction
 O
 - Code accessible to class of service with code restriction 0-3
 - 2 Code accessible to class of service with code restriction of 0, 2, or 3
 - 3 Code accessible to class of service with code restriction of 0 or 3

301 Word 4 Administers whether office codes are toll or non-toll.

Field 1 Enter the office code (200-999).

Field 2 Enter the toll specifications:

- O Indicates a non-toll office code in field 1
- 1 Indicates a toll office code in field 1

302 Word 1 Administers the allowed area code/office code pairs and their code restriction levels to a trunk group.

- Field 1 Enter the trunk group number (18-999).
- Field 2 Enter the code restriction level:
 - Trunk group associated with allowed code (Fields 3 & 4) can be accessed by line extensions with a code restriction level of 0
 - 1 Trunk group associated with allowed code can be accessed by line extensions with a code restriction level of 0, 1, 2, or 3
 - 2 Trunk group associated with allowed code can be accessed by line extensions with a code restriction level of 0, 2, or 3
 - 3 Trunk group associated with allowed code can be accessed by line extensions with a code restriction level of 0 or 3 only
- Field 3 Enter the NPA code (-, 200-219, 300-319, 400-419, 500-519, 600-619, 700-719, 800-819, 900-919).
- Field 4 Enter the office code (-, 200-999).

RESTRICTION — MISCELLANEOUS TRUNK RESTRICTIONS

The Restriction — Miscellaneous Trunk Restrictions feature restricts preselected (by class-of-service) extensions from the use of certain trunk groups (e.g., Wide Area Telecommunications Service [WATS]). A voice terminal user who is restricted from and tries to access the trunk group receives intercept treatment.

Assignment of the Miscellaneous Trunk Restrictions feature is on a per-extension class-of-service and per-trunk group basis.

Procedure Sequence

ADD	CHANGE	REMOVE
102 Word 1	175 Word 1	175 Word 1
010 Word 3	102 Word 1	010 Word 3
	010 Word 3	102 Word 1

Procedure Usage

010 Word 3 Administers the miscellaneous trunk restriction groups to an extension class of service.

Field 1	Enter the class of service (1-30, 32-63).
Fields 2-9	Enter the miscellaneous trunk restriction groups assignment: O This COS is not denied access to trunk groups in this restriction group This COS is denied access to trunk groups in this restriction group
Field 10	Enter the miscellaneous trunk restrictions "group" assignment: O Restrictions are determined by the values of fields 2-9 This COS is denied access to all trunk restriction groups assigned in Procedure 102 Word 1

102 Word 1 Administers which trunk group dial access codes are part of a miscellaneous trunk restriction group.

Field 1	Enter the first digit of the dial access code:	
	0-9	
	11 or *	
	12 or #	
Field 2	Enter the second digit of the dial access code (0-9).	

Field 3 Enter the third digit of the dial access code (0-9). Field 4 Enter the fourth digit of the dial access code (0-9).

Fields 5-12 Enter the groups to be restricted from dialing the access code in

fields 1-4:

0 Not restricted from dialing the access code in fields 1-4

1 Restricted from dialing the access code in fields 1-4

175 Word 1 Displays the trunk group dial access codes in a miscellaneous trunk restriction group. The results are displayed in fields 2-17.

Field 1 Enter the miscellaneous trunk restriction group (1-8).

RESTRICTION — TOLL RESTRICTION

The Restriction — Toll Restriction feature restricts callers at specified extension numbers from placing toll calls except with attendant assistance. This feature includes two types of restrictions:

- Battery Reversal The central office sends a battery reversal signal to the DEFINITY Generic 2 system when the caller dials a toll call. Generic 2 then examines the calling line's class of service. If the line is toll restricted, Generic 2 immediately releases the connection to the central office, and the caller hears intercept tone.
- 0/1 Toll Restriction This form of toll restriction is totally controlled within Generic 2. Toll restricted lines connect to intercept tone if the first or second digit dialed following the trunk access code is a 0 or 1, and the first three digits are not in the free (allowed) call list.

The free call list provides up to ten customer selected 3-digit codes (Numbering Plan Area [NPA], Home Numbering Plan Area [HNPA], and/or special service codes). This allows access by toll restricted lines to selected area codes and/or service codes such as 411 or 911. If the code is on the free call list, the call is allowed. If not, the call is denied.

Assignment of the Toll Restriction feature is on a per-extension class-of-service and/or per incoming dial repeating tie trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Trunk Administration

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 3	300 Word 1	010 Word 3
300 Word 1		300 Word 1
101 Word 1		101 Word 1

Procedure Usage

010 Word 3 Administers the Toll Restrictions to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 21 Enter the toll restriction assignments:

Not restrictedRestricted

101 Word 1 Administers battery reversal to an assigned trunk group.

Field 1 Enter the trunk group number (18-999). DCS trunk groups are

limited to 18-255.

Field 3 Enter a "1" for the battery reversal assignment.

300 Word 1 Administers the free call list (a list of up to ten unrestricted codes) for the system.

Field 1 Enter the code number (1-10).

Field 2 Enter the nonrestricted office or area code (100-999).

RESTRICTION — VOICE TERMINAL RESTRICTIONS

The Voice Terminal Restrictions feature provides six fixed restrictions on voice terminal extensions. These restrictions control call receiving and originating permission at the affected voice terminal. These restrictions are applied through extension class of service (COS) assignment.

Inward Restriction

Inward restrictions prevent voice terminal users at specified extension numbers from receiving non-Distributed Communications System (DCS) private network, public network, and attendant-extended calls. These calls will be intercepted. These voice terminal users can receive calls from within the DCS network.

Manual Terminating Line Restriction

Manual Terminating Line Restriction prevents voice terminal users at specified extension numbers from receiving calls other than direct or extended calls from a local attendant (or an attendant within the DCS network). All other calls route to the appropriate intercept. These voice terminal users can originate calls and activate features.

Origination Restriction

Origination Restriction prevents voice terminal users on specified extension numbers from originating calls. If voice terminal users attempt to make calls, their extension number is taken out of service after 10 seconds and returned to service when the user hangs up.

Outward Restriction

Outward Restriction prevents callers on specified extension numbers from directly accessing outgoing trunks to the public network. Calls can be made to other local voice terminal users (or voice terminal users within the DCS network), to a local attendant (or an attendant in the DCS network [using an LDN]), to a local attendant (using a dial access code), and to tie trunks. An attendant can assist in completing calls to outside numbers using the Straightforward Outward Completion or the Through Dialing feature.

Terminal-to-Terminal Only Calling Restriction

Terminal-to-terminal only calling restriction restricts all calls from specified extension numbers except those made to local extension numbers (or extension numbers within the DCS network). All other calls are intercepted.

Termination Restriction

Termination Restriction prevents voice terminal users on specified extension numbers from receiving calls but not from originating calls.

Assignment of the Voice Terminal Restriction feature is on a per-line class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

010 Word 3 Administers the type of Voice Terminal Restriction to an extension class of service.

Field 1	Enter the class of service (1-30, 32-63).
Field 15	Enter the terminal-to-terminal only calling restriction assignment: 0 Not restricted 1 Restricted
Field 16	Enter the inward restriction assignment: 0 Not restricted 1 Restricted
Field 17	Enter the manual terminating line restriction assignment: 0 Not restricted 1 Restricted
Field 18	Enter the origination restriction assignment: 0 Not restricted 1 Restricted
Field 19	Enter the outward restriction assignment: 0 Not restricted 1 Restricted
Field 20	Enter the termination restriction assignment: 0 Not restricted 1 Restricted

RINGING — ABBREVIATED AND DELAYED

The Ringing — Abbreviated and Delayed feature provides voice terminal users with manual transfer or delayed automatic transfer of ringing. The ringing can be directed to any subset of the voice terminals sharing an appearance with the primary terminal(s).

Assignment of the Abbreviated and Delayed Ringing feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Voice Terminal and Data Module Administration

Bridged Call.

Procedure Sequence

ADD	CHANGE	REMOVE
052 Word 1	052 Word 1	052 Word 1
052 Word 2	052 Word 2	052 Word 2
054 Word 1	054 Word 1	054 Word 1
061 Word 1	061 Word 1	

Procedure Usage

052 Word 1

Administers the type of ringing to an image (bridged appearance) of an assigned multiappearance voice terminal or straight line set. Assign *abbreviated ringing* to the image on the primary terminal and *delayed ringing* to the image on the secondary voice terminal. Field 9 specifies the line appearance and field 11 specifies the ringing type.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).

052 Word 2

054 Word 1

Field 5

Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter the extension number (000-99999).
Field 9	Enter the line appearance number (1-12).
Field 11	Enter the ringing type: 0 No ringing 1 Ringing 2 Delayed ringing 3 Abbreviated ringing
	A ringing type must be specified for each assignment, including each image of a line appearance. Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.
	r automatic transfer or manual transfer of ringing to both of the earance voice terminals.
Field 1	Enter the extension number (000-99999).
Field 2	Enter the line appearance number (1-12).
Field 3	Enter the abbreviated/delayed ringing type: 1 Manual 2 Automatic
Administers the A	BRV RING button to a primary multiappearance voice terminal.
Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).

Enter the circuit number (0-7 for traditional modules, 0-23 for

universal and XE modules).

Field 6	Enter the device type:
	0 Basic set
	1 Feature module
	2 Coverage module
	3 Display module
	4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter the extension number (-, 000-99999).
Field 9	Enter a "13" to specify the button type as "Ringing — Abbreviated and Delayed."

061 Word 1 Specifies the number of ringing cycles used with automatic transfer of ringing.

Field 2 Enter the Abbreviated/Delayed ringing cycles:

2 cycles

1 4 cycles

2 8 cycles

3 16 cycles

RINGING CUTOFF

The Ringing Cutoff feature turns off ringing at a particular extension without affecting the status lamp functions. This feature is useful during a conference, meeting, recording session, or any time that ringing might result in an unacceptable interruption.

Assignment of the Ringing Cutoff feature is on a per-extension basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Voice Terminal and Data Module Administration

Bridged Call.

Procedure Usage

054 Word 1	Administers the terminal.	e Ringing Cutoff button to an assigned multiappearance voice
	Field 1	Enter the module number (0-30).
	Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
	Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
	Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
	Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).
	Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP
	Field 7	Enter the member (button) number (0-62).
	Field 8	Enter the extension number (-, 000-99999).
	Field 9	Enter an "11" to specify button type as "Ringing Cutoff."

RINGING — DISTINCTIVE

The Ringing — Distinctive feature lets voice terminal users distinguish between various types of incoming calls. The three distinctive patterns of ringing indicate the types of incoming calls. The patterns of ringing are:

- One-burst ringing Terminal-to-terminal calls and remote-access calls
- Two-burst ringing Attendant calls or incoming trunk calls (calls from outside the system)
- Three-burst ringing Priority calls, including Automatic Callback, Priority Calling, Queuing Callback, or calls to attendants that are answered by designated voice terminals assigned preselected call routing.

The following table lists timing for the three ringing-pattern types. For each pattern, there is a slight differnce in timing between ports on a traditional module and ports on a universal module. In either case, a complete cycle lasts 5.2 seconds.

Ringin	g Pattern	Ringing Cycle (Seconds)
1-Burst	Trad. Mod.	on 1.1, off 4.1
Ringing	Univ. Mod.	on 0.9, off 4.3
2-Burst	Trad. Mod.	on 0.2, off 0.4, on 0.5, off 4.1
Ringing	Univ. Mod.	on 0.4, off 0.2, on 0.3, off 4.3
3-Burst	Trad. Mod.	on 0.2, off 0.1, on 0.2, off 0.1, on 0.5, off 4.1
Ringing	Univ. Mod.	on 0.2, off 0.1, on 0.2, off 0.1, on 0.3, off 4.3

Procedure Usage

Distinctive Ringing is provided with all systems and requires no administration.

112-1

RINGING TRANSFER

The Ringing Transfer feature allows a multiappearance voice terminal user to transfer all ringing for a given extension number to other voice terminal(s). When Ringing Transfer is active for an extension, a call terminating to an appearance of that extension rings a predefined subset of the other terminals sharing the same appearance.

Assignment of the Ringing Transfer feature is on a per-extension basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Voice Terminal and Data Module Administration

Bridged Call.

Procedure Sequence

ADD	CHANGE	REMOVE
052 Word 2	052 Word 2	052 Word 2
054 Word 1	054 Word 1	054 Word 1

Procedure Usage

052 Word 2 Administers the Ringing Transfer characteristics, including the extension, the line appearance, and the ringing transfer type to an assigned multiappearance voice terminal.

Field 1	Enter the extension (000-99999).	
Field 2	Enter the appearance number (1-12).	
Field 4	Enter the 0 1 2	e Ringing Transfer type: No Ringing Transfer Ringing when active No ringing when active

054 Word 1 Administers the RINGING TRANSFER button to an assigned multiappearance voice terminal.

oice terminal.			
Field 1	Enter the module number (0-30).		
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).		
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).		
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).		
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).		
Field 6	Enter the device type: 0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP		
Field 7	Enter the member (button) number (0-62).		
Field 8	Enter the extension number to transfer the ringing to (000-99999).		
Field 9	Enter a "12" to specify button type as "Ringing Transfer."		

ROUTE ADVANCE

The Route Advance feature automatically reroutes outgoing calls over alternate trunk groups when the initially-accessed trunk group is busy.

The Route Advance feature offers efficient use of available trunk groups. To provide minimum traffic interference, the first-choice trunk group could be 1-way outgoing trunks. Subsequent trunk groups might be 2-way. The alternate trunk groups are used primarily for incoming traffic. This allows spill over from the first-choice trunk group. The last (fifth-choice) trunk group could be assigned for Remote Access. These remote access trunks, being the last-choice trunk, should then remain virtually unblocked for Remote Access. The trunk access code determines the first-choice trunk group. Assignment of the Route Advance feature is on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Trunk Administration

Queuing.

Procedure Sequence

ADD	CHANGE	REMOVE	
100 Word 4	100 Word 4	100 Word 4	
330 Word 2	330 Word 2	330 Word 2	

Procedure Usage

100 Word 4 Administers the Ro	oute Advance trunk groups.
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Field 1 Enter the trunk group number (18-999).

Fields 2-5 Enter the "route-to" trunk group numbers (-, 18-999).

Allows trunk groups that are set up for Queuing to be used in a Route Advance pattern.

Field 1 Enter the trunk group number (18-999).

Field 9 Enter the Route Advance pattern:

0 Disable

1 Enable

SERIAL CALLS

The Serial Calls feature allows an attendant to connect a caller from the public network to two or more voice terminals in succession.

Assignment of the Serial Calls feature is on a per-system basis. Recall buttons are assigned on a per-voice terminal basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Voice Terminal and Data Module Administration

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
054 Word 1	054 Word 1	054 Word 1
200 Word 1		200 Word 1

Procedure Usage

054 Word 1 Administers the recall button to an assigned multiappearance voice terminal without a fixed recall button.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

	Field 6	Enter the device type: 0 Basic set 1 Feature module
		Coverage moduleDisplay module
		4 ADFTC/MTCP
	Field 7	Enter the member (button) number (0-62).
	Field 8	Enter the extension number (-, 000-99999).
	Field 9	Enter a "27" for the recall button.
200 Word 1	Administers t	wo-party hold for the attendant console(s).
	Field 9	Enter the two-party hold assignment:
		0 Disable
		1 Enable

STRAIGHTFORWARD OUTWARD COMPLETION

The Straightforward Outward Completion feature allows an attendant to complete an outgoing trunk call for a voice terminal user. This feature is used to extend calls under the following circumstances:

- For voice terminals that are outward restricted
- For voice terminals with insufficient Facilities Restriction Levels (FRLs) for the trunks required
- For trunks under attendant control.

By completing outgoing calls, the attendant can screen calls and control their destinations.

Prerequisite Administration

To administer this feature, make sure the following is administered:

Attendant Console Administration

TENANT SERVICES

The Tenant Services feature allows a large DEFINITY Generic 2 system to appear to users of the system as many small, independent systems. This capability allows a single large Generic 2 to be shared among a wide assortment of user groups (referred to as 'tenants'). A Generic 2 configured as a 'partitioned system' can appropriately serve the telecommunications needs of several situations:

- Major airports
- Industrial parks
- Large medical centers
- Large office complexes.

The Tenant Services feature is assigned on a per-attendant partition and on a per-extension partition basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Attendant Console Administration

Voice Terminal and Data Module Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation.

Authorization Codes

Interpartition Access

World Class Routing (WCR).

Procedure Sequence

ADD	CHANGE	REMOVE
276 Word 1	000 Word 4	317 Word 2
000 Word 4	210 Word 2	317 Word 1
210 Word 2	270 Word 1	270 Word 5
270 Word 1	270 Word 2	270 Word 4
270 Word 2	270 Word 3	270 Word 3
270 Word 3	270 Word 4	270 Word 2
270 Word 4	270 Word 5	270 Word 1
270 Word 5	317 Word 1	210 Word 2
317 Word 1	317 Word 2	000 Word 4
317 Word 2	350 Word 2	350 Word 2
350 Word 2		276 Word 1

Procedure Usage

O00 Word 4 Administers an extension or a range of extensions to an extension partition. Unless explicitly translated, extensions are assigned to extension partition 0 by default.

Field 1	Enter the first extension number (000-99999).
Field 2	Enter the last extension number (000-99999).
Field 3	Enter the extension partition (0-999).

210 Word 2 Administers an attendant console position to an attendant partition. Also, assigns an attendant position as the partition's controlling attendant console.

Field 1	Enter the console number (1-40).
Field 2	Enter the attendant partition (0-40).
Field 3	Enter the encode to establish controlling console: 0 Not the controlling console 1 The controlling console
Field 4	Enter the LDN (-, 000-99999).

270 Word 1 Associates an attendant partition with one or more extension partitions and associates one or more extension partitions with a partition group.

Field 1	Enter the extension partition (0-999).
Field 2	Enter the attendant partition (-, 0-40).
Field 3	Enter the partition group (-, 1-500).

270 Word 2 Administers the characteristics of an attendant partition including the attendant overflow parameters and associated controlled restriction groups.

Field 1 Enter the attendant partition (0-40).

Field 2 Enter the attendant overflow partition:

No overflow destination

0-40 Overflow destination

Field 3 Enter the attendant overflow type:

No overflow

1 Position busy or headset removed

2 Position busy, headset removed or all switch loops busy

Field 4 Enter the attendant controlled restriction group:

No controlled restriction group

1-63 Controlled restriction group

270 Word 3 Administers the default extension for preselected call routing to an attendant partition. This procedure also displays the attendant partition's common night extension.

Field 1 Enter the attendant partition (0-40).

Field 2 Enter the default extension (-, 000-99999).

270 Word 4 Administers a Listed Directory Number (LDN) to an attendant partition.

Field 1 Enter the LDN (-, 000-99999).

Field 2 Enter the attendant partition (0-40).

270 Word 5 Administers the trunk groups to extension partitions and attendant partitions. Included is the trunk group, the extension partition, outgoing trunk usage, and incoming trunk assignments to attendant partitions. Dedicated trunks are used by just one partition. Shared trunks are used by more than one partition.

Field 1 Enter the trunk group number (-, 18-999).

Field 2 Enter the extension partition (-, 000-999).

Field 4 Enter the outgoing trunk usage:

Incoming trunk only

0 Outgoing or 2-way shared

1 Outgoing or 2-way dedicated

Field 5 Enter the incoming trunk assignments to attendant partition (0-40).

Administers the Tenant Services feature to the feature group class of service. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.

Field 6 Enter the Tenant Services assignment:

0 Disable1 Enable

317 Word 1 Assigns extension partions and attendant partitions to a call categories.

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Field 1 Enter the call category (0-255)
```

Field 2 Enter "9" for all plans.

Field 4 Enter the partition type:

- Tenant Services feature is not active

0 Extension partition

1 Attendant partition

9 All partitions

Field 5 Enter the partion number:

Not applicable—either the Tenant Services feature is inactive or "All Partitions" (encode 9) was selected in field 4.

0-40 Attendant partion (field 4 = 1)

0-999 Extension partion (field 4 = 0)

317 Word 2 Assigns a call category and a Virtual Nodepoint Identifier (VNI) to a routing pattern.

Field 1 Enter the VNI (1-1023).

Field 2 Enter the call category (0-255).

Field 3 Enter the pattern number (-, 0-1023).

350 Word 2 Administers the access codes for the Tenant Services feature.

Field 1 Enter the feature encode:

97 Unattended Console Service (for a partition) - activate

98 Unattended Console Service (for a partition)

deactivate

Field 2 Enter the first digit of the dial access code:

0-9 11 or * 12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

TERMINAL BUSY INDICATIONS

The Terminal Busy Indications feature provides a visual indication of the on-hook/off-hook status of a voice terminal to a multiappearance voice terminal. A secondary answering position uses this information when servicing calls for a busy primary position.

When the signaling voice terminal is on-hook, the Terminal Busy Indication lamp on the signaled voice terminal is dark. When the signaling voice terminal goes off-hook, the green status lamp on the signaled voice terminal lights.

Assignment of the Terminal Busy Indication feature is on a per-voice terminal basis. Basic voice terminal assignments must be done before adding this feature.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Usage

O55 Word 1 Administers the Terminal Busy Indications feature to a signaling terminal (Fields 1-5) and a signaled terminal (Fields 6-12). Both terminals must be assigned as multiappearance voice terminals, however, the signaling terminal can be an analog voice terminal administered as a Straight Line Set (SLS). The Terminal Busy Indication button is assigned to a button with a lamp on the signaled terminal.

Field 1	Enter the module number (0-30).
Field 2	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 3	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 4	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 5	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

Field 6	Enter the device type (of signaled terminal):
	0 Basic set
	1 Feature module
	2 Coverage module
	3 Display module
	4 ADFTC/MTCP
Field 7	Enter the member (button) number (0-62).
Field 8	Enter the module number (0-30).
Field 9	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 10	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).
Field 11	Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).
Field 12	Enter the circuit number (0-7 for traditional modules, 0-23 for universal and XE modules).

THROUGH DIALING

The Through Dialing feature allows an attendant to select the outgoing trunk group for an outgoing call. The calling party then dials the seven or ten digits required to complete the call. This allows the attendant to retain control of trunk use while reducing attendant call-processing time.

 $Pre requisite\ Administration$

To administer this feature, make sure the following is administered:

Attendant Console Administration

TIMED RECALL ON OUTGOING CALLS

The Timed Recall on Outgoing Calls feature provides control over the use of outgoing trunks when there is an excessive number of lengthy calls. Timed Recall automatically transfers control of the outgoing calls from selected voice terminals to an attendant after a predetermined time interval of 1-31 minutes. This feature applies to voice terminals with a specific class of service which is set in the Class of Service section in Chapter 2, "System Administration" The system sends a warning tone to the calling party 30 seconds before the transfer occurs. The warning tone is a 440-hertz tone with a duration of 1 second.

When a call is transferred to an attendant, it is identified by the Attendant Display feature. At this time, the attendant assumes control of the call. The attendant may talk with the calling and/or called party to decide whether the call should continue.

Assignment of the Timed Recall on Outgoing Calls feature is on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Trunk Administration

Attendant Console Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Display.

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	101 Word 1	010 Word 1
101 Word 1		101 Word 1

Procedure Usage

010 Word 1 Administers Timed Recall Exempt to an extension class of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 16 Enter the Timed Recall Exempt assignment:

0 Disable (timed recall active)1 Enable (timed recall inactive)

101 Word 1 Administers Timed Recall to an assigned trunk group.

Field 1 Enter the trunk group number (18-999). DCS trunk groups are

limited to 18-255.

Field 10 Enter the amount of time that elapses before a Timed Recall

occurs on this trunk group (0-31 in minutes).

Field 11 Enter the desired threshold (0-7). Timed Recall will not occur

until the number idle trunks in a trunk group reaches the level

entered into this field.

TIMED REMINDER

The Timed Reminder feature automatically alerts the attendant after 30 seconds for the following types of calls:

- Calls on a switched loop waiting for the called party to answer
- Calls on a switched loop waiting to be connected to a busy extension number
- Incoming calls placed on hold on the console.

The attendant can reenter the call and decide whether to terminate the call or permit the waiting to continue. By reentering the call, the attendant lets the calling party know that the call has not been forgotten. The Timed Reminder feature enables the attendant to keep track of every call and provides callers with good service.

Prerequisite Administration

To administer this feature, make sure the following is administered:

Attendant Console Administration

TOUCH-TONE CALLING SENDERIZED OPERATION

The Touch-Tone Calling Senderized Operation feature reduces the time necessary to set up calls to distant locations equipped to receive touch-tone calling signals. The collected digits are sent to the distant office via touch-tone service signaling. If a distant location is not equipped to receive touch-tone calling signals, the system generates and sends dial pulses.

The Touch-Tone Calling Senderized Operation feature is assigned on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Touch-Tone Senders (See Chapter 2, "System Administration")

Trunk Administration

Procedure Usage

101 Word 1	Administers outs	going touch-tone	signaling to a	n assigned trunk	group.

Field 1 Enter the trunk group number (18-999). DCS trunk groups are

limited to 18-255.

Field 7 Enter the touch-tone out assignment:

O Touch-tone signals are not used for outgoing trunks

1 Touch-tone signals are used for outgoing trunks

TOUCH-TONE DIALING

The Touch-Tone Dialing feature provides quick and easy dialing on a touch-tone dialing pad. This dialing method is standard on voice terminals and attendant consoles for a DEFINITY Generic 2 system. Moreover, Touch-Tone Dialing is required for the use of certain features. For example, a touch-tone dialing pad is required to dial access codes beginning with the special character "*" or "#." Also, Remote Access requires that a dialing register be retained for additional dialing after a line or trunk seizure.

Buttons 0-9 are the equivalent of the same numbers on a rotary dial. The two extra buttons, * and #, support special functions such as forming parts of access codes. These characters are not available with rotary dialing. When a touch-tone dialing button is pressed, a distinctive tone is generated for each button.

If a distant system is unable to accept touch-tone calling signals, the system has the ability to generate dial pulses by using Touch-Tone Dialing to Dial Pulse Conversion.

Assignment of the Touch-Tone Dialing feature is on a per-trunk group and on a per-terminal class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Touch-Tone Receivers (See Chapter 2, "System Administration")

Voice Terminal and Data Module Administration

Procedure Usage

010 Word 1 Administers the touch-tone dialing to an extension of service.

Field 1 Enter the class of service (1-30, 32-63).

Field 15 Enter the touch-tone dialing assignment:

O Disable (rotary dialing only)

1 Enable (touch-tone and rotary dialing)

TRANSFER

The Transfer feature allows voice terminal users to transfer calls to other terminals or trunks without attendant assistance.

Assignment of the Transfer feature is on a line class-of-service basis for single-appearance voice terminals. Multiappearance voice terminals are always provided with the feature.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Voice Terminal and Data Module Administration

Procedure Sequence

ADD	CHANGE	REMOVE
010 Word 1	010 Word 1	010 Word 1
275 Word 4		275 Word 4

Procedure Usage

010 Word 1	Administers the Transfer feature to an extension class of service. This field also
	controls the Conference - Three Party feature for single-appearance voice terminals.

Field 1 Enter the desired class of service (1-30, 32-63).

Field 14 Enter the Conference Three Party/Transfer assignment:

0 Disable1 Enable

275 Word 4 Administers trunk-to-trunk transfer to the system class of service.

Field 3 Enter the trunk-to-trunk transfer assignment:

0 Disable1 Enable

TRUNK GROUP BUSY/WARNING INDICATORS TO ATTENDANT

The Trunk Group Busy/Warning Indicators to Attendant feature provides the attendant with a visual warning, indicating when the number of available trunks in a group diminishes to a preset level. A visual indication is also provided when every trunk in a group is busy.

The Trunk Group Busy and the Trunk Group Warning Indicators are useful when the Attendant Control of Trunk Group Access feature is provided. The warning indicators show the attendant when control of access to trunk groups may be necessary. The busy indicators show the attendant when a trunk in a busy group becomes available for a waiting voice terminal.

Assignment of the Trunk Group Busy/Warning Indicators to Attendant feature is on a per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Attendant Direct Trunk Group Selection.

Procedure Usage

202 Word 1

Administers the Direct Trunk Group Selection buttons to the attendant console(s). The buttons used for this feature are on the left half of the console. The rows are numbered from bottom-to-top (1-4) and the buttons are numbered from left-to-right (1-6).

Field 1	Enter the desired row number (1-4).
Field 2	Enter the desired button number (1-6).
Field 3	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 4	Enter the second digit of the dial access code (0-9).
Field 5	Enter the third digit of the dial access code (0-9).
Field 6	Enter the fourth digit of the dial access code (0-9).

Field 7 Enter the desired trunk group busy/warning status:

- 0 Busy for this trunk group only
- Busy for this trunk group and route advance trunk groups
- 2 Busy/warning for this trunk group only
- 3 Busy/warning for this trunk group and route advance trunk groups
- Field 8 Enter the warning lamp level (1-7). When the number of idle trunks is less than or equal to the number in this field, the applicable warning lamp will light.
- Field 9 Enter the remote flag indicator (0, 1). A "1" in this field when there is nothing in fields 10-12 means that the trunk group (DAC in fields 3-6) homes on this system but may be controlled or selected by a remote system. Having a "1" in this field when there is a DAC in fields 10-12 means that the trunk group is remote to this system, but may be controlled or selected by this system. In this case, the local DAC (Fields3-6) will access the tie trunk to the remote system.
- Field 10 Enter the first digit of the remote dial access code:
 - DAC not used

0-9

11 or *

12 or #

- Field 11 Enter the second digit of the remote dial access code (-, 0-9).
- Field 12 Enter the third digit of the remote dial access code (-, 0-9).

TRUNK GROUP SELECT ATTENDANT FEATURE LOOP BUTTONS **BUTTONS BUTTONS** 2 6 0 0 0 0 0 0 ALM O 1 2 0 0 0 0 0 0 O PR ACK O $\begin{array}{|c|c|c|}\hline 0 \\\hline 2 \\\hline \end{array}$ $\frac{\circ}{3}$ 4 6 5 4 6 0 0 · \bigcirc \circ \circ 7 8 9 0 0 O PA START ANSWER RELEASE 2 $\begin{bmatrix} \circ & \circ \\ 3 & 4 \end{bmatrix}$ * # 0 BUTTON BUTTON BUTTON BUTTON BUTTON BUTTON BUTTON ROW 1 ROW 2 ROW 3 ROW 4 ROW 1 ROW 2 ROW 3

TRUNK VERIFICATION — ATTENDANT

The Trunk Verification — Attendant feature gives an attendant the ability to test the operation of individual trunks. The attendant can identify defective trunks and report their condition for servicing. This results in better overall communications.

Assignment of the Trunk Verification by Attendant feature is on a per-system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Attendant Console Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection.

Procedure Sequence

ADD	CHANGE	REMOVE
103 Word 1 200 Word 1	203 Word 1	103 Word 1 200 Word 1
203 Word 1		200 Word 1 203 Word 1

Procedure Usage

102 337 1.1

103 Word 1	Administers the	briage-o	n capability	to an assign	ied trunk group	
		_				

Field 1 Enter the trunk group number (18-999).

Field 7 Enter the bridge-on assignment:

- O Bridging on to this trunk group is not allowed. Trunk verfication won't work for this trunk group when this encode is in effect.
- Bridging on to this trunk group is allowed. Trunk verification works for this trunk group when this encode is in effect.

200 Word 1 Administers the Trunk Verification — Attendant feature.

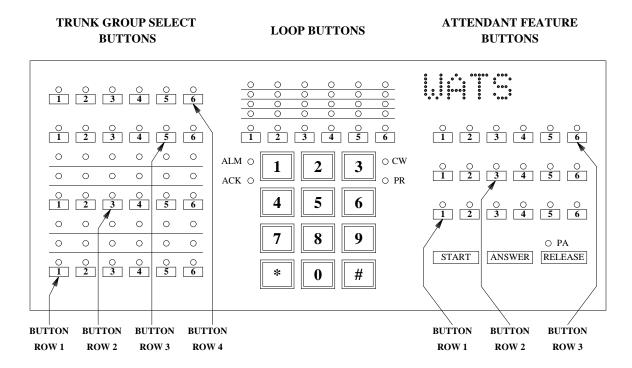
Field 8 Enter the trunk test assignment:

0 Disable1 Enable

203 Word 1 Administers the VERFY button to the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter a "7" for the VERFY button type.



TRUNK VERIFICATION — VOICE TERMINAL

The Trunk Verification — Voice Terminal feature gives the user of a designated voice terminal the ability to test the operation of individual trunks. The user can identify and remove defective trunks from service. The defective trunk can be repaired and returned to service quickly. As a result, better communications service is provided.

Assignment of the Trunk Verification — Voice Terminal feature is on a system basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration)

Procedure Sequence

CHANGE	REMOVE
285 Word 1	103 Word 1
350 Word 2	285 Word 1
	350 Word 2
	285 Word 1

Procedure Usage

103 Word 1	Administers the	e bridge-on c	apability to ar	ı assigned tru	nk group.

Field 1 Enter the trunk group number (18-999). Field 7 Enter the bridge-on assignment:

- O Bridging on to this trunk group is not allowed. Trunk verfication won't work for this trunk group when this encode is in effect.
- Bridging on to this trunk group is allowed. Trunk verification works for this trunk group when this encode is in effect.

285 Word 1 Administers a designated internal extension and/or a remote maintenance terminal for trunk verification.

Field 8 Enter the extension used for trunk verification (000-99999).

Field 9 Enter the remote maintenance extension used for trunk verification (000-99999).

350 Word 2 Administers the trunk test and maintenance busy dial access codes.

Field 1	Enter the feature encode: 42 Maintenance busy a trunk 43 Maintenance release a trunk 44 Trunk test from a terminal
Field 2	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 3	Enter the second digit of the dial access code (0-9).
Field 4	Enter the third digit of the dial access code (0-9).
Field 5	Enter the fourth digit of the dial access code (0-9).

TRUNK-TO-TRUNK CONNECTIONS

The Trunk-to-Trunk Connection feature allows an attendant to connect an incoming or outgoing trunk call to an outgoing trunk. The attendant console holds outgoing trunk-to-outgoing trunk connections in order to monitor the connection and release the trunk when the call is finished.

Assignment of the Trunk-to-Trunk Connection feature is on a per-system class-of-service basis.

Procedure Sequence

ADD	CHANGE	REMOVE
110 Word 1	110 Word 1	111 Word 1
111 Word 1	111 Word 1	110 Word 1
275 Word 1		275 Word 1
275 Word 4		275 Word 4

Procedure Usage

110 Word 1 Administers a trunk dial access code to a restricted dial code entry. This entry is used in Procedure 111 Word 1.

Field 1	Enter the type of trunk restriction desired: 0 Tandem tie 1 Trunk-to-trunk
Field 2	Enter the restricted dial code entry number (1-16).
Field 3	Enter the first digit of the dial access code: 0-9 11 or * 12 or #
Field 4	Enter the second digit of the dial access code (0-9).
Field 5	Enter the third digit of the dial access code (0-9).
Field 6	Enter the fourth digit of the dial access code (0-9).

Administers a trunk group to a restricted dial code entry. When assigned, the trunk dial access code you assigned in Procedure 110 Word 1 cannot be used to make a trunk call to the trunk group in field 2 of this procedure.

Field 1 Enter the type of trunk restriction desired:

Tandem tie trunkTrunk-to-trunk

Field 2 Enter the trunk group number (18-999). This trunk group cannot

be accessed by a caller using the trunk group dial access code

specified in Procedure 110 Word 1.

Field 3 Enter the restricted dial code entry number (1-16). This entry

number must match the entry number in Procedure 110 Word 1

field 2.

275 Word 1 Administers trunk-to-trunk calling to the system class of service.

Field 16 Enter the trunk-to-trunk calling assignment:

0 Disable1 Enable

275 Word 4 Administers trunk-to-trunk transfer to the system class of service.

Field 3 Enter the trunk-to-trunk transfer assignment:

0 Disable1 Enable

UNATTENDED CONSOLE SERVICE

The Unattended Console Service consists of three features which can function together or separately. The three Unattended Console Service features are:

- Unattended Console Service Alternate Console Position
- Unattended Console Service Call Answer From Any Voice Terminal
- Unattended Console Service Preselected Call Routing.

These features are designed to work together to provide flexibility and enhance attendant services under a wide variety of circumstances. While designed to work together, each of the Unattended Console Service features can function separately and independently from the other's.

The way in which these features work together to supplement each others' coverage is shown in Figure 129-1.

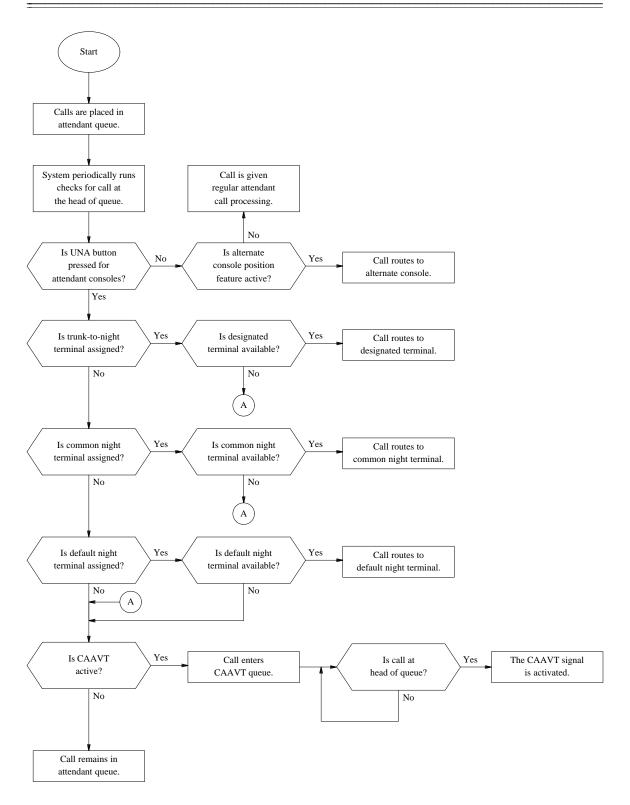


Figure 129-4. Interrelation of Unattended Console Service Features

Unattended Console Service — Alternate Console Position

When active, the Alternate Console Position version of this feature directs calls for one attendant console to an alternate console. The alternate console must be identical to and have the same features as the primary console.

This feature is useful at night or during periods when consoles have been removed from service. Also, providing attendant services at another location during certain periods (e.g., a security office) provides convenience and efficiency of operation. The alternate console position provides all the attendant capabilities of the primary attendant console.

The Alternate Console Position feature is a hardware implemented feature and requires no administrative procedures.

Prerequisite Administration

To administer this feature, make sure the following is administered:

Attendant Console Administration

Unattended Console Service — Call Answer From Any Voice Terminal

The Call Answer From Any Voice Terminal (CAAVT) version of the Unattended Console Service feature group allows any unrestricted voice terminal user to answer calls made to the attendant when the attendant is not on duty and a specific voice terminal has not been designated to answer the calls.

The incoming attendant-seeking calls activate a distinctive gong, bell, or chime. If necessary, the answering voice terminal user can transfer the call to another voice terminal.

Assignment of the CAAVT feature is on a system class-of-service basis.

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
275 Word 2	275 Word 2	275 Word 2
350 Word 2	350 Word 2	350 Word 2

Procedure Usage

275 Word 2 Administers CAAVT to the system class of service and administers the gong, chime, or bell equipment location (SN229 for traditional modules, TN742 or TN746 for universal modules).

Field 2	Enter the CAAVT feature activation:
	- Feature not available
	0 Disable
	1 Enable
Field 3	Enter the module number (0-30).
Field 4	Enter the cabinet number (0-7 for traditional modules, 0 for universal and XE modules).
Field 5	Enter the port carrier number (0-3 for traditional modules, c-e for universal and XE modules).

Field 6 Enter the slot number in the port carrier (0-3, 5-8, 13-16, 18-21 for traditional modules, 1-20 for universal modules, 1-18 for XE modules).

Field 7 Enter the circuit number (0-7 for traditional modules, 0-15 for

350 Word 2 Administers the feature dial access code.

Field 1 Enter the feature encode: CAAVT code 16 47 CAAVT — Activate for CAS Backup Field 2 Enter the first digit of the dial access code: 0-9 11 or * 12 or # Enter the second digit of the dial access code (0-9). Field 3 Field 4 Enter the third digit of the dial access code (0-9). Field 5 Enter the fourth digit of the dial access code (0-9).

Unattended Console Service — Preselected Call Routing

The Preselected Call Routing version of the Unattended Console Services feature group redirects attendant seeking calls to designated extension numbers whenever the console is unattended. Distinctive 3-burst ringing is used at the designated voice terminal to alert the user to the nature of the incoming call. The attendant can designate and cancel the assignment of extension numbers.

Calls already in progress when this feature is activated or canceled are not disturbed.

Three types of terminal assignments are available:

- Common Voice Terminal Directs all attendant seeking calls to a designated extension number.
- Default Voice Terminal Receives calls when no common voice terminal has been assigned.
- Trunk-to-Terminal Directs calls on a specified incoming trunk to a designated extension number.

The user benefits derived from this service are:

- Improved customer services by providing holiday, weekend, or night service
- Prevention of lost calls
- Flexibility in meeting customer needs.

Assignment of the Preselected Call Routing feature is on a per-system basis.

$Pre requisite\ Administration$

Before administering this feature, make sure the following is administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Attendant Console Administration

Procedure Sequence

ADD	CHANGE	REMOVE
116 Word 1	203 Word 1	350 Word 2
150 Word 1	275 Word 2	275 Word 2
203 Word 1	270 Word 3	270 Word 3

275 Word 2	350 Word 2	203 Word 1
270 Word 3	116 Word 1	116 Word 1
350 Word 2	150 Word 1	150 Word 1

Procedure Usage

116 Word 1 Administers the default night terminal to an assigned digital trunk group.

Field 7 Enter the extension for the desired night terminal (000-99999).

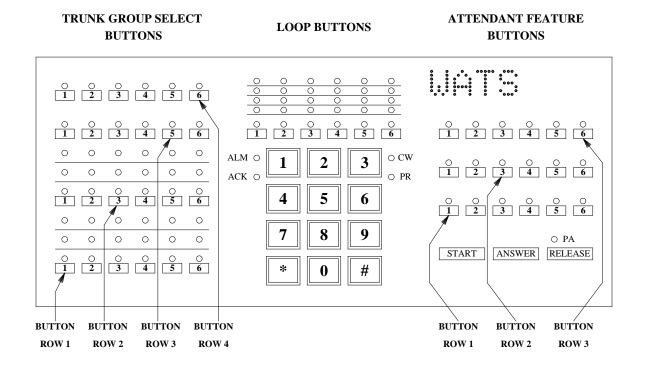
150 Word 1 Administers the default night terminal to an assigned analog trunk group.

Field 7 Enter the extension for the desired night terminal (000-99999).

203 Word 1 Administers the UNA (NITE) button for the attendant console(s). The buttons for this feature are located on the right half of the console. The rows are numbered from bottom-to-top (1-3) and the buttons are numbered from left to right (1-6).

Field 1 Enter the row number where you want the buttons (1-3).

Fields 2-7 Enter a "2" in the desired location.



270 Word 3 Administers a default night extension to an attendant partition. This procedure also displays the common night extension number. Use this procedure only when Tenant Services is active.

Field 1 Enter an attendant partition (0-40).

Field 2 Enter the default extension (000-99999).

275 Word 2 Administers the preselected call routing and the default night terminal extension. Use this procedure also to display the current common terminal extension (field 9).

Field 1 Enter the preselected call routing assignment:

Feature not available

0 Disable

1 Enable

Field 8 Enter the default extension (000-99999). Use Procedure 270 Word 3 to assign the default extension when Tenant Services is active.

350 Word 2 Administers the preselected call routing dial access codes.

Field 1 Enter the feature encode:

22 Clear all terminals

Assign common terminal

Override common terminal (not allowed with Tenant Services)

Assign terminal to trunk (not allowed with Tenant Services)

97 Activate Unattended Console Service

98 Deactivate Unattended Console Service

Field 2 Enter the first digit of the dial access code:

0-9

11 or *

12 or #

Field 3 Enter the second digit of the dial access code (0-9).

Field 4 Enter the third digit of the dial access code (0-9).

Field 5 Enter the fourth digit of the dial access code (0-9).

UNIFIED MESSAGING

The Unified Messaging feature is an integrated, cost-effective family of distinct messaging services working together to meet a customer's total organizational messaging requirements.

Unified Messaging allows prompt internal and external communications for voice and data. This feature is designed to break the barriers of efficient phone communications including busy signals, unanswered calls, repeated call backs, waiting on hold, and missed communications. These barriers are broken by having efficient alerting and notification of new messages that can be universally accessed from the messaging services.

Procedure Usage

No separate administration is needed for Unified Messaging. Unified Messaging relies upon the administration of AUDIX, Call Coverage, and Leave Word Calling at the system and the Messaging Server.

VISUALLY IMPAIRED ATTENDANT SERVICE

The Visually Impaired Attendant Service feature provides additional devices to enable visually impaired attendants to operate the attendant console. These devices include:

- A grooved faceplate guide
- A light-sensitive pen
- A tone generator.

Prerequisite Administration

To administer this feature, make sure the following is administered:

Attendant Console Administration

WIDE AREA TELECOMMUNICATIONS SERVICE ACCESS

The Wide Area Telecommunications Service (WATS) Access feature provides users with rapid, straightforward access into the WATS network. WATS provides outgoing call service to a predetermined geographical area at rate that is cheaper than regular toll service. A similar but separate service is provided for incoming calls by 800 Service Access. This feature (800 Service) has also been known as INWATS. Incoming 800 Service calls can be provided LDN Service (directed to an attendant), be directed to an ACD or go directly to a specific System 85 R2V4 extension, or be provided with the use of the Remote Access feature.

Calls using WATS Access can be originated by System 85 terminal users or Remote Access users provided restrictions are not applied, or they can be set up using attendant assistance.

Assignment of the WATS Access feature is on a per-system and per-trunk group basis.

Prerequisite Administration

Before administering this feature, make sure the following is administered:

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Attendant Direct Trunk Group Selection

This feature allows the WATS trunk group to be assigned to a button on the attendant console.

Attendant Display

This feature administers the attendant display to display the name associated with the WATS trunk groups.

Intercept Treatment

Restriction — Miscellaneous Trunk Restrictions

Route Advance

Procedure Sequence

ADD	CHANGE	REMOVE
103 Word 1	103 Word 1	103 Word 1
115 Word 1	115 Word 1	115 Word 1

Procedure Usage

103 Word 1 Specifies which World Class Routing options, and other features (such as FRL and Authorization Codes), are in effect for any particular trunk group.

115 Word 1 Administers the incoming termination point of a trunk group.

Field 1 Enter the trunk group number (18-999).

Field 2 Enter the termination point:

- Trunk group terminates in an ACD group
 Trunk group terminates on local attendant
- 1 Trunk group terminates on CAS
- 2 Trunk group terminates on a VDN.

Field 3 Enter the ACD split assignment:

- Trunk group not terminated at ACD

1-60 ACD split number

Field 4 Enter the ACD priority:

- Non-priority ACD split termination

1 Priority ACD split termination

WORLD CLASS ROUTING

The World Class Routing (WCR) feature provides alternate routing of public and private network calls. As of DEFINITY Generic 2.2, WCR replaces the earlier AAR and ARS features. WCR provides all the capabilities of AAR and ARS plus some new enhancements.

The North American Numbering Plan (NANP) definitions are changing to accommodate growth of the public network (i.e. area codes and office codes by definition are no longer distinguishable). WCR was developed to handle NANP and International changes long into the future. In addition to accommodating growth of the public network, enhanced digit analysis and multiple networks were added to provide several new capabilities.

WCR consists of eight administrable networks. One network for interfacing with the internal dialing plan (Network 0), and the other 7 (Networks 1-7) for routing purposes. Network 1 is a unique network in that it has a toll and a toll-free DAC assigned to it. These networks are typically organized by digit strings that for some reason have something in common.

Administration of the World Class Routing feature is on a per-system basis. In depth examples of WCR administration and implementation can be found in *DEFINITY Communications System Generic 2 World Class Routing Implementation Notes* (555-105-531).

Prerequisite Administration

Before administering this feature, make sure the following are administered:

Dialing Plan and Dialing Plan — Features (See Chapter 2, "System Administration")

Trunk Administration

Related Administration

The following administration is not required for this feature or task, but is recommended to enhance operation:

Account Codes

Attendant Direct Trunk Group Selection

Authorization Codes

Bearer Capability Class of Service (BCCOS)

Call Detail Recording

New capabilities allow the "number sent", "dialed number", and "pattern and preference numbers" to be recorded.

Facilities Restriction Level

Queuing

Administer the number of trunk groups in a WCR pattern used for Queuing.

Trunk-to-Trunk Connections

Procedure Sequence

ADD	CHANGE	REMOVE
075 Word 2	075 Word 2	075 Word 2
075 Word 3	075 Word 3	075 Word 3
010 Word 3	010 Word 3	010 Word 3
276 Word 1	350 Word 2	321 Word 2
350 Word 2	285 Word 1	312 Word 1
285 Word 1	320 Word 1	314 Word 1
103 Word 1	321 Word 1	314 Word 2
312 Word 1	312 Word 1	314 Word 3
314 Word 1	314 Word 1	317 Word 1
314 Word 2	314 Word 2	317 Word 2
314 Word 3	314 Word 3	318 Word 1
317 Word 1	317 Word 1	318 Word 2
317 Word 2	317 Word 2	319 Word 1
318 Word 1	318 Word 1	321 Word 1
318 Word 2	318 Word 2	287 Word 1
319 Word 1	319 Word 1	350 Word 2
320 Word 1	321 Word 2	103 Word 1
321 Word 1	103 Word 1	285 Word 1
321 Word 2	286 Word 1	276 Word 1
287 Word 1	287 Word 1	286 Word 1
354 Word 4	354 Word 4	354 Word 4
316 Word 1	316 Word 1	316 Word 1
286 Word 1		286 Word 1

Procedure Usage

010 Word 3 Administers the extension class of service for WCR toll restriction.

Field 1 Enter the class of service (1-63).

Field 22 Enter the WCR Toll restriction encode:

0 Not Restricted

1 Restricted

075 Word 2 Displays trunk groups and WCR patterns/preferences assigned to a BCCOS, toll-free index, digit modification index, digit sending index, or ISDN sending index.

Field 1	Enter the type encode:	
	1 Bearer Capability Class of Service	
	2 Toll-free Table Index	
	3 Digit Modification Index	
	4 Digit Sending Index	
	5 ISDN Sending Index	
Field 2	Enter the Display Type encode:	
	1 Trunk group information	
	2 Pattern/Preference information	
Field 3	Enter the BCCOS or index number (-, 0-4095).	
Field 4	Trunk group number (-, 18-999).	
Field 5	Pattern number (-, 1-640).	
Field 7	Preference number (-, 1-16).	

075 Word 3 Displays the uses of digit modification indexes administered in Procedure 314 Words 1 and 2.

```
Field 1
                Enter the type:
                          Virtual Nodepoint Identifier (VNI)
                  1
                  2
                          Digit Modification Index (DMI)
Field 2
                Enter the search item number (-, 1-4095).
Field 3
                Enter the Network Number (-, 1-7).
Field 4
                Segment number encode:
                         Digits 1-6
                  1
                  2
                          Digits 7-12
                  3
                         Digits 13-18
Fields 5-10
                Decimal digits -, 0-9, 11 (*).
Field 11
                String length (1-31).
```

103 Word 1 Administers the network trunk group parameters for incoming tie trunk access to WCR, conditional routing attributes, and the number of trunks that are reserved for first-choice WCR trunk groups.

```
Field 1 Enter the trunk group number (18-999).

Field 2 Enter the default FRL (0-7) for incoming calls.
```

Field 3	Enter the number of TCMs (0-2). 0 Do not send or expect to receive any TCMs 1 Send and expect to receive the FRL TCM 2 Send and expect to receive the FRL and Conditional Routing TCMs	
Field 4	Enter the Symmetrical Route specification. 0 No 1 Yes	
Field 5	Enter the WCR trunk access: 0 Incoming tie trunks do not have WCR access 1 Incoming tie trunks have WCR access	
Field 6	Enter the authorization code requirements: 0 No 1 Yes	
Field 8	Enter the number of trunks (0-15) that are reserved for first choice WCR routes.	
Field 9	Dial tone detect ignore: 0 Dial tone detection active 1 Ignore dial tone, wait the pause interval (assigned in Procedure 321 Word 2)	
Field 12	Enter the WCR conditional routing specifications: 0 Is not a conditional facility (e.g., satellite) 1 Is a conditional facility (e.g., satellite)	
Field 13	Enter the Route Selection Method: O Commence route selection after entire number has been dialed 1 Attempt route selection as soon as a Virtual Nodepoint Identifier has been determined	
Field 14	Enter the digit collection specification: 0 Collect all digits before sending 1 Overlap sending	
Field 15	Specify whether dial tone is suppressed after a WCR DAC is dialed or inferred via Procedure 101 Word 3. O Apply dial tone 1 Suppress dial tone	

- 276 Word 1 Administers the standard network feature group. Generally, permission to change the fields in this Procedure is limited to certain AT&T personnel and a "Right-to-Use" fee is usually charged for activating these features.
 - Field 1 Enter the standard network feature assignment:

- 0 Disable
- 1 Enable
- Field 14 This field enables and disables "restart" actions to Network 0 in Procedure 314. Enter the "WCR to Extension" feature assignment:
 - 0 Disable
 - 1 Enable
- Administers the network parameters to the system class of service, including remote access code requirements, numbering plan data, symmetrical routing depth, WCR authorization code enabled, and WCR dial tone suppressed. With symmetrical routing, tandem-to-tandem calls route only on the first-choice trunk group.
 - Field 1 Enter the Remote Access code requirements:
 - 0 No barrier code required
 - 1 Barrier code required
 - 2 Authorization code required
 - 3 Speaker verification required
 - 4 Barrier and authorization code required
 - 5 Barrier and authorization code required; do not prompt for authorization code
 - Field 3 WCR short interdigit timing interval seconds (2-20, default=10)

 To see how the WCR short interdigit timing interval is used, suppose two strings, one of length 7 and the other of length 10, are both administered in a WCR network and that both strings begin with the digits "818." WCR uses the WCR short interdigit timing interval between the seventh and eighth digits rather than using the standard interdigit timing interval of 10 seconds that is applied between each of the first seven digits.
 - Field 5 Enter the symmetrical routing depth:
 - 0 Hierarchical routing
 - 1-16 Preference depth

An ETN tandem switch checks the symmetrical routing depth for incoming calls over intertandem tie trunks where the WCR feature is selecting an outgoing preference. If this field is set to 0, the switch will always check whether every preference has been checked. If this field is set to 1-16, the switch compares the current preference being used to the value assigned in this field. If the current preference is *less than or equal to* the value in this field, the switch will check the next preference in the pattern. If the current preference is *greater than* the value in this field, the switch will continue processing the call as if all

preferences were checked.

Field 6 Enter the Network Route Selection Method:

- O Commence route selection after entire number has been dialed
- 1 Attempt route selection as soon as a Virtual Nodepoint Identifier has been determined
- **286 Word 1** Administers the WCR Plan in effect for the system COS.
 - Field 13 Enter the network plan in effect (1-7).
 - Field 14 Enter the control mode encode:
 - O Automatic control or plan in effect
 - 1 Manual or clocked manual override
- 287 Word 1 Administers the time of day plan for clocked manual override.
 - Field 1 Enter the encode for the day of the week:
 - 1 Monday
 - 2 Tuesday
 - 3 Wednesday
 - 4 Thursday
 - 5 Friday
 - 6 Saturday
 - 7 Sunday
 - Field 2 Enter the hour (0-23) (0 = midnight, 12 = noon).
 - Field 3 Enter the minute (0, 15, 30, 45).
 - Field 4 Enter the Plan number (1-7).
 - Field 5 Enter the day to return to automatic control (manual override can only last for seven days before going back to automatic scheduling):
 - 1 Monday
 - 2 Tuesday
 - 3 Wednesday
 - 4 Thursday
 - 5 Friday
 - 6 Saturday
 - 7 Sunday
 - Field 6 Enter the hour to return to automatic control:
 - 0 12 midnight
 - 1 1 a.m.
 - \downarrow \downarrow
 - 12 12 noon

	13 1 p.m. ↓ ↓	
	23 11 p.m.	
Field 7	Enter the minute to return to automatic control: 0 0 minutes 15 15 minutes 30 30 minutes 45 45 minutes	
Administers info	ormation which applies to WCR networks.	
Field 1	Enter the network number (1-7).	
Field 2	Enter the dial tone suppress encode: 0 Not suppressed 1 Suppressed after dialing the Network DAC	
Field 3	Specify whether CDR account code is required: 0 Not required 1 Must be dialed before WCR DAC 2 May be dialed before or after WCR DAC	
Field 4	Enter the Dial Toll Prefix encode: 0 Not required 1 Required.	
Administers the	dial plan for network digit analysis	
Fields 1-6	Digit strings must occur in the following order: — Account code — IXC — Toll prefix — International access — Operator assistance — One or more address strings.	
	If a digit string occurs out of order, the switch blocks the call. Enter the 1 to 18 digit string identifier: 0-9 Decimal digits 11 Wild card digit (exception SIs only)	
Field 7	Enter the segment number: 1 Digits 1-6 2 Digits 7-12 3 Digits 13-18	
Field 8	Enter the last segment identifier:	

312 Word 1

314 Word 1

- O Segment is not the last in the string identifier
- 1 Segment is the last, add string to network
- 2 Segment is the last, add string to exception network

Note: The remaining fields in this word apply only to the last segment (field 8 = 1 or 2).

- Field 9 Enter the string length (1-31).
- Field 10 Enter the string type encode:
 - 1 Account code
 - 2 Inter-exchange carrier
 - 3 Toll prefix
 - 4 International
 - 5 Operator assistance
 - 6 Address
- Field 11 Enter the action encode:
 - 0 Resolve
 - 1 Restart
- Field 12 Enter the action object (0-4095). The meaning of this field depends on the assignment made in field 11 (see the table following "Field 13")

Field 13 Enter the action attribute (0-7). The meaning of this field depends on the assignment made in field 11 (see the following table)

Field 11	Field 12	Field 13
0 (resolve)	When field 11=0, this field specifies a Virtual Nodepoint Identifier. Zero in this field indicates that the string does not affect route selection.	When field 11=0, this field specifies a Facility Restriction Level for Unauthorized Call Control. Zero in this field allows all callers unconditional access to the dialed number.
1 (restart)	When field 11=1, this field specifies a digit modification index for the M to N conversion function. Zero in this field indicates that no modification of the string should take place.	When field 11=1, this field specifies the Network Number to restart digit analysis. Zero in this field results in an analysis restart to the internal dial plan.

Field 14 Enter the current network number (0-7) being administered.

314 Word 2 Administers string attribute specifications for network digit analysis.

Field 1 Enter the termination or continue digit analysis encode:

- Indicates that the terminating string has been analyzed.WCR software proceeds to route selection.
- Tells the WCR software that there is another string to analyze before selecting a route.
- Field 2 **Note:** Use this field only when Procedure 314 Word 1 field 11 is set to "1" (RESTART).

Enter the restart analysis encode:

- O Analyze the string in the network, specified in Procedure 314 Word 1 field 13, to determine if digit collection should continue or terminate
- 1 Continue collecting digits in the network, specified in Procedure 314 Word 1 field 13, without applying the converted string to the network's dial plan. Only new digits will be analyzed.

Field 3 Enter the VNI operation encode:

Procedure 314	Procedure 314	Word 2 field 3
Word 1	Encode	
Field 11	0	1
0 (resolve)	Set the VNI to the VNI in word 1, field 12.	Add the VNI in word 1, field 12 with the VNI that has been established by a previous string (or strings) in the dialed number.
1 (restart)	Reset the VNI to zero	Allow a VNI which has been established by a previous string (or strings) in the dialed number to persist.

Field 4 Enter the freeze VNI encode:

- O Allow subsequent strings in the dialed number to influence the Virtual Nodepoint Identifier through sets, resets and combines.
- Do not allow subsequent sets, resets and combines. Use the VNI which has been established by this string, and any other previous strings in the dialed number for route selection.

Field 5 Enter the maximum length encode:

- The string length specified in word 1 field 9 is the only acceptable string length for the string identifier.
- Establishes the upper bound on the range of string lengths which the string identifier entered in word 1 can identify.

Field 6 Tone:

- 0 No tone.
- Dial tone. (Apply tone after receipt of this string identifier.)

314 Word 3 Displays the network digit analysis unallocated nodes.

- Field 1 Unallocated Node Counts (0-8191).
- Field 2 Unallocated Leaf Nodes (0-57344). (The number of string identifiers that can be added.)

316 Word 1 Administers the WCR 7 Day Clock.

Field 1 Enter the day encode: Monday 2 Tuesday 3 Wednesday Thursday 4 5 Friday 6 Saturday 7 Sunday Field 2 Enter the hours (0-23) (0 = midnight, 12 = noon). Field 3 Enter the minutes (0-59). Field 4 Enter the plan number (1-7). Field 5 Enter the available for use encode: No 1 Yes Field 6 Display the number of plans administered for each day.

317 Word 1 Administers the GRS-network call category definition.

Field 1 Enter the call category (0-255). Field 2 Enter 1-7 for a specific plan number or 9 for all plans. Field 3 Enter the conditional routing count encode: 0 No conditional routing links used 1 One conditional routing link used 2 Two conditional routing links used 9 0, 1, or 2 conditional routing links used Field 4 Partition Type: Tenant Services feature is not active 0 Extension partition Attendant partition 1 9 All partitions Field 5 Partition Number: Not applicable—either the Tenant Services feature is inactive or "All Partitions" (encode 9) was selected in field 4.

0-999 For extension partitions

For attendant partitions

0-40

317 Word 2 Administers the GRS-network routing.

	Field 1	Enter the VNI (1-1023).	
	Field 2	Enter the call category (0-255).	
	Field 3	Enter the pattern number (1-1023).	
210 W 11	A 1	WOD	
318 Word 1		VCR-network route translation.	
	Field 1	Enter the Pattern number (1-1023).	
	Field 2	Enter the Preference number (1-16).	
	Field 3	Enter the trunk group (18-999).	
	Field 4	Enter the Facility Restriction Level (0-7).	
	Field 5	Enter the warning tone encode: 0 Not given 1 Warning on toll calls 2 Warning on all calls	
	Field 6	Enter the toll-free table encode: - All numbers are toll-free calls 0 All numbers are toll calls 1-63 Toll-free table number	
	Field 7	Enter the digit modification index: 0 No digit modification 1-4095 Digit modification index number	
	Field 8	Enter the digit sending index: 0 Use default sending attributes 1-511 Digit sending index number	
	Field 9	Enter the ISDN sending index: - Non-ISDN 0 Use default sending attributes 1-1023 ISDN sending index number.	
318 Word 2	Administers the network route translations.		
Field 1 Enter the pattern numbe		Enter the pattern number (1-1023).	
	Field 2	Enter the preference number (1-16).	
	Field 3	Enter the bearer capability COLS (0-255).	
319 Word 1	Administers the n	lministers the network toll-free tables.	
	Field 1	Enter the toll-free table index (1-63).	
	Fields 2-8	Enter the toll-free string identifier in fields 2-8.	

320 Word 1 Administers the WCR-Network digit modification.

Field 1 Enter the digit modification index:

0 Display only, (default)

1-4095 Digit modification index number

Field 2 Enter the digits to be deleted from the digit string:

0 Default

1-31 Number of digits to delete

99 Delete all digits.

Field 3 Enter the segment number encode:

0 No digits to insert

1 Digits 1-8

2 Digits 9-16

3 Digits 17-24

4 Digits 25-31

Fields 4-11 Enter the Insertion digit segments one through four (-, 0-9, 11, 12).

321 Word 1 Administers the WCR-digit sending translation.

Field 1 Enter the digit sending index:

0 Display only (default)

1-511 Digit sending index number

Field 2 Enter the send DAC encode:

0 Do not send any DAC (default)

1 Send dialed DAC or else send no DAC

2 Send dialed DAC or else send assigned DAC

3 Send assigned DAC

Fields 3-6 Enter the DAC digits (0-9 for fields 3-6, plus 11, and 12 for field 1).

Field 7 Enter the send IXC flag encode:

0 Do not send any IXC (default)

1 Send dialed IXC or else send no IXC

2 Send dialed IXC or else send assigned IXC

3 Send assigned IXC.

For encodes 2 and 3, the "administered" IXC is actually created by putting two or three digits in front of the carrier identification code (CIC) entered in fields 8-12. Specifically, when the CIC is one, two, or three digits, the digits "10" are put in front to form the IXC and when the CIC is four digits, the digits "101" are put in front to form the IXC.

Fields 8-11 Enter the CIC digits 1-4 in fields 8-11 (-, 0-9).

Field 12 Enter the toll prefix flag encode:

- 0 Do not send any toll prefix (default)
- 1 Toll calls: send the dialed prefix
- 2 Toll calls: send dialed prefix or else assigned prefix
- 3 All calls: send the dialed prefix
- 4 All calls: send dialed prefix or else assigned prefix
- 5 Toll calls: send assigned prefix
- 6 All calls: send assigned prefix

Fields 13-15 Enter the toll prefix digits (-,0-9).

Field 16 Enter the pound sign flag encode:

- 0 Do not send pound sign (default)
- 1 Send pound sign after all other digits have been sent.
- 321 Word 2 Defines the digit grouping and dialing format (touch-tone or rotary) for a trunk group in a WCR pattern.

Field 1 Enter the digit sending index number (0-511).

Fields 2, 5, 8, 11

Enter the pause length (0-16 in even increments) in seconds before the outpulsing of digits groups.

Fields 3, 6, 9

Enter the number of digits to be sent for groups 1, 2, and 3, respectively (1-31, 99=send all remaining digits).

Fields 4, 7, 10, 12

Enter the type of signal to be outpulsed:

- 0 Touch-tone signals to be outpulsed
- 1 Rotary signals to be outpulsed
- **322 Word 1** Administers the WCR-outgoing ISDN feature parameters.
 - Field 1 Enter the ISDN sending index (0-1023).
 - Field 2 Enter the ISDN network service value (1-511, or "-" for default).
 - Field 3 Enter the type of address encode (not all ISDN switches code these fields consistently. Coordinate with the distant switch):
 - 0 Unknown, default
 - 1 International number
 - 2 National number
 - 3 Network specific number
 - 4 Subscriber number
 - 5 Undefined
 - 6 Abbreviated number

	7	Reserved for extension
Field 4	Enter the 0 1 2 3 4 9 15	numbering plan identification encode: * Unknown, default ISDN/telephony numbering plan Telephony numbering plan Data numbering plan Telex numbering plan Private numbering plan Reserved for extension
Field 5	Enter the 0	IXC option encode: Code IXC in NSF IE or TNS IE Code IXC in CDN IE
Administers the fo	eature acce	ess codes for the WCR feature.
Field 1	Enter a V 32 33 60 61 108 109 110 111 112	WCR network 1, toll-free access WCR network 1, toll access WCR plan change WCR network 2 access WCR network 3 access WCR network 4 access WCR network 5 access WCR network 6 access WCR network 7 access
Field 2	Enter the 0-9 11 or * 12 or #	
Field 3	Enter the	second digit of the dial access code (0-9).
Field 4	Enter the	third digit of the dial access code (0-9).
Field 5	Enter the	fourth digit of the dial access code (0-9).

350 Word 2

354 Word 4 Displays all assigned ENP node numbers or the Virtual Nodepoint Identifiers (VNI) associated with these nodes. This Procedure is only used for ENP.

Field 1 Enter or display the ENP node number (1-999).

Field 2 Enter or display the VNI (0-1023).

A. CONFIGURATION LIMITS

The following tables provide a quick reference to the limits of Generic 2 and System 85, Release 2, configurations by Version. These limits are based on allocated or available memory table space. Each application has a maximum limit, and the system has a limit that further constrains the sum of all applications.

Maximum Line Records: 32,703 (in Release 2, Version 3)

Sum of Line Applications: 62,000

Difference: 29,297 (More Applications than Line Records).

That is, while a specific application may have a limit of its own, say 10,000 Multiappearance Station Sets, the system may not permit that limit to be reached. This is because the sum of related applications (Line Limits) must be less than the total of their combined maximums (in the described case, 29,297 fewer total applications).

Line Limits (Note)							
Application	5	System 85	DEFINITY				
Арріїсаціон	V1	V2	V3	V4	G2.1	G2.2	
Analog Station Sets (2500, 7100 Series)	7,000	8,000	32,000	32,000	32,000	32,000	
Multiappearance Station Sets (7200H Series, 7300H Series, 7400D Series, 7500D Series)	5,000	5,000	10,000	10,000	10,000	10,000	
Voice Data Stations (7400D Series with data module or cartridge and 7500D Series with ADM-T)	2,500	4,020	8,000	8,000	8,000	8,000	
Display Stations (7400D or 7500 Series with display, 515 BCT, and 510D)	900	2,000	5,000	10,000	10,000	10,000	
Line Side Data Modules (DTDM, PDM, TDM, MDM, 7400A, EIA Ports, etc.) Plus Total Multiappearance Sets	5,000	8,040	16,000	16,000	16,000	16,000	
Line Records	15,000	19,145	32,703	32,703	32,703	32,703	
Dedicated Switch Connections (voice and data)	_	_	1023	1023	1023	1023	

NOTE

The Line Records limit is the upper limit of combinations of other line applications. The sum of other limits exceeds this figure, but the total administered in an installation cannot.

Limits for multiappearance sets, voice/data sets, display sets, and line-side data modules cannot be realized simultaneously. Moreover, these limits should be reduced if heavy feature usage or a heavy traffic load is anticipated.

Sta	tion Featu	re Limits				
A 11 11		System 85	5, Release	2	DEF	INITY
Application	V1	V2	V3	V4	G2.1	G2.2
Abbreviated Dialing:						
-Characters Per Button	20	20	20	20	20	20
-Characters Per Call	36	36	36	36	36	60
-Maximum in System List	99	99	9999	9999	9999	9999
-Maximum in a Nonsystem List	30	30	95	95	95	95
-Number of Nonsystem Lists	2047	5118	13,107	52,223	52,224	52,224
-Number of Group Lists	500	1000	9999	9999	9999	9999
-Maximum in All Lists	24,000	65,535	65,535	262,143	262,144	262,144
Mnemonic (Keyboard) Dialing:						
-List Entries	-	-	300	1000	1000	1000
-Mnemonic Characters	-	_	10	10	10	10
-Characters in Number		_	20	20	20	20
Default (Terminal) Dialing:			1	1		
-Characters in Number	_	-	20	20	20	20
Button Table Words*	64,000	220,000	400,000	400,000	476,670	
Call Pickup Groups	999	999	999	999	999	999
Coverage Groups	3000	4096	4096	4096	4096	4096
Effective Coverage Groups	3000	3047	3047	3047	3047	3047
(Dual Paths Counted as 1)					1	
Display—Voice Terminal:						
-Display Names	5000	8500	32,767	32,767	32,767	32,767
-Average Characters Per Name	22	22	22	22	22	22
-Maximum Characters Per Name	30	30	30	30	30	30
-Maximum Characters Per Msg (buffer)	40	40	40	40	40	40
Intercom Records:						
-Auto/Manual	300	300	300	300	300	300
-Dial	280	280	280	280	280	280
Last Number Dialed:	3000	6000	6000	6000	6000	6000
-Maximum Digits	_	_	_	20	20	20
Line Appearances and Images:						
-Appearances Per Extension	12	12	12	12	12	12
-Images Per Line Appearance	16	16	16	16	16	16
-Images Per Extension	192	192	192	192	192	192
-Images Per Terminal	30	30	30	30	52	52
Leave Word Calling Messages on the Switch	3000	6000	6000	6000	6000	6000
Extension Classes of Service	63	63	63	63	63	63
Message Waiting Lamps (Auto)	7500	10,500	32,000	32,000	32,000	32,000
Message Waiting Lamps (Auto) Per Extension	3	3	3	3	3	3
* See the next table for Button Table Word requirem	ents.					

Button Table Word Requireme	nts
Application	V1 to V4 Requirement
2500, 7101A, 7102A, 7103A, and Encore Station Sets	None
Straight Line Sets	1 Word Each Unit
7203H, 7303S, 7401D, 7403D, and 7410D Station Sets, and 10-Button MET Sets	12 Words Each Unit
7205H, 7305S, 7405D, 7434D, PC/PBX Station Sets, and 20- and 30-Button MET Sets	36 Words Each Unit
7404D Station Sets	8 Words Each Unit
7406D and 7406D With Display Station Sets	32 Words Each Unit
CALLMASTER Station Set	36 Words Each Unit
510D Terminal	36 Words Each Unit
515 BCT	12 Words Each Unit
C201A, C401A, and C401B Call Coverage Modules	20 Words Each Unit
Display Modules	8 Words Each Unit
Data Modules (PDM, TDM, DTDM, MDM, EIA Port)	2 Words Each Unit
Dual Port Data Modules and ADFTC	4 Words Each Unit
One Button Transfer	1 Word Each Unit
F201A and F401A Function Key Modules	24 Words Each Unit
Manual Message Waiting Button	1 Word Each Unit
Stations Signaled by Station Busy	2 Words Each Unit
Stations Signaled by Manual Signaling	1 Word Each Unit

(Continued)

Button Table Word Requirements (Continued)					
Application	G2 Requirement				
2500, 7101A, 7102A, 7103A, and Encore Station Sets	None				
Straight Line Sets	1 Word Each Unit				
7401D Station Sets	11 Word Each Unit				
7203H, 7303S, 7403D, and 7410D Station Sets	12 Words Each Unit				
7205H, 7305S, 7405D, 7434D, PC/PBX Station Sets	36 Words Each Unit				
7404D Station Sets	8 Words Each Unit				
7406D and 7406D With Display Station Sets	30 Words Each Unit				
CALLMASTER Station Set	30 Words Each Unit				
7505D and 7506D Station Sets (with or without data)	19 Words Each Unit				
7507D Station Set (with or without data)	42 Words Each Unit				
10-Button MET Set	7 Words Each Unit				
20-Button MET Set	17 Words Each Unit				
30-Button MET Set	27 Words Each Unit				
510D Terminal	21 Words Each Unit				
515 BCT	12 Words Each Unit				
C201A, C401A, and C401B Call Coverage Modules	20 Words Each Unit				
Display Modules	7 Words Each Unit				
Data Modules (PDM, TDM, DTDM, MDM, EIA Port)	2 Words Each Unit				
Universal Data Modules (UDM)	4 Words Each Unit				
Dual Port Data Modules and ADFTC	4 Words Each Unit				
One Button Transfer	1 Word Each Unit				
F201A and F401A Function Key Modules	24 Words Each Unit				
Manual Message Waiting Button	1 Word Each Unit				
Stations Signaled by Station Busy	2 Words Each Unit				
Stations Signaled by Manual Signaling	1 Word Each Unit				

Sysi	tem Parame	ters Limit	ts				
Application		System 85	, Release	2	DEF	DEFINITY	
Application	V1	V2	V3	V4	G2.1	G2.2	
ACD (EUCD):							
-Agents	l —	512	1024	1024	1024	2048	
-Agents Measured (by CMS)	_	_	1023	1023	1023	1023	
-Service Observers (Active)	—	_	64	64	64	64	
-Splits	—	30	30	60	60	60	
-Recorded Announcements	_	30	30	84	84	255	
Answer-Back Channels:							
-Call Park and Loudspeaker Paging*	9	9	9	9	9	9	
-Code Calling Access	6	6	6	6	6	6	
Attendant Features:							
-Conference Bridges	13	13	13	13	13	13	
-Console Positions	28	40	40	40	40	40	
-Switched Loops Per Console	6	6	6	6	6	6	
-Switched Loops	168	240	240	240	240	240	
-Remote Console Positions (ORPI)	_	40	40	40	40	40	
-Consoles (100s Groups)	100	100	100	100	100	100	
-Originating Registers (ORs)	28	40	40	40	40	40	
-Voice Terminal Restriction Groups	63	63	63	63	63	63	
Call Forwarding—Follow Me:							
-Off-Net Forwarding Relationships	3200	3200	3200	3200	3276	3276	
Call Vectoring:							
-Number of Vectors	_	_	-	128	128	511	
-Steps per Vector	—	_	_	15	15	15	
-Recorded Announcements		_	_	84	84	255	
Calling Number Display Units	20	20	20	20	6	6	
DCIUs:							
-DCIU Links	8	8	8	8	8	8	
-APs per DCIU	7	7	7	7	7	7	
-AUDIX Adjuncts per DCIU	_	4	4	8	8	8	
-DCS Links per DCIU	8	8	8	8	8	8	
-Logical Channels per Link	64	64	64	64	64	64	
Maximum Digits in Dial Access Code	3	3	3	4	4	4	
Dial Access Codes (Feature and Trunk)	175	500	1104	1104	1104	1102	
Dial Pulse and Touch-Tone ORs	246	246	246	246	246	458	
Total ORs	300	300	300	300	300	512	
* The Call Park and Loudspeaker Paging Access	features share th	e same nine	answer-back	channels.			

(Continued)

System Paral	meters Li	mits (Con	tinued)				
Application		System 85	, Release	2	DEFINITY		
Application	V1	V2	V3	V4	G2.1	G2.2	
DS1:							
-DS1 Circuit Packs Per Switch	255	255	511	511	511	511	
-Circuit Packs Per Universal Carrier							
Line Side	_	_	_	_	20	20	
Trunk Side	_	-	—	_	10	10	
-Line Side DS1 Circuit Packs per DS1 Carrier	_	4	4	4	4	4	
-Trunk Side DS1 Circuit Packs per DS1 Carrier	2	2	2	2	2	2	
-73-Series Port Circuits Per DS1 Port Carrier		16	16	16	16	16	
FADS:							
-CAS Display Units	1	1	1	1	1	1	
-UCD Display units	12				_		
Listed Directory Numbers (DID)	4	4	9	999	999	999	
Loudspeaker Paging Zones	18	18	18	18	18	18	
Network Modules	18	31	31	31	31	31	
Remote Modules	_	15	30	30	30	30	
Network Cabinets Per Module							
Traditional Module	4	4	4	4	4	4	
Universal Module	_	_	_	_	1	1	
Port Carriers Per Module							
Traditional Module	12	12	12	12	12	12	
Universal Module	_	_	_	_	3	3	
PCC (Processor Communications Circuit) Circuit	_	_	_	3*	3*	3*	
Packs							
Port Circuit Packs:							
-Per Traditional Port Carrier	16	16	16	16	16	16	
-Per Universal Port Carrier	_	<u> </u>	_	_	21†	21†	
Recorded Announcements (Non ACD/EUCD)	2	15	15	15	15	15	
System Status Indicator Lamps	128	168	168	168	168	168	
Tenant Services:							
-Extension Partitions	_	_	_	1000	1000	1000	
-Extension Partition Groups	_	<u> </u>	_	500	500	500	
-Attendant Partitions	_	l —	_	41	41	41	
CDR:							
-Number of Data Item Encodes	_	l —	_	76	76	76	
-Maximum Record Length	18	18	18	24	24	24	
-Maximum LSUs	2	2	8	8	8	8	
Malicious Call Trace:							
-Maximum Simultaneous Traces	l —	l —	l —	15	15	15	

^{*} Only *one* PCC port can be used and this port can only be used as a CDR port.

 $[\]dagger$ This includes the service slot which can only accommodate a TN748C Tone Detector.

Tru	nk Limits	(per Swit	ch)				
A 1' 1'		System 85	Release 2	2	DEFINITY		
Application	V1	V2	V3	V4	G2.1	G2.2	
ANI Boards	2	2	2	2	2	2	
Contact Interface Boards	34	34	34	34	34	34	
Preselected Call Routing Groups	255	255	255	982	982	982	
Preselected Call Routing Trunks Per Trunk Group	99	99	99	99	99	99	
Personal Central Office Lines (Trunks)	150	150	150	150	150	150	
AIOD Queues	6	6	6	6	6	6	
Trunks, Physical (Including Host Access and Modem Pooling)	2250	5000	6000	6000	6000	6000	
Trunk Records, Assignable (Outgoing Trunk Queues, Physical Trunks, and Trunk Intercom Records)	2705	7525	10,500	10,500	10,500	10,500	
Trunk Records (Total)	3250	7970	11,046	11,046	11,046	11,046	
Trunk Groups: -Modem Pooling Trunk Groups -Host Computer Access Trunk Groups -Total (Including Host Access and Modem Pooling) -Trunk Group Dial Access Codes -Trunks Per Trunk Group (Modem Pooling) -Trunks Per Trunk Group (Host Computer Access) -Trunks Per Trunk Group (Others**)	175 175 255 255 99 99	238 238 255 255 99 99 255	238 238 255 255 99 99 255	982 982 999* 999 99 99	982 982 999* 999 99 99	982 982 999* 999 99 99	
RLTs (Release Link Trunks): -Inward† -Outward -Groups at Main (CAS Branch) Remote Access Trunks Restriction Levels (Code Restriction)	110 16 40 45 4	110 16 40 45 4	110 16 40 45 4	110 16 40 6000	110 16 40 6000 4	110 16 40 6000 4	
Route Advance, Trunk Groups Per Pattern	5	5	5	5	5	5	

^{*} The first 17 trunk groups are dedicated to internal service facilities. The number of trunk groups available for customer use is 982.

^{**} Trunk groups 16 and 17 can have a maximum of 458 trunks in Generic 2.2.

 $[\]dagger$ The limit of 110 for RLTs is imposed by the number of System Status Indicator (SSI) that can be used. If RLTs are not monitored by SSIs, the limit is the same as for other types of trunks.

Netwo	ork Param	eter Limit	s			
Application		System 85	DEFINITY			
Application	V1	V2	V3	V4	G2.1	G2.2
AAR (System 85 and Generic 2.1):						
-Patterns	255	255	640	640	640	—
-Trunk Groups Per Pattern	4	4	16	16	16	-
-Conditional Routing Call Categories	-	-	3	3	3	-
-Maximum Valid RNXs	780	780	780	780	780	_
-Maximum Number of Routes	10,240	10,240	10,240	10,240	10,240	_
ARS (System 85 and Generic 2.1):						
-Patterns Per Plan	64	64	64	64	64	-
-Plans—Time Dependent	3	3	3	3	3	_
-Trunk Groups Per Pattern	16	16	16	16	16	_
-Call Categories for Tenant Services	—	_	_	64	64	_
-Foreign NPAs (6-Digit Translation)	64	64	160	160	160	_
-Patterns Per 6-Digit Translation	4	4	10	10	10	-
-Maximum Number of Routes	1024	1024	1024	1024	1024	_
Unauth. Call Control/10- to 7-Digit Conversion:						
-3-Digit NPAs	None	None	None	None	None	_
-6-Digit NPA-NXX Combinations	500	500	500	500	500	_
-7-Digit NPA-NXX-X Combinations	2048	2048	2048	2048	2048	_
-8-Digit NPA-NXX-XX Combinations	2048	2048	2048	2048	2048	_
-9-Digit NPA-NXX-XXX Combinations	2048	2048	2048	2048	2048	_
-10-Digit NPA-NXX-XXXX Combinations	2048	2048	2048	2048	2048	_
Generic 2.2						
M to N Conversions:	_	-	-	-	_	4095
Authorization Codes	9000	9000	90,000	90,000	90,000	90,000
Facilities Restriction Levels	8	8	8	8	8	8
DCS:						
-Maximum Nodes	12	20	20	63	63	63
-Maximum ES Nodes	_	_	_	63	63	63
-Maximum Nodes with Attendants	12	20	20	40	40	40
Centralized at One Node						
-Maximum Nodes per AUTOVON	12	20	20	40	40	40
Interface						
Maximum Extension Numbers Per	T _	T _	_	100,000	100,000	100,000
Network (5-Digit Dialing)						1.00,000
	1 00	1 00	00	1 00	1 00	1
Maximum NPA-NXX Designators	99	99	99	99	99	1

(Continued)

Network Parameter Limits (Continued)							
Application		System 85	DEF	INITY			
Application	V1	V2	V3	V4	G2.1	G2.2	
ISDN:							
-Codesets	_	_	_	8	8	8	
-Codepoints Per Codeset	_		_	1024	1024	1024	
-Mappings Per Codeset	_	_	_	_	256	256	
-Codeset Mappings	_		_	_	16	16	
-Maximum ISDN Call Records	_		_	6000	15,000	15,000	
-Maximum Calls on D-channel	_		_	23	500	500	
-Maximum D-channels				•	-		
BRI:	_	_	_	_	10,000	10,000	
PRI:	_	_	_	512	512	512	
-Maximum NFAS D-channel Groups	_	_	_	_	255	255	
-Maximum Number for Interface ID	_	_	_	_	32	32	
-Bearer Capability Classes of Service	_	_	_	_	256	256	
WCR:							
-Maximum Networks	_	_	_	_	_	8*	
-Access Code Length	_		_	_	_	4	
-Maximum Digit String Length	_	_	_	_	_	31	
-Call Categories	_		_	İ —	_	256	
-Time-of-Day Plans	_	_	_	_	_	8	
-Plan Changes Per Day	_	_	_	_	_	6	
-Patterns	_		_	_	_	1023	
-Preferences Per Pattern	_	_	_	_	_	16	
-Toll-free Tables	_	_	_	_	_	63	
-Toll-free Table Maximum	_	_	_	_	_	7	
String Length							
-Maximum Digits Deleted	_	_	_	_	_	31	
-Maximum Digits Inserted	_	_	_	_	_	31	
* Network numbers range from 0 through 7. Netw	vork 0 is reserve	d for the inte	rnal (local)	dialing plan.			

B. IMAGES, APPEARANCES, AND EXTENSIONS

Preface

The following tutorial is intended to clarify the relationship between images, appearances, and extensions. Confusion has resulted from using the term "bridged appearance," because it leads the user to believe that all the terminals *sharing* an appearance are physically bridged together. This is not true (only one terminal can bridge on to an existing call of a particular appearance). Therefore, the term "shared appearance" (access point for two or more "images") is used to better describe the functionality of appearances for this application. The term "image" was introduced to distinguish between a particular "bridged appearance" ("now shared appearance") and a point(s) of access to that appearance. It is hoped that, rather than compounding the confusion, this new terminology will simplify a somewhat difficult topic.

Shared Appearances

Definition of Shared Appearance

— Shared Appearance — An appearance that allows multiple voice terminals to access it (for example, an executive and his or her secretary may share an appearance, each with an image of that particular appearance). On a multiappearance voice terminal, the point of access (or "image") to a shared appearance is called an appearance button. A shared appearance is an integral part of the Bridged Call feature, which allows any two points of access to the same appearance to participate in a call at the same time.

Terminals With Shared Appearances

It is true, and should be remembered, that one "point of access" to every appearance is located on the home voice terminal. It should also be understood, however, that these points of access (on the home terminal) are in no way preferred over (or superior to) the points of access on the other terminals. From the perspective of the DEFINITY Generic 2 software, these points of access share in a "peer" relationship. Each point of access (or "image") is *an equal* in its ability to place and answer calls.

Images and DEFINITY Generic 2

Definitions

- Extension A unique 3-, 4-, or 5-digit number by which calls are routed through a private network. This number is primarily associated with a single terminal (the destination of a routed call).
- Appearance A point of access to an extension. (Appearances are also known as "occurrences.") The DEFINITY Generic 2 software allows as many as 12 appearances of an extension. However, a more common limit is ten appearances per extension. This limit is often imposed by the voice terminals themselves. Generally, multiappearance voice terminals have a maximum of ten appearance buttons. (Normally, three appearances of an extension are assigned to a home voice terminal.)

NOTE: The software limit of 12 appearances can be reached using a 7205H or 7405D (equipped with the appropriate coverage module), a 7507D, or a 7434D.

— Image — A point of access to an appearance. DEFINITY Generic 2 software allows as few as one, and as many as 16, images of each appearance. An appearance with only one image is known as an unshared appearance. An appearance with from 2 to 16 images is known as a shared appearance.

Shared appearances are basic to the Bridged Call feature. When an appearance is shared, one other person who shares the appearance where an active call resides can "bridge onto" the call.

NOTE: An extension with *one or more shared appearances* is known as a *shared extension*.

NOTE: The DEFINITY Generic 2 software allows for as many as 192 images of an extension (i.e., 12 appearances \times 16 images per appearance).

Description of Images and Appearances

Figure B–1 is a diagram showing the structure of a fictitious extension. This extension, number "6234," has three appearances, and all three appearances have at least one image. Appearances 6234-1 and 6234-3 are shared appearances; while appearance 6234-2 is unshared.

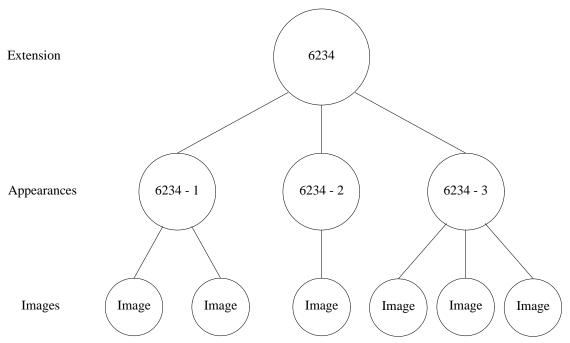


Figure B-1. Relationship of Images, Appearances, and Extensions

Notice the connections within the diagram. Each appearance's images are *independent* of the other appearances' images. For example, an image of Appearance 6234-3 *can only access* Appearance 6234-3, not 6234-1 or 6234-2. Likewise, when a call terminates to Appearance 6234-3, visual alerting (and ringing, if assigned) will only occur for the three images of *that* appearance. When a call does terminate to the third appearance of Extension 6234, the call can be answered from any of the three assigned voice terminals.

Figure B–2 is a simplified drawing containing eight voice terminals labeled A through H. The voice terminals labeled A through E represent multiappearance voice terminals, and F through H represent single-appearance terminals. Since the appearances on terminals F, G, and H are shared appearances, these terminals are known (and administered) as *straight line sets*.

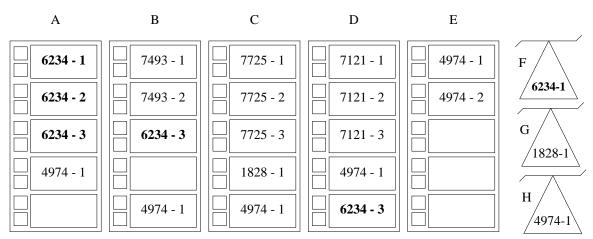


Figure B-2. Shared Extensions

Notice that Extension 6234, previously shown in Figure B–1, is also shown (in bold print) within this figure. For Extension 6234, voice terminal A would be referred to as the home terminal. An image of every appearance is located on this terminal. The two images of the first appearance are located on terminals A and F. The one image of the second appearance is located on terminal A. The three images of the third appearance are located on terminals A, B, and D.

NOTE: The image configurations shown in Figure B–2 are *administrable*, but not necessarily *functionally desirable*. This figure is only meant to show some of the possibilities. It is left to the reader to devise functional image configurations to suit specific needs.

Another extension that is worth some discussion is extension 1828. Although less apparent than for the previous extension, the home terminal for this extension is terminal G. The two images of appearance 1828-1 are located on voice terminals G and C. Single-appearance voice terminal G must be administered as a straight line set in order to share the appearance with terminal C.

This arrangement is typical of an executive/secretary arrangement where the secretary performs most of the calling duties. Terminal G would be located on the executive's desk, and the secretary would handle terminal C. Terminal C is home to extension 7725 with three appearances. Using three appearances, the secretary can effectively handle most of the calling responsibilities. However, extension 1828 serves as a direct line to the executive. When this extension is unanswered, or when ringing is transferred to the secretary, the secretary can also answer these calls using the image on terminal C.

Visual Alerting

When a call terminates to an appearance of an extension, the green status lamp flashes for every image of that appearance on a multiappearance voice terminal.

Administration

Home Terminal Administration

— Home Terminal — If "home terminal" is assigned to an image of one appearance on a voice terminal, the home terminal designation is applied to the image of every appearance of that terminal's extension number. (An image can be designated as "home terminal" in Procedure 052 Word 1 field 12.)

Send All Calls Group Administration

— **Send All Calls Group** — When "Send All Calls Group" is assigned to one image of an extension on a voice terminal, this assignment is applied to every image of the same extension on the same voice terminal. ("Send All Calls Group" is assigned to an extension's images residing on a specific voice terminal in Procedure 052 Word 1 field 14.)

Administrable Characteristics of Appearances

- Terminating/Originating or Originating Only When one of these attributes is assigned to an image of an appearance, every image of the appearance takes on the same attribute. (The attribute is assigned in Procedure 052 Word 1 field 13.)
- A/D Ringing Encode A ringing encode is assigned for the Abbreviated and Delayed Ringing feature. When manual, automatic, or manual and automatic ringing transfer is assigned to an image of an appearance, the type of transfer chosen is applied to every image of the appearance. (The type of transfer is assigned in Procedure 052 Word 2 field 3.)

Administrable Characteristics of Images

- Ring Type A type of ringing for the Abbreviated and Delayed Ringing feature (i.e., no ringing, ringing, delayed ringing, or abbreviated ringing) is independently specified for each image of an appearance. (The ringing type is assigned in Procedure 052 Word 1 field 11.)
- Ringing Transfer Encode A ringing characteristic for the Ringing Transfer feature (i.e., no ringing transfer, ring when active, or no ring when active) is independently specified for each image of an appearance. (The ringing transfer encode is assigned in Procedure 052 Word 2 field 4.)

Images and The Bridged Call Feature

The software of the Bridged Call feature allows *any two images* of the same appearance to participate in a call at the same time. But, as previously mentioned, the images of the separate appearances are independent.

Within the context of the Bridged Call feature, the following conditions still hold true: Any image of a particular appearance can place and/or answer a call on the appearance. Once the call (either terminating or originating) is established, another image of the same appearance can bridge onto the call. (An image of a different appearance cannot bridge onto the call.) Also, a third image cannot enter the call at the same time. When this is attempted, the switch returns reorder tone to the user of the third image.

C. ACRONYMS AND ABBREVIATIONS

The following are the specialized acronyms and abbreviations and their associated terms. Explanations of these terms are provided within the text or in the glossary.

- AAR: Automatic Alternate Routing
- ACA: Automatic Circuit Assurance
- *ACD*: Automatic Call Distribution
- ACTGA: Attendant Control of Trunk Group Access
- ADU: Asynchronous Data Unit, or Automatic Dialing Unit
- AIOD: Automatic Identification of Outward Dialing
- AMA: Automatic Message Accounting
- ANI: Automatic Number Identification
- AP: Applications Processor
- **APLT**: Advanced Private Line Termination
- ARS: Automatic Route Selection
- ASCII: American Standard Code for Information Interchange
- ATMS: Automatic Transmission Measurement System
- AUDIX: Audio Information Exchange
- AUTOVON: Automatic Voice Network
- AVD: Alternate Voice Data
- **BCC**: Bearer Capability Class
- BCT: Business Communications Terminal
- BLF: Busy Lamp field
- **BOS**: Bit-Oriented Signaling
- bps: Bits Per Second
- **BRI**: Basic Rate Interface
- *BTC*: Better Transmission Checking
- CAAVT: Call Answer From Any Voice Terminal

- CAS: Centralized Attendant Service
- CCITT: International Telephone and Telegraph Consultation Committee
- CCS: Hundred Call Seconds
- CCSA: Common Control Switching Arrangement
- *CDM*: Channel Division Multiplexer
- CDR: Call Detail Recording
- CDRR: Call Detail Recording and Reporting
- CDRU: Call Detail Recording Utility
- CIC: Carrier Identification Code
- CMDR: Centralized Message Detail Recording
- CM: Call Management
- CMS: Call Management System
- COS: Class-of-service
- CPE: Customer Premises Equipment, or Customer Provided Equipment
- CRT: Cathode Ray Tube
- CSM: Centralized System Management
- CSMDR: Centralized Station Message Detail Recording
- CU: Control Unit
- CWC: Call Work Code
- DAC: Dial Access Code
- dB: Decibels
- *DCA*: Data Communications Access
- DCE: Data Communications Equipment
- DCIU: Data Communications Interface Unit
- DCP: Digital Communications Protocol
- DCS: Distributed Communications Service
- *DDC*: Direct Department Calling
- DDCMP: Digital Data Communications Message Protocol
- **DDD**: Direct Distance Dialing
- DID: Direct Inward Dialing

- DMA: Direct Memory Access
- DMI: Digital Multiplexed Interface
- DNHR: Dynamic Nonhierarchical Routing
- DNIS: Dialed Number Identification Service
- DOD: Direct Outward Dialing
- DSC: Dedicated Switch Connections
- *DS1*: Digital Service 1
- DTDM: Digital Terminal Data Module
- DTGS: Direct Trunk Group Selection
- DTE: Data Terminal Equipment
- *DTMF*: Dual Tone Multi-Frequency
- *DTS*: Disk/Tape System
- DXS: Direct Extension Selection
- EBCDIC: Extended Binary Coded Decimal Interchange Code
- *EDC*: Electronic Document Communications
- EFC: Electronic Flip Chart
- EIA: Electronics Industry Association
- *ELL*: Equipment Line Location
- EPSCS: Enhanced Private Switched Communications Service
- ES: Enhanced Services
- ESS: Electronic Switching System
- ETA: Extended Trunk Access
- ETN: Electronic Tandem Network
- EUCD: Enhanced Uniform Call Distribution
- FADS: Force Administration Data System
- FEAC: Forced Entry of Account Codes
- FP: Feature Package
- FRL: Facilities Restriction Level
- *FX*: Foreign Exchange
- GPP: General Purpose Port

- GT: General Trade
- GTA: General Terminal Administration
- *HCA*: Host Computer Access
- HNPA: Home Numbering Plan Area
- HSAM: Host Security Access Manager
- *IACC*: Integrated Adjunct Call Control
- *IBM*: International Business Machines
- ICI: Incoming Call Identification
- IDDD: International Direct Distance Dialing
- *IDT*: Integrated Display Terminal (7407D)
- IE: Information Element
- INWATS: Incoming WATS Line
- IPA: Interpartition Access
- ISDN: Integrated Services Digital Network
- *ISN*: Information Systems Network
- ISO: International Standards Organization
- *IXC*: Interexchange Carrier Access
- *I/O*: Input/Output
- Kbps: Kilobits per second
- LADS: Local Area Data Set
- LAN: Local Area Network
- LATA: Local Access and Transport Area
- LDN: Listed Directory Number
- LND: Last Number Dialed
- *LSU*: Local Storage Unit
- LUDM: Linked Universal Data Module
- *LWC*: Leave Word Calling
- LXD: Last Extension Dialed
- MAAP: Maintenance and Administration Panel
- MADU: Multiple Asynchronous Data Unit

- Mbps: Megabits per second
- MCS: Message Center Service
- MCT: Malicious Call Trace
- MDM: Modular Data Module
- MET: Multibutton Electronic Telephone (DIMENSION System Voice Terminal)
- *MFT*: Multifunction Telephone (Multiappearance Voice Terminal)
- *MFAT*: Multifunction Analog Telephone (73-Series)
- MFDT: Multifunction Digital Telephone (74-Series, 510D, 515 BCT)
- MFET: Multifunction Electronic Telephone (72-Series)
- MIA: Most Idle Agent
- MIS: Management Information System
- MMWR: Manual Message Waiting Receive
- MMWS: Manual Message Waiting Send
- MOS: Message-Oriented Signaling
- MPDM: Modular Processor Data Module
- MTDM: Modular Trunk Data Module
- Mux: Multiplex
- NCOSS: Network Control Operations Support System
- NFAS: Non-facility Associated Signaling
- NPA: Numbering Plan Area
- *NSF*: Network-Specific Facilities
- *OUTWATS*: Outgoing WATS Line
- *PBX*: Private Branch Exchange
- PC: Personal Computer
- PDM: Processor Data Module
- PRI: Primary Rate Interface
- QDN: Queue Directory Number
- RAM: Random Access Memory
- RCG: Remote Carrier Group
- RF: Radio Frequency

- RLT: Release Link Trunk
- RMATS: Remote Maintenance, Administration, and Traffic System
- ROM: Read-Only-Memory
- RS: Recommended Standard
- SCI: Switch Communication Interface
- SCS: System Clock Synchronizer
- SDN: Software Defined Network
- SLS: Straight Line Set
- SMDR: Station Message Detail Recording
- SMT: System Management Terminal
- TCM: Terminal Change Management or Traveling Class Mark
- TDM: Trunk Data Module
- TMS: Time Multiplexed Switch
- TRACS: Translations Recovery Additions Conversions System
- TRL: Trunk Reservation Limit
- TTL: Terminating Test Line
- TVA: Trunk Verification by Attendant
- TVVT: Trunk Verification by Voice Terminal
- *UCD*: Uniform Call Distribution
- UDM: Universal Data Module
- VDN: Vector Directory Number
- VDS: Voice Data Station
- VFCDR: Variable Format Call Detail Recording
- VMAAP: Visual Maintenance and Administration Panel
- VNI Virtual Nodepoint Identifier
- WATS: Wide Area Telecommunications Service
- WCR: World Class Routing

GLOSSARY

10- to 7-Digit Conversion

A process used with the ARS (Automatic Route Selection) feature that allows the switch to convert the dialed number of a call to conform to the needs of a new (different) network. This process is used specifically, for public network numbers that can be routed over private network facilities (converts the 10-digit public network number to a 7-digit private network number).

Abandoned Call

A call during which the calling party "hangs up" ("abandons" the call) before the call can be connected to the called party. Often, calls are abandoned when the calling party is waiting in queue for an appropriate answering position to become available.

Access Code

A 1-, 2-, 3-, or 4-digit dial code used to activate or cancel a feature. The star (*) and pound (#) are sometimes used as the first digit of these codes.

Account Code

A dialed code (used with the CDR feature) that allows a call to be charged to a specific department's (or project's) account.

ACD Call

A call directed toward an ACD split using an associated extension number (or a published number). Since these calls enter the split's queue, ACD calls differ from calls to an agent's individual extension number which do not enter the queue.

ACD Console

The CALLMASTER voice terminal. This digital multiappearance voice terminal is primarily designed for ACD agents. The special attributes of this terminal for ACD agents include: built-in alphanumeric display, two direct Starset-headset connectors, horizontal button layout, a fixed MUTE button, and a moderate price. (This voice terminal can also serve as a cost-reduced attendant console for the System 75.)

GL-1

ACI (AT&T Communications Interface)

The name given to ISDN—PRI on the 4 ESS switching system. The 4 ESS is a Class 4 switch used for toll switching.

Action Control Point (ACP)

A switch in the AT&T Switched Network that recognizes an SDN (Software Defined Network) call and queries the NCP (Network Control Point) for routing instructions. The NCP returns specific routing instructions to the ACP.

Adjunct/Switch Application Interface (ASAI)

A protocol through which adjunct processors and switches cooperate to provide services that permit adjunct-based software applications to initiate, receive, and control calls or make use of switch features.

Administer

To add, remove, or change software programs or stored data that provide services or features.

Administrable Recall Button

A feature button that can be assigned as a RECALL button to those multiappearance voice terminals that do not have a fixed RECALL button. These RECALL buttons can be assigned to voice terminals on System 85s beginning with R2 V2. The multiappearance voice terminals without a fixed RECALL button include: Models 7401D, 7404D, 7406D, 7407D, 7410D, 7505D, 7506D, 7507D, 510D, and CALLMASTER.

Advanced 800 Service

The second generation of the AT&T 800 Service. This collection of enhanced 800 Service offerings provides additional capabilities, flexibility, and control to 800 Service customers. Some of the Advanced 800 Service offerings include: Single Number Service, Area Code Routing, Time Manager, Day Manager, Call Allocator, Call Prompter, Command Routing, and Courtesy Response.

Agent

A member of an ACD (EUCD in Release 2, Version 2) split.

Agent Hold

See Multiple Call Handling.

Agent Queue

An ordered sequence of agents who are available for and are waiting to receive an ACD call.

AIOD (Automatic Identification of Outward Dialing)

The AIOD feature identifies, translates, and transmits the calling party's extension number and trunk-group access code to the serving switch (i.e., CO, CCSA, or EPSCS switching office). In turn, the serving switch augments, compiles, and records this call-detail information and periodically provides the information to the customer.

GL-4 GLOSSARY

Alerting

Audible (ringing) and/or visible signals indicating incoming calls.

American Standards Code for Information Interchange (ASCII)

An 8-bit binary code adopted by the American Standards Association to achieve compatibility between data services. Only seven of the eight bits are used for character identification. The eighth bit is left available for use as a parity bit.

Analog

Continuous in form. Analog signals contrast with digital signals which are discontinuous, or discrete, in form.

Analog Voice Terminals

An analog voice terminal (telephone) receives acoustic voice signals and sends analog electrical signals along the line. These voice terminals are served by a single wire pair (tip and ring). The analog voice terminals include: Models 2500, 7101A, 7102A, and 7103A.

Answer-Back Channel

A group of dedicated circuits which a paged party can use to answer a page.

ANI (Automatic Number Identification)

See AIOD.

Answer Supervision

A signal sent by System 85 to the serving CO (Central Office) indicating that an incoming call has been answered. Upon receiving this signal, the originating CO (generally) begins tracking toll charges for the call (if charges apply).

Appearance

A point of access to an extension (also known as an occurrence). Using a multiappearance voice terminal, an extension can be manually accessed by pressing a button labeled with the extension number. Indicator (status) lamps next to the button light when a terminal user places a call, receives a call, or puts a call on hold.

AP (Applications Processor)

An adjunct minicomputer to System 85.

Area Code

See Numbering Plan Area.

ARS

See Automatic Route Selection.

ASAI

See Adjunct/Switch Application Interface.

ASAI Gateway

A hardware and software package that provides a gateway between a DEFINITY Generic 2 and call-center software residing on a host computer. The ASAI Gateway enables the call-center software to monitor and control certain incoming, outgoing, and internal calls on the DEFINITY Generic 2.

ASCII

See American Standards Code for Information Interchange.

Associated Extension Number

An extension number that is assigned to and correlated with another extension number in Procedure 001.

Calls to an ACD (previously, EUCD, UCD, or DDC) split are routed to the split's queue with an "associated extension number." The system then distributes the calls to an available agent from the queue. Since these calls enter the split's queue, they are considered ACD (or EUCD/UCD/DDC) calls.

Asynchronous Data Transmission

Transmission in which time intervals between transmitted characters may be of unequal length. Transmission is controlled by start and stop elements at the beginning and end of each character. For comparison see *Synchronous Data Transmission*.

Attendant

The operator of an attendant console.

Attendant Console

An electronic switchboard, with pushbutton control, used by the attendant to manage calls.

Attendant Diversion to Recorded Announcement

A function of the Intercept Treatment feature. Using this function, a System 85 attendant can divert *all* attendant-seeking calls to a recorded announcement by dialing an access code.

Attendant-Extended Call

A call (usually from the public network) that routes to an attendant, and is in turn relayed ("extended") by the attendant to an appropriate destination (e.g., a voice terminal or an ACD split). Attendant-extended calls differ from *direct attendant calls* that are *initiated* by an attendant.

Attendant Overflow

A function of the Tenant Services feature. Attendant overflow allows calls directed to an attendant partition to overflow and terminate to that partition's overflow partition. This function operates during periods of heavy calling to attendants, or when attendant partitions are lightly staffed.

Attendant Queue

The ordered sequence of calls waiting to be answered by an available attendant from within the group of attendants. (Using a System 85, there can be as many as 40 attendants in the group.)

ATMS

See Automatic Transmission Measurement System.

Audible Alerting

See Ringback Tone.

Audit Trail

A record of Automatic Circuit Assurance referrals. This system-generated record includes the date, time of day, trunk-group access code, and trunk number. The record indicates whether the referral was for a long call or a series of short calls. Also, the record indicates whether the trunk was tested after a referral. The audit trail record can be retrieved using the Facilities Management feature.

Attendant-Completing Trunk

A member of an attendant-completing trunk group.

Attendant-Completing Trunk Groups

Incoming (or 2-way) groups that terminate calls to preassigned answering positions within the switch. Since the answering positions are preassigned, digits are not passed to the local switch. These preassigned answering positions include: the attendant queue (by default), an ACD queue (Procedure 115), or a VDN (Procedure 031, Word 2). (The term 'attendant-completing' usually refers to CO, 800 Service, or FX trunk groups.)

Authorization Code

A dialed code that can override the FRL of the facility being used to place an outgoing call. Authorization Codes can also be used (in preference to the Barrier Code) to protect against unauthorized entry to System 85 on Remote Access trunks.

Automatic Alternate Routing (AAR)

A feature on System 85 and DEFINITY Generic 2.1 switches that provides least-cost routing for private network calls by selecting, in descending order of desirability, the best route available.

Automatic Calling Units (ACU)

An automatic dialing device that permits a machine to place calls.

Automatic Dialing

A method of using Abbreviated Dialing to place a call. With Automatic Dialing, the calling party accesses a stored number with a single button press.

Automatic Incoming Trunk

A member of an automatic incoming trunk group.

Automatic Incoming (Automatic-In) Trunk Groups

Incoming (or 2-way) trunk groups that terminate calls to preassigned answering positions within the switch. Since the answering positions are preassigned, digits are not passed to the local switch. These preassigned answering positions include: the attendant queue (by default), an ACD queue (Procedure 115), or a VDN (Procedure 031, Word 2). (The term "automatic-in" usually refers to the various kinds of tie trunks.)

Automatic Route Selection (ARS)

A feature on System 85 and DEFINITY Generic 2.1 switches that provides least-cost routing for public network calls by selecting, in descending order of desirability, the best route available.

Automatic Transmission Measurement System (ATMS)

A System Management feature that automatically measures the transmission characteristics of private and public network trunk facilities.

Backup Answering Position

The second or third termination point in a coverage path.

Backup Terminal

A voice terminal used with Centralized Attendant Service (CAS) to answer calls at a branch location when the attendant at the main location is not available.

Balance Field

Field 2 of Procedure 101, Word 1. When this field is assigned to "1" for a trunk group, the switch inserts an extra 2 dB of loss to each trunk-to-trunk connection involving an analog CO (Central Office), FX (Foreign Exchange), WATS (Wide Area Telecommunications Service), or DID (Direct Inward Dialing) trunk. This field is set to reduce reflections (including echoes) on analog trunks where the serving CO is not providing enough impedance compensation (i.e., balance) for the trunk group. (A trunk is considered balanced with an Echo Return Loss of at least 16 dB.)

Band Width

The range of frequencies assigned to a channel or system; the difference expressed in hertz between the highest and lowest frequencies of a band.

Barrier Code

The security code that allows a remote user to access the services of the System 85 and prevents unauthorized access to the system.

Basic Rate Interface (BRI)

One of two standard ISDN frame formats. The BRI is the station direct interface to an ISDN. It consists of a 192 Kbps carrier interface organized into two 64 Kbps B (bearer) channels and one 16 Kbps D (data) channel.

Bay

Another term for "split" that is used by some other ACD vendors. A split (or bay) is a group of agents (group members) organized to receive calls in an efficient and cost-effective manner. Throughout this manual, the term "split" is used in preference to "bay."

Bearer Capability

A term used with ISDNs (Integrated Services Digital Networks) that identifies the types of traffic that can be supported by a given facility.

Bearer Capability Class (BCC)

A term used with ISDN that identifies the type of carrier service required for a caller. This is part of the class of service for the calling party and identifies the bearer capability required.

Bearer Capability Class of Service (BCCOS)

An expansion of the ISDN BCC concept used with System 85, R2 V4, and DEFINITY Generic 2 switches. The BCCOS provides additional granularity to the BCC concept and applies to both ISDN and non-ISDN calls and facilities.

Binary Synchronous Communications (BSC or Bisync)

A data communications protocol, developed by IBM, that interfaces the AP to an IBM host computer. This protocol is used with the Terminal Emulation feature.

Bisync

See Binary Synchronous Communications.

Bit (Binary Digit)

Smallest unit of information in binary notation (having two possible states or values, zero or one).

Bits Per Second (bps)

The number of units of information in binary notation that are transmitted or received per second.

Bit-Oriented Signaling (BOS)

A form of call control signaling that transmits information in the form of single digital bits, most commonly A & B bit signaling.

Blocking

The inability to connect the calling party with the called party. Blocking occurs when either (1) all suitable trunk paths are busy or (2) a path between a given inlet and a suitable outlet of the switching system is unavailable.

Branch Locations

Telecommunication systems served by attendants at a centralized location.

BRI Voice Terminal

A voice terminal designed to use the " 2 B + D" interface specified in the ISDN—BRI standard. The AT&T BRI voice terminals available with System 85, Release 2, Version 5, include the 7500D series models: 7505D, 7506D, and 7507D. Because ISDN—BRI is an open standard, other manufacturer's voice terminals may also be used once certified.

Bridged Appearance

An appearance on a voice terminal matching an appearance on another voice terminal. For every appearance on a "home" terminal, there can be a bridged appearance on as many as 15 other voice terminals. (The concept of is similar to the concept of "images.")

Bridging

Connecting one circuit in parallel with another without interrupting the continuity of the first.

BSC

See Binary Synchronous Communications.

Business Communications Terminals (BCT)

A family of terminals that provide the user with the ability to enter data and message information via a keyboard. The terminals are the 500 BCT, 513 BCT, and 515 BCT.

Bypass Access

A method of connecting to public telecommunications facilities whereby a customer (terminal or PBX) is provided with direct physical connections to a long distance carrier service that physically *circumvent* the LEC (local exchange carrier).

Bypass Access Tie Trunks

One-way tie trunks from an ETN (Electronic Tandem Network) tandem switch to an ETN main location that is homed on a *different* tandem within the ETN configuration.

Call Appearance

A point of access to an extension (also known as an occurrence). Using a multiappearance voice terminal, an extension can be manually accessed by pressing a button on the voice terminal labeled with an extension number. Indicator (status) lamps next to the button light when a terminal user places calls, receives calls, or puts a call on hold.

Call-by-Call Service Selection

An attribute of the ISDN—PRI feature. Call-by-Call Service Selection allows ISDN trunks to be more efficient than traditional trunk facilities. By specifying a calling service, the ISDN—PRI call SETUP message, Call-by-Call Service Selection allows different network services to be applied to the same trunks on a per-call basis. Therefore, ISDN—PRI trunk groups reduce the need to provide separate trunk groups for services such as WATS (Wide Area Telecommunications Service), DID (Direct Inward Dialing), and DOD (Direct Outward Dialing). All of these services can be provided over the same set of trunks.

The ISDN—PRI feature also allows the same digital trunk facilities to handle various types of calls. The SETUP message contains information to specify the type of call including voice calls and various types of data calls. This ISDN—PRI capability, provided on the Dynamic Trunk Type (Trunk Type 120), is provided by System 85 and DEFINITY Generic 2 switches using the Generalized Routing function of the AAR, ARS, and WCR features.

Call Category

The classification of a call based on selected factors that can influence the selection of a network routing pattern. The call category is used by the generalized route selection function of the AAR, ARS, and WCR features. The factors used in determining call category vary depending on the type and vintage of switch. On System 85 and DEFINITY Generic 2.1 switches, call category is determined by the conditional routing or satellite hop control count. On Generic 2.2 switches, call category definition expands to include not only the conditional routing count, but also the time-of-day plan, and the partition of origin on switches with Tenant Services active.

Call Detail Recording and Reporting (CDRR)

The CDRR feature collects, formats, and reports switch generated call detail information using a local Applications Processor. The CDRR feature surpasses SMDR as a comprehensive and customized way of reporting call details.

Call Detail Recording Utility (CDRU)

A series of software programs that run on the 3B2 LSU to process the CDR records generated by the switch.

Call Forwarding—Off Net

A function of the Call Forwarding—Follow Me feature. Using this function, a user can forward all calls to a telephone in the nontoll public network.

Call Forwarding Override

A function of the Call Forwarding—Follow Me feature. With Call Forwarding—Follow Me active, most calls directed to the forwarding terminal forward to a specified destination terminal. Call Forwarding Override allows the user of the forwarded-to terminal to complete calls to the forwarding terminal.

Call Hold

The name of the access code that allows a single-appearance voice terminal user to access the hard hold function of the Hold feature. See **Hold**.

Call Management System (CMS)

Software routines on an adjunct processor that assist in the management of ACD activity. The CMS system generates reports on ACD activity, provides real-time displays of current agent activity, and provides the customer with the ability to partially administer the ACD feature for the switch.

Call-Progress Tone

One of a set of tones (e.g., ringback tone, busy tone, or reorder tone) that a calling party can receive from a switch. Call-progress tones indicate the specific status of a call or the facilities used by the call.

Call Reference Value

A number between 0 and 32767, used to identify a specific ISDN call in progress. The call reference value is used to associate ISDN D-channel messages with the related ISDN call.

Called Party

The person who receives a call.

Caller Response Interval

The administrable period of time for internal callers to respond to a call that has been redirected to coverage. During this system-wide interval (from 0 to 10 seconds) that begins with coverage tone, an internal caller could hang up, activate Leave Word Calling, or wait for the covering user to answer.

Calling Party

The person who places a call.

Carrier Ready Tone

See Ready Tone.

CCITT (Committee Consultative for International Telegraph and Telephone)

An agency of the United Nations (under the auspices of the International Telecommunication Union). The CCITT is also known in English as the International Telegraph and Telephone Consultive Committee. It is a multinational organization that sets international telecommunications standards.

CCS (Hundred Call Seconds)

A unit of measure for telephone call traffic. The equivalent of one call lasting for 100 seconds.

CCSA

See Common Control Switching Arrangement.

CDRR

See Call Detail Recording and Reporting.

CDRU

See Call Detail Recording Utility.

Cell

A 4-bit (1/2 byte) portion of a CDR record. Each CDR record contains four adjacent cells.

Central Office

A place where public telephone switching equipment is housed.

Central Office Trunk

A telecommunications channel on the public network between the central office and the system.

Channel

A communications path over which voice or data is transmitted.

Channel Negotiation

A capability of ISDN connections that allows the called (terminating) switch to request, on a call-by-call basis, a different channel than the channel selected by the calling switch. For an ISDN—BRI connection, channel negotiation is between a terminal device and a switch, rather than between switches. The benefit of channel negotiation is that the only other alternative, if the originally selected channel is not acceptable for some reason, is to deny the call.

Chime Sidetone

See Chimeback Tones.

Chime Signals

Tone bursts sent over the loudspeaker system to page persons with the Code Calling Access feature. These 892-hertz tone bursts are combined in a coded manner to signal a specific person out of a larger group of persons.

Chimeback Tones

Tones (resembling chime signals) sent to the paging party's voice terminal by the System 85 switch. These tones are used to confirm that chime signals are being sent over the loudspeaker system.

Class of Service (COS)

A numeric code that specifies a group of features and calling privileges that together determine the calling privileges of a group of extension numbers.

Cluster

A group (2 or more) of individual nodes connected by DCIU links and tie trunks into a DCS network.

CMS

See Call Management System.

Codepoint

A term used in ISDN terminology to identify a point within a "codeset" that defines an IE (Information Element). See also **Codeset** and **Information Element**.

Codeset

One of eight possible standard groupings, consisting of 133 ISDN IEs (Information Elements), used in the ISDN messaging structure. Codeset 0 contains the IEs defined by the CCITT. Codesets 1 through 5 are reserved for future standards expansion. Codeset 6 is for IEs specific to the local serving network (switch), and codeset 7 is for user-specific (user-to-user) IEs. See also **Information Element**.

Codeset Conversion

An administrative process, used with ISDN messaging, that allows an IE (Information Element) from one codeset to be translated to an IE in a different codeset. This allows ISDN messaging to be used between two separate interfaces (switches) that use different codeset structures.

Codeset Mapping

Another name for Codeset Conversion.

Collision

See Glare.

Command Path

See Path Name.

Common Channel Signaling

A method of providing call control and signaling for multiple links (trunks) on a common or shared channel. This is the signaling form required by DS1 clear channel or AVD (Alternate Voice Data) arrangements and by ISDN (Integrated Services Digital Network) arrangements. Also known as 24th channel signaling.

Common-Channel Interoffice Signaling (CCIS)

A system of supervising the routing, setting up, and disconnecting of voice and data calls within a telecommunications network. CCIS is the primary method of signaling used within the AT&T Communications Network. AT&T CCIS consists of a network of processors and high-speed data links residing in parallel to the actual switching and transmission facilities. Some of the benefits of CCIS signaling include: faster call-setups, smarter "look-ahead" routing capabilities, fewer blocked calls, lower-cost routing.

Common-Control Switching Arrangement

A private telecommunication network using dedicated trunks and a shared switching center for interconnecting company locations.

Conditional Routing

A method of controlling call route selection in the System 85 and DEFINITY Generic 2 routing features (AAR, ARS, and WCR). Conditional routing selects possible routing patterns based on the number of satellite links used by a call and the number of satellite links that are included in a potential routing pattern. See also, Satellite Hop Control.

Confirmation Tone

Three short bursts of tone provided by the System 85 switch to confirm that a feature has been accepted or canceled.

Control Vectors

Another term for "Call Vectoring" that is used by some other ACD vendors. Call Vectoring (or the similar concept, Control Vectors) provides an enhanced method of defining calling-party interfaces for incoming calls (usually incoming ACD calls). Throughout this manual, the term "Call Vectoring" is used rather than "Control Vectors."

Controlling Terminal

For Abbreviated Dialing, the voice terminal within a group that is used to program and change group-list items for the group.

For ACD, the terminal within an assigned ACD (previously, EUCD/UCD/DDC) group that is used to activate or deactivate functions for the group.

Conversion (Code)

See Code Conversion.

Conversion (Digit)

See 10- to 7-Digit Conversion and M-to-N Conversion.

Conversion Resource

The combination of a TDM (Trunk Data Module) and a modem that converts DCP (Digital Communications Protocol) data signals from digital format to analog format suitable for transmission over analog trunk facilities. The reverse conversion (analog to digital) is also provided. This term is used primarily with the Modem Pooling feature.

Coverage Call

A call that is redirected from the called extension (the principal) to another extension.

Coverage Group

The combination of a principal, the principal's coverage path(s), and the associated criteria. A dual-path coverage group contains two paths and criteria.

Coverage Module

An optional attachment to the 7205H or the 7405D voice terminal. Coverage modules provide 20 additional appearance buttons for these voice terminals, and are usually used by covering users. The C201A coverage module attaches to the 7205H, and the C401A or C401B module attaches to the 7405D or the 7434D.

Coverage Path

An ordered sequence of up to three answering positions (points) to which coverage calls are redirected.

Coverage Point

An extension designated as an alternate answering position in a coverage path.

Coverage Tone

A call-progress tone, also known as Coverage Redirect Feedback, that indicates to a calling party that the coverage process is being started for the call.

Covering User

A person authorized to answer redirected calls at a coverage point.

Criteria

The conditions under which a call to a principal is redirected to coverage. This term is used with the Call Coverage feature.

Crossover (Network)

See Network Crossover.

Customer-Provided Equipment (CPE)

Customer-owned equipment that is not provided as part of the system but is to be connected to it.

Cut-Through Connection

An attribute of outgoing calls that are not automatically routed (such as AAR or ARS calls). Cut-through connections are established between local and distant switches whereby the local switch sets up a talking connection to the distant switch and then relinquishes control of the call to the distant switch. At this time, the distant switch may return dial tone for subsequent dialing and call routing.

D (Data) Channel

The designation for either of two types of communications links:

DCP Usage

A communications link (as opposed to signaling link) in the DCP setup.

ISDN Usage

The signaling link (as opposed to a communications link) for an ISDN span, either PRI or BRI.

DC (Digit Collect) Signal Ignore

An attribute of the AAR and ARS Subnetwork Trunking functions. The DC Signal Ignore fields are field 11 of Procedure 309, Word 1 and field 8 of Procedure 321, Word 1. When the DC Signal Ignore field is assigned to an AAR/ARS preference, the System 85 only sends digits to the serving switch for outgoing (or tandem) calls after the assigned pause times out. The System 85 does not send digits in response to a Wink-Start, Delay-Dial, or precise dial tone signal.

This field might be assigned to an AAR/ARS preference to compensate for excess noise on the trunk group. As an example, the trunk type of many AAR preferences allows for "universal" outgoing signaling. These trunk groups can respond to either Wink signals, Delay-Dial signals, or precise dial tone. (In this way, the System 85 switch administrator need not be overly concerned about the precise trunk type at the distant end of the preference.) However, excess noise over one of these trunks can be misinterpreted as digit-collect signal which would result in the System 85 sending digits before the receiving switch is ready to receive them.

D-Channel Backup

A technique used with ISDN NFAS (Non-Facility Associated Signaling) on PRI (Primary Rate Interface) spans to provide a second (redundant) D-channel for a D-channel group. With D-channel backup, two signaling channels (D-1 and D-2) are assigned to a D-channel group. One D-channel is active (usually D-1) and the other is in a standby mode (active at level 2 only [of the ISO Model]). When the active D=channel is taken out of service for any reason, the standby channel automatically takes over signaling for the assigned B-channels.

D-Channel Group

A term used with ISDN NFAS (Non-Facility Associated Signaling), to identify the B-channels and D-channels that are associated in a common signaling arrangement.

Data Channel

The means of transmission and the intervening equipment involved in the transfer of information in a given direction.

Data Communications Access

The feature that provides access to on-premises host computers for data end points with an analog interface (modem). These end points include analog voice terminals and attendant consoles.

Data Communications Equipment (DCE)

The equipment that provides the functions required to establish, maintain, and terminate a connection, the signal conversion, and coding required for communication between DTE (Data Terminal Equipment) and data circuit. Any equipment that connects to a data terminal device using an EIA RS-232C interface.

Data Communications Interface Unit (DCIU)

A circuitry configuration that provides interprocessor communication between switch processors or between a switch processor and another processor.

The DCIU is used between switches in a DCS cluster, between a switch and an Applications Processor, or between a switch and an AUDIX system.

Data Link

The configuration of physical facilities enabling end terminals to communicate directly with each other.

Data Path

The complete connection (end-to-end) used for a data communications link (see also Virtual Circuit). This term is used for the combination of all elements used in an interprocessor communication in the DCS feature.

Data Module

A device that interfaces customer-provided data equipment to the System 85 equipment.

Data Port

A point of access to a computer that uses trunks or lines for sending or receiving data.

Data Protection

The feature that prevents intrusions by bridge-on features (e.g., Call Waiting, Override, and Busy Verification of Lines) into data transmissions. The bridge-on features, if allowed, would disrupt a data transmission by inserting a warning tone into the connection. Two forms of Data Protection are available: temporary and permanent. Temporary data protection is activated with an access code and permanent data protection is assigned to a line class of service.

Data Rate

The transmission of data measured in bits per second.

Data Service Unit (DSU)

A device designed specifically to transmit digital data on transmission facilities.

Data Set

A term sometimes used for *modem*. A device that converts data communications between a digital (i.e., RS232C) format and an analog format. These terms (data set and modem) are used interchangeably in this manual.

Data Supportable Tie Trunk (DSTT)

A tie trunk that can support data rates greater than 300 bps.

Data Terminal

An input/output device [with a keyboard and a CRT (cathode ray tube)] that has either switched or direct access to a host computer (or to an AP). The AT&T data terminals include: The AT&T Personal Terminal 510D, and Models 500, 513, and 515 BCT (Business Communications Terminal).

Data Terminal Equipment (DTE)

- 1) The equipment comprising the data source, data destination, or both. A data endpoint such as a data terminal or line printer.
- 2) The configuration of leads and control devices (and logic) specified by a protocol that complements the *Data Communications Equipment (DCE) for the same protocol.*

Data Tone

See Ready Tone.

DCIU

See Data Communications Interface Unit.

DCIU Link

A hardware communications link (data link) that connects two DCIUs.

DCIU Network Channel

The association between two link/logical channel pairs such that a DCIU message received on one link/logical channel pair is transmitted on the other pair. There are two types of network channels, fixed or PVC (Permanent Virtual Circuit) and alternate routing.

DCIU Port

A gateway to or from an application (DCS is an example of an application). Ports are the endpoints of a virtual circuit and look like an input/output device to the application.

DCS

See Distributed Communications System.

DCS Cluster

Two or more switches interconnected by DCIUs.

DCS Node

A switch within a DCS cluster.

Default FRL

A value (between 0 and 7) assigned to a specific extension class of service or trunk group. The default FRL of the originating facility is used as the initial FRL for a call for route selection purposes. *See also* Facility Restriction Level.

Default Voice Terminal

A preassigned voice terminal to which calls can be routed when the attendant console is unattended.

Delay Dial Signaling

A trunk signaling protocol that provides a waiting period for the far end of a trunk connection to respond before the near end outpulses digits.

De-multiplexer

A device or circuit used to separate two or more signals that were previously combined on a single carrier medium. The de-multiplexer must be associated with a compatible multiplexer.

Designated Voice Terminal

The forwarded-to voice terminal (that is the specific voice terminal to which calls, for a certain extension are forwarded) in a Call Forwarding arrangement.

Dial Access Restriction

A method of preventing voice terminal users, data terminal users, and attendants from directly accessing a trunk group by dialing the trunk-group access code. Dial access restriction also prevents an attendant from accessing a restricted trunk group with a DTGS (Direct Trunk Group Selection) button. This restriction (assigned to a trunk group in Procedure 100, Word 1), *does not* prevent verification of trunks in the trunk group by an attendant or the designated voice terminal user.

Dial Pulse Addressing

A means of signaling consisting of regular momentary interruptions of a current path at the sending end. The number of these interruptions corresponds to the value of a digit or character. This method of address signaling is usually associated with rotary dial terminals. However, this method of signaling can also be used between switches.

Dial Repeating Tie Trunk

A telecommunications channel between two systems. The number dialed is "repeated" (or dialed-in) at the distant end.

Digit Strings

A term used in the WCR (World Class Routing) feature to refer to the elements of a dialed number. A digit string is any grouping of digits (one or more) that constitutes a discrete element of a dialed number string. Digit strings are used within the digit analysis module of the WCR software to make call processing decisions about the call in progress. Digit strings include such elements as: account codes, interexchange carrier access codes, international dialing prefixes, toll prefixes, and address strings.

Digit-Oriented Routing

A method of routing calls into the System 85 switch. Using digit-oriented routing, dialed digits are passed through the serving switch (usually, the serving CO) and to the local System 85 in a similar manner to DID calls.

Digital Access Cross-Connect System (DACS)

A large electronic "cross-connect field" where telecommunications channels are permanently connected using software translations. AT&T Communications maintains a DACS network in parallel to the AT&T Switched Network that primarily contains 4 ESS switches. To limit the trunk load on each 4 ESS, private lines through the AT&T Communications network are usually routed through a set of DACS offices to reach their destinations.

Specific trunks in a DACS office can also interface the AT&T Switched Network using translated

connections to the adjacent 4 ESS. As an economical alternative when this interface is used, the DACs can also concentrate the incoming direct-access trunks to consume fewer switched trunk facilities at the 4 ESS.

Digital

Discrete, or discontinuous, in form. Digital signals contrast with analog signals which are continuous in form. Digital signals are usually binary.

Digital Communications Protocol (DCP)

A protocol used to transmit both digitized voice and data over the same communications link. [A System 85 data link made up of two information channels and one signaling channel.]

Digital Data

Data represented in discrete, discontinuous form, usually binary. This is in contrast to continuous analog

Digital Service-1 (DS1)

A high-speed, high-volume digital trunking facility.

Digital Terminal Data Module (DTDM)

A data module designed as a plug in module for a digital voice terminal.

Digital Trunk

A circuit in a telecommunications channel designed to handle digital data.

Digital Voice Terminal

A voice terminal (telephone) that converts acoustic voice signals (analog signals) into digital electrical signals to be sent along the line. These voice terminals are served by two pairs of wire. The digital voice terminals include: Models 7401D, 7403D, 7404D, 7405D, 7406D, 7407D, 7410D, 7434D, 7505D, 7506D, 7507D, 510D, 515 BCT, and CALLMASTER.

Direct Access

A method of connecting to public telecommunications facilities whereby a customer (terminal or PBX) is provided with direct physical connections to a long-distance carrier that employ fixed *translated* connections through the LEC (local exchange carrier).

Direct Attendant Call

A call that is *initiated* by an attendant. Direct attendant calls differ from *attendant-extended calls* that are initiated elsewhere (usually from the public network), and extended by an attendant to an appropriate destination.

Direct Distance Dialing

Long distance calls completed without operator assistance.

Direct Extension Selection

An option on an attendant console which allows an attendant direct access to an idle voice terminal (inside the system) by pressing a hundreds button and a tens and units button.

Disconnect Supervision

A signal sent by the serving switch to the local System 85 indicating that an "answered call" was hung up at the distant end. Depending on the type of serving switch, a delay of from 2 to 25 seconds can precede this signal.

Display Voice Terminal

A voice terminal with display capabilities. The display voice terminals include: 7404D (with Z300B messaging cartridge and EIA terminal), 7405D (with D401A display module), 7406D With Display, 7407D, 7506, 7507, 510D, 515 BCT, and CALLMASTER.

Distant

Pertaining to, or within, the physical limits of another network node [from the perspective of the local (or serving) switch].

Distributed Communications Service (DCS)

A network of switches appearing to the user as a single switch.

Don't Answer Interval

The specified number of times that unanswered voice terminals can ring (number of alerting cycles) before a call is redirected to coverage or forwarded.

Drop Button

A fixed feature button on the AT&T multiappearance voice terminals. When a multiappearance voice terminal user is the controller of a 3-Party Conference, the user can press the DROP button to disconnect the third party in the conference. Also, when a multiappearance voice terminal user is active on a 2-party call, the user can press the DROP button to disconnect the other party and to receive new dial tone on the *same* appearance.

Using the DROP button to disconnect a 2-party call and receive new dial tone is faster than using the DISCONNECT button. Using the DISCONNECT button returns dial tone on the appearance specified by the Multiappearance Preselection and Preference feature.

Dual Tone Multifrequency (DTMF)

A signaling technique where specific tone pairs are used to represent the dialing characters (0 through 9, *, and #). Also known as touch-tone.

Duplicated Switch

A switching system that contains backup processing equipment. A "high-reliability" switch contains backup common control processors. A "critical-reliability" switch contains backup common control processors, module processors, and TMSs (Time Multiplexed Switches).

DXS Button

One of a set of 100 buttons, arranged as two groups of 50 buttons, engraved with a number (from 00 to 99) on the type 34 console. When DXS is assigned, an attendant can select an extension (such as, 1356) by pressing the appropriate hundreds group selection button (for this example, the one assigned as "13") and then pressing the appropriate DXS button (for this example, "56"). When Extended DXS is assigned, however, the attendant can select an extension by pressing two DXS buttons in sequence (for this example, "13," followed by "56"). When Extended DXS is assigned, the hundreds group selection buttons do not function.

Dynamic Nonhierarchical Routing (DNHR)

The primary algorithm used to route calls through the AT&T Switched Network. Each 4 ESS in the network has a direct route to most of the other 4 ESS switches in the network. Meanwhile, each 4 ESS can also have up to 13 indirect routes with *just one* intervening node. Under this algorithm, the direct route is usually the first preference, and the indirect routes are arranged in order of desirability. At the time that a preference is actually selected for a call, each preference is queried on a "look-ahead" basis by the CCIS network. After the CCIS network reserves an available path from the originating 4 ESS, through the intervening 4 ESS (if needed) to the destination 4 ESS, the CCIS network instructs the originating 4 ESS to route the call over this path.

E&M (Ear and Mouth) Supervision

A symmetric signaling scheme using dc voltage levels over "E" and "M" interface leads. The E and M leads are separate from the transmission path. The signals are used to indicate on-hook and off-hook states at each end of the connection path.

Egress

The opposite of access; the act of going out or emerging. For example, 800 Service and/or MEGACOM WATS 800 Service can be used to egress the public network for access to a System 85. Also, the SDN (Software Defined Network) Access feature allows a single call to use special access from a System 85 or DEFINITY Generic 2 to the public network and then use special egress from the public network to another System 85 or Generic 2.

Electronic Tandem Network (ETN)

A private telecommunications network configured with electronic tandem switches. It interconnects customer locations via dedicated intertandem tie trunks, access trunks, and bypass trunks.

Emulation

A technique using software programming that allows one computer or digital device to behave like a different device.

Enhanced Private Switched Communications Service (EPSCS)

A private network service that provides advanced voice and data communications services for companies with widespread operations.

Equipment Location

The location, or the corresponding numerical representation of the location, of a circuit within the switch. Equipment locations are represented by 7-digit numbers (in the form, 01 2 3 12 0). The first and second digits identify a module. The third digit identifies a cabinet within the module. The fourth digit identifies a carrier within the cabinet. The fifth and sixth digits identify a slot within the carrier. The seventh digit identifies a circuit of the slot's circuit pack.

Extended Digital Subscriber Line (EDSL)

The name used for the ISDN—PRI feature (network interface) on the 5ESS switching system. The 5ESS is used for COs (Central Offices) and large PBX (Private Branch Exchange) applications.

Extension Number Steering

An attribute of the Main/Satellite feature. The Main/Satellite switches use the initial digit(s) of a dialed extension number to steer the call to the appropriate switch. The call is then routed to its final destination.

Facilities Restriction Level (FRL)

A number (between 0 and 7) assigned to calls and calling facilities, used during route selection, to determine accessibility of call routing facilities for specific calls. A call can access a calling facility (trunk group or routing preference) if the FRL of the call is equal to or greater than the FRL of the facility being accessed. *See* also Default FRL.

Facsimile

A process, or the result of a process, where fixed graphic material is scanned and the information converted into electrical signal waves to produce a likeness or copy.

Feature

A specifically defined function or service provided by System 85.

Feature Key Module

See Function Key Module.

Feature Button

A labeled button designating a specific feature.

Fiber Optics

A technology using light-guide materials and ultra-wide band electromagnetic wave forms for high-capacity carrier systems.

Final Effective Step

A "final effective (vector) step" is either the last vector step or a vector step that is followed by a "stop" step.

Flash

A momentary press of (noun) [or to momentarily press (verb)] the switchhook on an analog voice terminal. Switchhook flashes can have a duration of from 0.2 seconds to 1.2 seconds. A shorter press would not be detected, while a longer press would cause the voice terminal to disconnect.

Flash Button

Another term for "recall button" that is used by some other switch vendors. After a recall button press (or flash button press) the switch returns recall dial tone to the voice terminal user. Throughout this manual, the term "recall button" is used in preference to "flash button."

Flexible Routing Selection (FRS)

Another term for "ARS" (Automatic Route Selection) that is used by some other switch vendors. ARS (or the similar concept, FRS) provides least-cost routing of public network calls. Throughout this manual, the term "ARS" is used in preference to "FRS." On Generic 2.2 switches the ARS feature is replaced by the WCR (World Class Routing) feature.

Flow Control

See ISDN Flow Control.

Foreign Exchange (FX)

A central office other than the one located in the calling customer area.

Foreign Exchange Trunk

A telecommunications channel that connects a private telephone system to a central office other than its own central office.

Forwarded-To Voice Terminal

The designated voice terminal (i.e., the specific voice terminal to which calls, for a certain extension, are forwarded).

Frame

One of several segments of an analog or digital signal that has a repetitive characteristic. Corresponding elements of successive frames represent the same thing. The specific nature of a frame varies depending on the context in which the term is used.

- In a time-division system, a frame is a sequence of time slots, each containing a sample from one of the channels served by the system.
- In DS1 signaling, a frame is the digital representation of the 24 logical channels represented by 192 bits of data. An additional bit is included for framing making a frame 193 bits long.
- In D4 signaling, the framing format includes 12 frames.
- In extended super framing (Fe), the framing format includes 24 frames.
- In packet switched data communications, a frame incloses a "packet" by adding a header and a trailer element for additional control purposes (See the "Packet" and "Packet Switching" definitions for further details).

Full Duplex

A transmission system capable of carrying signals in both directions simultaneously.

Function Key Module

An optional attachment for the 7205H or the 7405D voice terminal. Function key modules provide 24 additional feature buttons for these voice terminals.

Gate

Another term for "split" that is used by some other ACD vendors. A split (or gate) is a group of agents (group members) organized to receive calls in an efficient and cost-effective manner. Throughout this manual, the term "split" is used in preference to "gate."

General Purpose Port (GPP)

An SN270 (or TN754 for universal modules) port used for either a digital voice terminal or a data module. The GPP uses the digital communications protocol and can be used as either a line or trunk appearance.

General Trade (GT)

Commercially available materials and equipment that are not restricted to a single manufacturer or to manufacture under license.

Generalized Route Selection (GRS)

The process of selecting a routing pattern and preference for a call (in a networking environment) that uses a series or set of administerable criteria to make the routing selection. GRS is used by the AAR, ARS, and WCR features.

Glare

A fault condition in trunk seizure operations where both ends of a trunk attempt to seize the same connection at the same time.

Ground Start Supervision

A supervisory signal given at certain terminals and switches by connecting one side of the line or trunk to ground. Ground start signaling was introduced in trunk signaling to minimize glare.

Group Number

Software packages before R2 V2 allowed for as many as 28 UCD/DDC groups. In Procedure 025, Word 1, the "group number" (a number between 1 and 28) is used to uniquely identify the individual groups. These same group numbers are used in Procedure 011, Word 1 to specify a UCD/DDC group which is used as the final point in a coverage path.

GTA (General Terminal Administration)

A capability introduced with DEFINITY Generic 2 that enables a system administrator to define the characteristics of new multiappearance terminals and data modules. That is, terminal types that are not defined in the switch administration software (Procedure 051, Word 1).

Half Duplex

Transmission of signals in either direction but not both directions simultaneously.

Handshaking Logic

Logic circuits used to establish a data connection between two devices.

Hard Disk

A rigid magnetic platter used to store data.

Hard Hold

One of the two forms of hold provided by the Hold feature. Hard hold is more durable than soft hold, providing greater assurance of being able to return to the held call. Hard hold is available for multiappearance voice terminals (using the HOLD button) and for single-appearance voice terminals (using the Hold dial access code).

Hard Processor Swap

An attribute of a duplicated System 85. During a "hard swap," the switch abruptly shifts control from one processor to the other "healthier" processor. Since the current call-status information is not transferred to the new processor, hard processor swaps are usually noticed by users who are active on a call. (See also **Soft Processor Swap**.)

Hard-Wired

Permanently connected [as opposed to a temporary (switched) connection].

Head-End Hop Off

A call-routing attribute of ETN main and tandem switches. Using head-end hop off, a main or a tandem quickly routes a public-network call over a public-network trunk facility instead of routing the call part of the way over private-network trunk facilities.

Head of Queue

The first item (e.g., a call or an agent) in a queue. The item at the head of queue is usually the next item to be processed.

Hertz (Hz)

A unit of frequency equal to one cycle per second.

Hold

A feature provided for System 85 voice terminal users. The Hold feature allows the user to separate from an active call while retaining the ability to return to the call. There are two forms of hold: hard hold and soft hold. Hard hold is more *durable* than soft hold, providing greater assurance of being able to return to the held call. Hard hold is available for multiappearance voice terminals (using the HOLD button) and for single-appearance voice terminals (using the Hold dial access code). Soft hold is only available for single-appearance voice terminals (using the switchhook or the RECALL button).

Home Numbering Plan Area (HNPA)

The dialing plan area (area code in the public network) within which a private network switch is located.

Homing

The connection of a subtending switch to a tandem switch based on factors such as traffic loads, geographic proximity, and community of interest.

Нор

Nondirect communication between two DCIUs, whereby the DCIU message passes through one or more intermediate DCIUs.

Host Computer

A computer connected to the network that processes data from various data-entry devices.

Hub

The central or controlling switch in a "STAR" networking configuration.

Hundred Call-Seconds (CCS)

The unit with which telephone call traffic is measured. One call that lasts for 100 seconds constitutes 1 CCS.

Hundreds Group Selection Button

One of 18 assignable buttons (arranged horizontally as three rows of six buttons) on the type 34 console. When DXS is assigned, an attendant can select an extension by pressing the appropriate hundreds group selection button and then pressing the appropriate DXS button. When Extended DXS is assigned, the hundreds group selection buttons don't function.

Hybrid Module

See Universal Module.

Hybrid Voice Terminal

Hybrid voice terminals (telephones) possess characteristics of both analog and digital voice terminals. Like analog voice terminals, hybrid voice terminals send analog electrical voice signals. However, like digital voice terminals, hybrid voice terminals are controlled by digital signals. These voice terminals are served by three pairs of wire. The hybrid voice terminals include Models 7203H, 7205H, 7303S, and 7305S.

I-Field

A channel used for communicating digital information for voice and data.

I-Use Lamp

An indicator lamp on a multiappearance voice terminal that indicates whether or not a particular appearance is in use.

ID/Password

A security measure that limits access to those with the correct ID and password.

Idle Loop

An idle appearance on the attendant console.

IE

See Information Element.

Initializing Terminal

A term used with specific ISDN—BRI terminals to indicate that the terminal interface exchanges information with the switch (similar to handshaking between data modules), when first placed into service or when returned to service after an outage.

Image

A point of access to an appearance. There can be as many as 16 images of an appearance. An unshared appearance has only one image of the appearance. (The concept of an "image" is similar to the concept of a "bridged appearance.")

Immediate Start Signaling

A trunk signaling protocol in which the receiving switch (incoming end of a trunk seizure) has 0.07 seconds to respond to the incoming seizure.

Individual Extension Number

Agents in an ACD (previously, EUCD/UCD/DDC) split have "individual extension numbers" and are allowed to receive calls directly on these numbers. Since calls to an individual extension number do not enter the split's queue, they are not considered ACD calls.

IMT (Intermachine Trunk)

See Intertandem Tie Trunk.

Information Element (IE)

A logical block of data in an ISDN message (control and signaling). IEs provide specific information related to terminals, lamps, ringing, data rates, and other call related data. Information elements are specified as "codepoints" within the series of ISDN "codesets". See also **Codepoint** and **Codeset**.

Integrated Services Digital Network (ISDN)

According to the CCITT, a network "that provides end-to-end digital connectivity to support a wide range of services, including voice and nonvoice service to which users have access by a limited set of standard multipurpose user-network interfaces."

Intelligent Main

Usually, a main location in a Main/Satellite/Tributary configuration that accesses an ETN (Electronic Tandem Network) tandem switch and that also has the AAR (Automatic Alternate Routing) feature assigned. AAR is assigned to the intelligent main to give this switch local control over some of the AAR private-network routing decisions.

Intelligent Data Terminal

A data terminal containing a microprocessor to reduce the data transmitted and to expand the data received.

Intercept Tone

An alternating high and low tone; indicates a dialing error or denial of the service requested.

Interface

A common boundary between two systems or pieces of equipment.

Interflow

The diversion of calls from an ACD (previously, EUCD) split to another node of the network (also known as Overload Balancing).

International Standard Organization (ISO)

An agency of the United Nations, given the responsibility for establishing and coordinating common standards between member nations.

Intertandem Tie Trunk

A private telecommunications channel (of Trunk Type 41 to 46) between two tandem switches in an ETN network. An intertandem tie trunk can be classified as either "high-usage," or "final."

High-usage trunk groups efficiently carry a large volume of call traffic. When an entire high-usage trunk group is busy, this trunk group can overflow to a final trunk group that carries a mixture of "first-route" and overflow traffic. Normally, final trunk groups do not overflow to alternate routes.

Intervening Switch

For Look-Ahead Interflow, a private- or public-network switch between the sending (or tandeming) and receiving switches of a Look-Ahead Interflow call. The intervening switch uses its usual routing software to continue the routing of these calls on an "ISDN Preferred" basis. However, when no ISDN facilities are available or permitted, the intervening switch continues to route the interflow call on a *non*-Look-Ahead basis.

Interworking

The term used with ISDN to refer to the processes by which ISDN and non-ISDN services interconnect and work together.

Intraflow

The diversion of calls from an ACD (previously, EUCD) split to a destination within the local switch.

Intrusion Tone

A 440-hertz tone applied by System 85 during a call. Intrusion tones are used to alert the talking parties to the presence of an unexpected party in the connection. The features that are able to provide an intrusion tone include: ACD (Automatic Call Distribution), Busy Verification of Lines, EUCD (Enhanced Uniform Call Distribution), Override, Trunk Verification—Attendant, and Trunk Verification—Voice Terminal.

ISDN Flow Control

A defensive mechanism designed to protect switch processors from overload due to an excessively high level of ISDN D-channel messaging activity. In the DEFINITY Generic 2 time frame, Flow Control consists of monitoring and controlling the level of messaging activity at the interface (BRI or PRI) level.

ISDN Gateway

A type of ACD split administered in Procedure 026, Word 1. ISDN Gateway software runs on an adjunct processor. The ISDN Gateway software receives call-related information from the switch, converts the information into a form that a customer's application software can use, and then sends the converted information to the application software.

Leave Word Calling Administrator

A person authorized to access messages for anyone on the system.

Leave Word Calling Without an AP

Leave Word Calling messages can be stored on the switch, on an AUDIX system, or on an AP (Applications Processor). Leave Word Calling without an AP refers to message storage on the switch or on an AUDIX system. That is, the messages are not stored on an AP.

LEC

See Local Exchange Carrier.

Line Port

The actual hardware providing the access point to the system switching network for each circuit associated with an extension.

Link

The physical connection between two devices. Specifically, with the CDR feature, the CDR (or SMDR) link is the physical connection between the output port on the switch and the CDR recording adjunct. With the DCS feature, link usually refers to the physical connection between the DCIU and the local switch (switch port) or between ports on separate DCIUs (located on different switches).

Link Access Procedure (LAP)

A group of standards (LAP, LAPB, LAPD, etc.) adopted by the CCITT for the link level protocols used with CCITT standards such as X.25 and ISDN. The CCITT LAP standards are generally modeled after the various ISO recommendations for HDLC (High-level Data Link Control).

Listed Directory Number (LDN)

The listed number in a public directory (phone book) for a private switching system that is usually answered by an attendant.

Local

Pertaining to, or within, the physical limits of the serving switch.

Local Area Data Set (LADS)

A modem, specifically the 48230 and 48234, manufactured by Codex Corporation, These data sets support synchronous data transmission at selectable rates of 2.4, 4.8, and 9.6 Kbps. They offer good noise immunity.

Local Area Network (LAN)

A networking arrangement specifically designed to support a limited geographical area. Generally, they are limited in range to a maximum of 6.2 miles and provide high-speed carrier service with low data error rates. Common configuration includes: star (included circuit switched), ring, and bus.

Local Distribution Service Unit (LDSU)

A modem that supports synchronous data transmission at selectable rates of 2.4, 4.8, and 9.6 Kbps.

Local Exchange Carrier (LEC)

The telephone company that provides switching and transmission service for local calls and long-distance calls *within* the LATA (Local Access and Transport Area).

Local Storage Unit (LSU)

A device that collects and stores CDR records. Usually, an LSU temporarily stores records that are periodically requested by a central polling device.

Logical Channel (or Circuit)

A message slot on a digital communications link. One of the logically independent elements of a data stream that are multiplexed onto a single communications carrier. This term is used in connection with "packet switching" and to refer to a designated subelement of a DCIU link. In the DCIU application, a logical circuit on the "switch link" is called a "port."

Long-Holding Time

A measurement of call length on selected trunks; occurs automatically when the Automatic Circuit Assurance (ACA) feature is activated.

Look-Ahead Interflow

A System 85 and DEFINITY Generic 2 feature that is usually an ACD application of the Call Vectoring and the ISDN—PRI features. (Call Vectoring provides the decision-making capabilities, and ISDN—PRI provides the messaging capabilities between switches.) A sending switch usually uses Look-Ahead Interflow to divert ACD calls to a different switch in the ETN network after asking the receiving switch whether that switch can adequately handle each call.

If the receiving switch can handle the interflow call, the sending switch will send the call. If not, the sending switch either queries another switch or performs a predefined alternate action.

Loop

A voice circuit associated with an appearance button on the console, used by the attendant to process or originate calls.

Loop Start Supervision

An older, and in some ways antiquated, signaling protocol that is used by some older COs in rural areas. The newer ground start signaling protocol offers improved signaling capabilities (including disconnect supervision and glare resolution) over the loop start method. Loop start signaling relies on a supervisory signal initiated by a terminal or switch in response to completing the loop's current path.

LSU

See Local Storage Unit.

M-to-N Conversion

A process used by the World Class Routing feature to change the form and content of a digit string (dialed number). The M-to-N conversion process allows the number being processed to be changed to conform to the needs of call routing over a network other than that originally dialed. This process is used to support the network crossover function of the WCR feature. M-to-N conversion is similar to the 10- to 7-digit conversion process used by the earlier ARS (Automatic Route Selection) feature; however, M-to-N conversion is more flexible and more powerful the 10- to 7- digit conversion.

MAAP

Maintenance and Administration Panel. A device used by the vendor's service technicians to completely administer the System 85.

Main Location

A centralized area where attendants answer calls routed from branch locations.

Main Split

The split to which a call controlled by vector processing is initially directed. Vector processing always queues calls to this split unless the split is not staffed.

Main/Satellite

A Main/Satellite complex is a private network configuration. This configuration can either stand alone or access an ETN (Electronic Tandem Network). The trunk facilities that access the public network and attendant positions are usually concentrated at the main.

Main/Tandem Field

Field 4 of Procedure 103. Assigning a "1" in this field gives certain capabilities to a trunk group. For example, the Main/Tandem field must be assigned to send an FRL TCM over an outgoing trunk group. The Main/Tandem field cannot be assigned to apply AAR subnetwork trunking to an outgoing trunk group. Also, the Network Trunk field must be assigned to each DCS trunk group where AAR routes the calls. Otherwise, transparency is lost for DCS calls.

Management Information Message (MIM)

One of a set of special ISDN messages used to communicate maintenance and management information between the switch processor and an ISDN—BRI terminal or end point.

Manual Dialing

Using the touch-tone dialing pad (or rotary dial) to place a call. The calling party dials each digit of the called number individually. Manual dialing contrasts with Automatic Dialing where a single button press outpulses a set of stored digits.

Measured Agent

A member of an ACD split whose activity is measured by CMS (Call Management System).

Measured Split

A group of ACD agents whose activity is measured by CMS (Call Management System).

Mega-

A prefix used with units to indicate a factor of 1,000,000. Typically N Megahertz is $N \times 1,000,000$ hertz (or cycles) per second and N Megabits is $N \times 1,000,000$ bits per second.

Message Center

A service that provides for answering of calls that would otherwise go unanswered, accepts and stores messages for later retrieval.

Message Center Agent

A person with membership in a Message Center split. Message Center agents take and retrieve messages for voice terminal users.

Message-Oriented Signaling (MOS)

Call related signaling over a D (Data) channel that takes the form of a set of standard messages rather than bit signals. Used with ISDN.

MIA Distribution

See Most Idle Agent Distribution.

Modem Pooling

A feature that provides shared "conversion resources" (modems plus data modules) for cost-effective access to analog facilities by data terminals. When needed, a conversion resource is inserted into the path of a data call. This feature serves both outgoing and incoming calls.

Modular Trunk Data Module (MTDM)

A digital interface device that provides the interface for DCP (Digital Communications Protocol) connections to trunk facilities. It is used between off-premises private line trunk facilities and the System 85 switch, and for connections to DDD modems as the DCP member of a Modem Pooling conversion resource. The MTDM provides conversion between the RS-232 protocol and the DCP protocol (see also Trunk Data Module).

Most Idle Agent (MIA) Distribution

A call-distribution routine provided by the ACD (Automatic Call Distribution) feature that distributes an ACD call to the "most idle" agent. An available agent who has not been active on an ACD call for the longest time is considered the most idle agent.

Multiappearance Voice Terminal

A terminal equipped with several appearance buttons for the same extension number. This allows the user to handle more than one call, on the same extension number, at the same time. The multiappearance voice terminals include: Models 7203H, 7205H, 7303S, 7305S, 7401D, 7403D, 7404D, 7405D, 7406D, 7407D, 7410D, 7505D, 7506D, 7507D, 510D, 515 BCT, and CALLMASTER.

Multibutton Voice Terminal

A terminal equipped with multiple buttons to access and cancel features. These buttons can be either feature buttons or Abbreviated Dialing buttons (using access codes as the stored numbers). The multibutton voice terminals include: Models 7103A Fixed Feature, 7103A Programmable, 7203H, 7205H, 7303S, 7305S, 7401D, 7403D, 7404D, 7405D, 7406D, 7407D, 7410D, 7505D, 7506D, 7507D, 510D, 515 BCT, and CALLMASTER.

Multidigit Steering

A form of Extension Number Steering. This form of Main/Satellite steering uses two or more digits to route a call to the appropriate switch. The call is then routed to its final destination.

Multiple Call Handling

A function of the R2 V4 ACD feature that is primarily intended for Message Center agents. Multiple call handling, when assigned to a split, allows an ACD agent to place a call on hold (using the HOLD button) and remain available to receive ACD calls.

Multiplexer

A device for simultaneous transmission of two or more signals over a common transmission medium.

Multipoint Configuration

Network

Two or more interconnected switching systems or telecommunications end points. A physical network. *See also* Local Area Network (LAN).

For the WCR (World Class Routing) feature; a system of digit strings and digit string attributes that provides a software representation of a "physical network."

Network Channel

See DCIU Network Channel.

Network Control Point (NCP)

The remote computer (usually a 3B20) that, in response to a routing query from an ACP (Action Control Point), returns routing instructions to the ACP for SDN calls. The NCP contains the customized database for an SDN customer that specifies routing options and the correct point of egress from the AT&T Switched Network.

Network Crossover

A function of the World Class Routing feature that allows a call to "crossover" from one (software) network to another during call processing. See also **M-to-N Conversion**.

Network Specific Facilities (NSF) IE

An ISDN information element used to request features or service or to obtain information from the transit network. The NSF IE is part of the ISDN call setup message.

Network Trunk Field

Field 3 of Procedure 103. Assigning a "1" in this field gives certain capabilities to a trunk group. For example, the Network Trunk field must be assigned to apply ARS subnetwork trunking to an outgoing trunk group. The Network Trunk field must be assigned to each outgoing DCS trunk group. Otherwise, DCS calls will fail. Also, the Network Trunk field must be assigned to an incoming ETN trunk group so that, when necessary, the AAR feature can tandem calls.

Node

A switching or control point for a network. Nodes are either tandem (receive signals and pass them on) or terminal (originate or terminate a transmission path).

Nodal Main

A private switching system with direct or bypass access to one or more of the AT&T Communications services through a service node in the AT&T Switched Network [for example, ACCUNET Service, MEGACOM WATS Service, MEGACOM WATS 800 Service, and SDN (Software Defined Network)].

Nonanalog Voice Terminals

Hybrid and digital voice terminals.

Noncircuit Call

Refers to ISDN D-channel message traffic that is not call related. These messages carry maintenance and management type information between switches.

Nonfacility Associated Signaling (NFAS)

The ISDN—PRI signaling mode where a D-channel can be assigned to provide call control and signaling support for B-channels that are physically located on a different ISDN circuit board.

Numbering Plan Area (NPA)

A geographic division within which telephone numbers are assigned to a common public network area code. Another name for NPA is area code.

Observer

A person who is allowed to monitor the call-handling activity of ACD (or EUCD) agents. The service observing and/or agent override functions provide this capability. Often, split supervisors observe an agent's performance for training purposes. During training, inexperienced agents can also benefit by observing experienced agents handling difficult calls. To maintain courteous and efficient handling of calls, observers (outside the split) can also be appointed to evaluate the ongoing performance of agents.

Occurrence

A point of access to an extension (also known as an appearance). Using a multiappearance voice terminal, an extension can be manually accessed by pressing a button on the voice terminal labeled with an extension number. Indicator (status) lamps next to the button light when a terminal user places calls, receives calls, or places a call on hold.

Octet

The international (CCITT) term for an 8-bit data element. Equivalent to the term "byte" more commonly used in the United States.

Off-Hook

A term signifying that the voice terminal handset has been lifted.

On-Hook

A term signifying that the voice terminal handset has been replaced on the switchhook (hung up).

Opcode (Operation Code)

In some CDR record formats, a 4-bit (1-cell) code placed in the left-most cell position of each word. Certain CDR peripherals use the opcode as an end-of-record identifier.

Originating (Only) Appearance

One of the two kinds of appearances assigned in Procedure 052, Word 1: terminating/originating and originating (only). An originating (only) appearance of (or, point of access to) an extension is reserved for placing calls.

Normally, calls placed to an extension are not allowed to terminate to an originating (only) appearance. For most of these calls (without some type of redirection active), the switch returns busy tone to the calling party when every terminating/originating appearance is busy. However, priority calls and override calls *can terminate* to originating (only) appearances. With Priority Calling, this operation is considered preferable to returning busy tone for an important call. With Override, this operation is considered preferable to an unnecessary entry into an active appearance.

Originating Register

A temporary software record that contains necessary information for System 85 call processing.

Overflow Partition

An attendant partition that is assigned in Procedure 270, Word 2 to receive excess incoming calls from another attendant partition. Any attendant partition (from 0 to 40) can be assigned as an overflow partition in a partitioned System 85.

Overload Balancing

The diversion of calls from an ACD (previously, EUCD) split to another node of the network (also known as Interflow).

Packet

As used in data communications, a packet is a group of bits including a message element (data) and control information element (header) that is used in packet switching and transmitted as a discrete unit. Within each packet, the message elements and control information elements are arranged in a specified format. In many systems, the packet is further encapsulated with additional header and trailer elements to form what is called a "frame." (See the following "Packet Switching" definition and the BX.25 Protocol discussion in the DCS feature for further details).

Packet Switching

A digital transmission technique that sends addressed packets over logical circuits or channels multiplexed onto a common carrier medium. Packet switching is designed to make more efficient use of high speed carriers by multiplexing or sharing these facilities between multiple users and applications. When properly implemented, packets or frames travel on the shared carrier, with each packet being separate and

independent from the packet that precedes it or follows it.

A protocol is used that ensures proper sequencing of delivered packets at a common destination, and addressing is used in a header element to distinguish between multiple destinations on the common carrier. The international standard for packet switching is the CCITT X.25 protocol. The BX.25 protocol is the AT&T implementation of X.25. AT&T commonly uses the BX.25 protocol for internal communications between digital control elements of AT&T systems.

Paging Trunk

A telecommunications channel used for accessing an amplifier (loudspeaker paging).

Parallel Data

Data bits that are processed or transmitted simultaneously.

Parallel Trunk Groups

Two or more trunk groups (each with a different trunk type) that interconnect the same two switches. In a parallel trunk-group arrangement, each trunk group is used for a different feature application or for a different call-routing strategy. A common example of parallel trunk groups might be DDD, WATS, and Personal CO Line trunk groups between a System 85 and the same CO. A less common example might be an intertandem tie-trunk group and a Main/Satellite trunk group connecting the same two System 85s in a private network.

Partition

To separate or divide a switch into discrete functional parts (verb). One of the discrete functional parts of a "partitioned switch" (noun).

Party Test

An electrical test most often used by some older COs (Central Offices) to determine which party on a party line is placing a toll call. Since the CO's party test would look like "disconnect supervision" to the System 85, trunk groups residing in System 85 traditional modules can be assigned to ignore the party test. This is done by assigning a "party test" trunk type to a trunk group that accesses the LEC (Local Exchange Carrier). These trunk types include Trunk Types 18, 20, 23, 25, and 28.

Since the party-test signaling process consumes call-processing time on an outgoing call, these trunk types should only be used when the serving CO *requires* that they be used.

Trunk groups in *universal* modules cannot be assigned to ignore the party test. If the serving CO requires party test, a traditional module must be used.

Passive Buss

Path Name

A "command path," formed as a specific series of entries, which is used to access the desired Manager IV, FM, or TCM screen (form). Throughout this manual, path names are listed in their complete, unabbreviated forms. However, for easy access to the screens, unique abbreviated versions of the path names may be entered.

Permanent Seizure

In trunk signaling, a trunk state in which the distant switch seizes a trunk but does not respond to normal signaling (disconnect supervision) or is maintenance busied out.

Permanent Virtual Circuit (PVC)

A fixed network channel assigned for communications between two DCIUs. A permanently dedicated (administered) circuit communicating between two DCIU ports.

Pickup Group

A group of individuals authorized to answer any call directed to a voice terminal extension number within the group.

Ping Ring

See Ring Ping.

Port

A point of access to the system or to a computer that uses trunks or lines for transmitting or receiving voice or data.

Precedence Ringback Tone

An attribute of the Precedence Calling feature. This ringback tone has the same component frequencies as standard ringback tone (440 + 480-hertz). However, the cycle of this ringback tone (approximately 1.65 seconds on and 0.35 seconds off) is considerably faster than the standard-ringback cycle.

Precedence Warning Tone

An attribute of the Precedence Calling feature. The System 85 switch applies this 440 + 620-hertz tone to a connection that is about to be preempted.

Precursor Tone

A special function tone used with the Remote Access feature on selected long distance trunks to perform echo suppressor control. The precursor tone is a high pitched (2220-hertz) tone that lasts for 0.4 seconds and precedes standard dial tone. It is used during the call-setup dialing sequence on certain Remote Access trunk connections where transmission distances are likely to exceed 1200 miles.

Preference

Within the context of network routing features, a specific trunk group within a destination routing pattern. Preferences are arranged in order and with the earlier routing features (AAR and ARS) this order is assumed to be preferential (that is, the preferred trunk group first with subsequent trunk groups in descending order of preference) hence the name preference.

Prefix

A digit (other than a dial access code) dialed (or inserted) before the destination address of a call. Dialed prefixes are used to place a destination address in proper context, to indicate service options, or both (for example, a toll prefix). Also, a prefix can be assigned to an incoming trunk group. In this context, the prefix is inserted in front of the incoming digits and becomes part of the digit stream. This type of prefixing is used to provide additional call processing instructions (such as a dial access code) for the incoming call.

Primary Covering User

The first answering position in a coverage path when a call is redirected to coverage.

Primary Rate Interface (PRI)

The switch interface to an ISDN, as specified by the CCITT. A 1.544 Mbps interface organized into 24 time slots of 64 Kbps each (23 bearer channels and 1 data channel). A specific adaptation of the DS1 signaling format.

Principal (User)

A person whose calls are redirected to a covering user.

Private Network

A network accessible exclusively by the customer for the handling of telecommunications needs.

Processor Data Module (PDM)

A device providing a DCE interface for connecting to data terminals, Application Processors, and host computers. It also provides a DCP interface for connection to the switch. It supports the downloading function of the Terminal Emulation feature between the AP and the 515 BCT. It provides protocol conversion between the RS-232C protocol and DCP.

Protocol

The rules governing format, timing, and message exchanges over a data link to control data transfer and to correct errors.

Public Network

A network which is commonly accessible for local or long distance calling.

Q.921

See Recommendation Q.921.

Q.931

See Recommendation Q.931.

Queue

An ordered sequence of items (e.g., outgoing trunk calls, incoming ACD calls, or ACD agent positions) waiting to be processed.

Queue Directory Number (QDN)

The first associated extension number of an ACD (previously, EUCD) split. A split's QDN is assigned in Procedure 026, Word 2. The QDN is also associated with the split supervisor's individual extension number in Procedure 001. For systems that have the Call Vectoring feature, QDNs are replaced by VDNs (Vector Directory Numbers).

Queue-Status Display

A function of the ACD and Call Vectoring features. When an ACD agent has a display terminal and the class-of-service assignment, information regarding the split's queue is provided to the agent on an automatic or on-demand basis. This information includes: the number of calls currently in the split's queue (ACD and Call Vectoring) and the amount of time the oldest queued call has waited (Call Vectoring).

Queuing

The process of placing calls in an ordered sequence. The Queuing feature orders outgoing calls that are waiting for an idle trunk. Whereas, the ACD feature places incoming calls in queue to wait for an idle agent.

Radio Paging Trunk

A telecommunications channel used to access paging transmitter equipment.

Random Access Memory (RAM)

A storage arrangement that permits information elements to be addressed directly, independent of the location of the information in storage. Also, commonly used as a misnomer for Read Write Memory that offers the same form of direct addressing.

Read Only Memory (ROM)

An electronic memory device that is permanently recorded during the manufacturing process. It provides protected memory storage with no provisions for erasing or writing over its contents.

Read Operation

The process of retrieving information from memory.

Ready Tone

A steady tone received when a data connection is ready for completion. Ready tone is also known as "carrier ready tone" or "data tone."

Recall Button

A standard button provided with many System 85 voice terminals. The functionality of the Recall button differs between single-appearance and multiappearance voice terminals. When the Recall button is provided on single-appearance terminals (such as, 2500 and 7103A), the switch provides Recall Signaling (returns recall dial tone) when the Recall button is pressed during an active call. The Recall button on single-appearance terminals is also used with the Attendant Recall, Call Park, Conference—Attendant Six Party, Loudspeaker Paging Access, and Serial Calls features.

The Recall button has limited functionality on multiappearance terminals. This button is used with the Attendant Recall, Call Park Conference—Attendant Six Party, Loudspeaker Paging Access, and Serial Calls features. The Recall Signaling operation is not provided for multiappearance terminals. Instead, the Hold, Conference, and Transfer operations are performed using fixed feature buttons provided with the voice terminal.

Recall Dial Tone

Confirmation tone followed by dial tone. The confirmation tone confirms acceptance of a requested feature and the dial tone allows subsequent dialing to proceed.

Recommendation Q.921

The CCITT recommended standard of the ISDN Levels 1 and 2 (Physical and Link Level) protocol.

Recommendation Q.931

The CCITT recommended standard of the ISDN Level 3 (Network Level) protocol.

Recursive

In software programming, a function is "recursive" if the function contains a call on itself. Intraflow—All is a recursive function of the ACD and the EUCD features.

Redundant Switch

See Duplicated Switch.

Register

A short-term storage circuit having a capacity (usually) of one computer word.

Release Link Trunk (RLT)

A telecommunications channel used with Centralized Attendant Service to connect attendant-seeking calls from a branch location to the main location.

Remote Access Trunk

A telecommunications channel used by an authorized user to gain access to the system.

Remote Maintenance, Administration, and Traffic System (RMATS)

A centrally located system that can remotely provide maintenance, administration, and traffic (calls) measurement for the System 85 or other similar equipment.

Reorder Tone

Fast busy signal; indicates that the necessary facilities are busy. This tone also serves as the default form of Intercept Treatment for incoming calls from the public network.

Reverse Battery Supervision

A supervisory signal used by 1-way trunks that uses open and close signals from the originating end and reversals of battery and ground from the terminating end.

Ring Ping

As an attribute of the Call Forwarding—Follow Me feature. Just before forwarding a call, System 85 applies ring ping, a quick burst of ringing (0.1 seconds), to remind the forwarding party that unconditional forwarding is in effect.

As an attribute of the Send All Calls function of the Call Coverage feature. Just before unconditionally redirecting a call, System 85 can apply ring ping, a quick burst of ringing (0.1 seconds), to remind the principal that Send All Calls is in effect.

Ringback Queuing

The process by which a caller is placed in queue, hangs up, and is called back when an outgoing trunk becomes available.

Ringback Tone

Tone provided by the System 85 switch to confirm that the terminal on the other end of the line is ringing. The component frequencies of this tone are 440 and 480-hertz.

Ringing Cycle

Voice terminal ringing followed by the silence before the next ring. The duration of a ringing cycle is approximately 5.2 seconds (1.2 seconds of ringing and 4.0 seconds of silence). Before redirecting calls that are placed to an unanswered voice terminal, System 85 counts these ringing cycles as a way of timing the don't answer condition.

RNX

An expression that represents the location or office code for a private network switch (in a dialing string), where R equals any digit 2 through 9 except the CDR account-code prefix, N equals any digit 2 through 9, and X equals any digit 0 through 9.

Route Advance

A switch software routine (feature) that routes outgoing calls over alternate trunk groups when the dialed trunk group is busy.

Routing Tables

Another term for "Call Vectoring" that is used by some other ACD vendors. Call Vectoring (or the similar concept, Routing Tables) provides an enhanced method of defining calling-party interfaces for incoming calls (usually incoming ACD calls). Throughout this manual, the term "Call Vectoring" is used in preference to "Routing Tables."

S-Channel Data Transmission

A channel used for communicating control signals between the System 85 and a data module.

Satellite

An orbiting telecommunications transceiver that provides long-distance transmission (usually using the microwave transmission medium).

Also, in a Main/Satellite networking arrangement, a subtending switch that operates through the main switch and appears (from an external perspective) to be part of the main. In this arrangement, the main provides attendant services for the satellite, including a common LDN (Listed Directory Number) system.

Satellite Hop Count

The number of orbiting transceivers that have already been used in connecting a call to its destination. This information is sent with the call as a TCM (Traveling Class Mark).

Satellite Location

An unattended location in a Main/Satellite/Tributary complex that has the same listed directory number as the main switch and accesses the public and private network through the main.

Satellite Partition

An extension partition in a partitioned switch that also serves as a satellite location in a Main/Satellite configuration. This capability allows a partitioned System 85 to act as an endpoint in a tenant's private network.

SDN

See Software Defined Network.

Serial Data

Data bits that are transmitted or processed sequentially, one bit after the other.

Service Node

A gateway to the services and capabilities of the AT&T Telecommunications Network. A service node usually consists of: a 4 ESS switch and a cross-connect device [such as a DACS (Digital Access Cross-Connect System) or DSX (Digital System Cross-Connect)].

Shared Extension

An extension with more than one image (bridged appearance) of an appearance. System 85 recognizes two functional types of shared extensions: shared extensions with *only one* appearance and shared extensions with *more than one* appearance. Straight line sets can participate in both types of shared extensions.

Short-Holding Time

A time limit set for internal calls when the Automatic Circuit Assurance feature is activated so that faulty lines can be detected.

Sidetone

The portion of a voice signal that is extracted from a telephone user's voice transmission and is returned to the receiver of the same telephone. Sidetone assures the telephone user that the telephone is working properly and helps the user adjust the volume of his/her speech.

SID (Station Identification)/ANI (Automatic Number Identification)

An attribute of the ISDN feature that delivers a calling party's number to the called party for an ISDN call. A SID is the calling party's number provided by the calling party and contained in the Calling-Party Number IE of a SETUP message (ISDN). Whereas, an ANI is the calling party's billing number either stored at the calling party's serving switch or stored within an Interexchange Carrier's network.

At service provisioning, an ISDN customer can choose whether to subscribe to SID/ANI. For those who do subscribe, there are two service alternatives.

- 1. SID/ANI provided to called party whenever available
- 2. SID/ANI provided to called party upon request.

Within each of the previous two categories, an ISDN customer also specifies which number (either SID or ANI) is preferred. This decision can be made in one of four ways.

- 1. First SID, then ANI (if SID not available)
- 2. First ANI, then SID (if ANI not available)
- 3. SID only
- 4. ANI only.

For the initial implementation of ISDN—PRI, the network does not specify which number the called party is receiving. This can produce ambiguity when the calling party has specified that *either* the SID or ANI number can be transmitted.

Simplex

A data transmission system that allows data to travel in only one direction at a time.

Simulated Bridged Appearance

See Temporary Bridged Appearance.

Single-Appearance Voice Terminal

A voice terminal that can support only one appearance of its extension. The single-appearance voice terminals include: Models 2500, 7101A, 7102A, and 7103A.

SLS

See Straight Line Set.

Soft Hold

One of the two forms of hold. Because soft held calls can be lost in certain situations, soft hold is less durable than hard hold. Soft hold is only available on single-appearance voice terminals.

Soft Processor Swap

In a duplicated switch, a "soft swap," gracefully shifts control from one processor to the other "healthier" processor. Since current call-status information is transferred to the new processor, soft processor swaps are usually not noticed by users. (See also **Hard Processor Swap**.)

Software

A set of computer instructions that accomplish one or more tasks.

Software Defined Network

An AT&T Communications service that provides *virtual* private-network routing through the AT&T Switched Network. Using this service, an ETN tandem (or an intelligent ETN main) in a customer's private network delivers seven private-network digits (RNX + XXXX) to a serving 4 ESS over a direct- or bypass-access trunk group. In turn, the serving 4 ESS [under the control of an NCP (Network Control Point)] routes the call to a specific receiving 4 ESS. The receiving 4 ESS then delivers (again with direct or bypass access) the seven digits to another private-network switch (with AAR or WCR) where the rest of the routing proceeds.

Special Access

See Bypass Access, Direct Access, or Switched Access.

Special Dial Tone

See Recall Dial Tone.

Special Loop Start Trunk Types

The System 85 trunk types assigned as Type 316 to 350 in Procedure 100, Word 1. This set of System 85 DS1 trunk types is primarily intended for disaster preparedness. However, these trunk types can also be used by a System 85 to communicate with some older COs [equipped with D4 channel bank(s)] that do not use ground start signaling. Since the ground start signaling protocol offers enhanced capabilities over loop start, ground start is the signaling protocol of choice whenever this protocol is supported by the serving CO.

Split

A group of agents (group members) organized to receive calls in an efficient and cost-effective manner. This terminology is generally used in relation with the ACD (previously, EUCD) feature.

Instead of "split," the terms "gate" and "bay" are used by other ACD vendors to refer to a functional grouping of agents.

Split Member

A member of an ACD split (usually referred to as an "agent").

Split Number

Sixty (thirty, before R2 V4) ACD splits can be assigned to the system. In Procedure 026, Word 1, the "split number" (a number between 1 and 60) is used to uniquely identify the individual splits. These same split numbers are used in Procedure 011, Word 1 to specify an ACD split that is used as the final point in a coverage path.

Split Supervisor

The first member of an ACD (or, EUCD) split. Usually an experienced agent who trains new agents, serves as a consultant to the split, and regulates the operation of the split.

Splitting

Separating a caller from an existing connection. Used for attendant call handling.

Stable Call

A call that has already been "set up" by call processing. Stable voice calls are in a steady talking condition. Stable data calls have finished the "hand-shaking" process.

Stage One Dialing

One Stage Dialing used with the ISN Interface feature when placing a call from the ISN to (or through) the System 85. This is done from an ISN terminal (Keyboard Dialing) by entering both the interface access code and the destination address on a single line.

Stage Two Dialing

Two Stage Dialing used with the ISN Interface feature when placing a call from the ISN to (or through) the System 85. Similar to one stage dialing (above) except that the interface access code and the destination code are each entered separately, on separate lines, in response to separate dial prompts (one from the ISN and the second from the System 85).

Standard Serial Interface (SSI)

A communications protocol that operates at 56 Kbps and interfaces the Applications Processor to 400 Series printers and the 500 BCT.

Station Message Detail Recording (SMDR)

A service that records detailed call information on incoming and outgoing calls, and associates these calls with account codes.

Statistical Multiplexing

A form of time-division multiplexing.

Status Information

Data that defines the current state of call processing within a switching system. In a duplicated switch, status information is transferred to the healthier processor during a soft processor swap. However, during a hard processor swap, status information is lost.

Status Lamp

An indicator lamp showing the status of an appearance by the state of the lamp (lighted, flashing, fluttering, or dark).

Stored Program Control

Software programs controlling system operation.

Straight Line Set (SLS)

A single-appearance voice terminal that *appears* to System 85 as a multiappearance voice terminal. Whenever single-appearance voice terminals are used as *signaling* terminals, the Terminal Busy Indication feature requires that these voice terminals are administered as straight line sets. Also, whenever single-appearance voice terminals are given bridging capabilities, the Bridged Call feature requires that these voice terminals are administered as straight line sets.

String

See Digit String.

String Identifier

A term used with the WCR (World Class Routing) feature. String identifiers are the elements of a digit string that uniquely identify that digit string. A string identifier can be from 1 to 18 digits long and specifies string length (of the digit string), string type, and call processing actions to be taken when the digit string is identified.

Subscriber

A voice terminal user who is authorized to access the AUDIX system to send and recover messages.

Subnetwork Trunking

Also referred to as Subnet Trunking. This is a technique used with intelligent switches that routes network calls based on the destination rather than a fixed path. This process is usually dynamic in that call routing can be changed after the call has left its point of origin. For example, if a call is processed using a 7-digit private network address and then during the route selection process it is determined that a public network route (requiring a 10-digit address) must be used, the address must be changed to conform to the route selected. The process of restructuring the address digits to conform to the route selected is subnetwork trunking. Features that use this technique include AAR, ARS, WCR and Extension Number Portability.

Subtending

A subtending switch is a lower-order switching system in the network hierarchy.

Switch

The System 85 or DEFINITY Generic 2 switching system; usually used to refer to the System 85 or Generic 2 as distinguished from adjuncts (such as, APs and AUDIX adjuncts).

Switch Administrator

An executive responsible for specifying features and/or services available to users of the switch.

Switched Access

A method of connecting to public telecommunications facilities whereby a customer (terminal or PBX) is provided with indirect physical connections to a long-distance carrier that employ dynamically *switched* connections through the LEC (local exchange carrier).

Switched Digital Communications Protocol Interface (SDCPI)

An interface that physically connects between the PDM and the SDCPI interface ports on the AP. Its primary function is to provide the system with a 64 Kbps link for the downloading of AP software into the 515 BCT.

Switched Loop Operation

An automatic system in which an incoming call is switched to an idle loop on an available attendant console.

Switchhook

The button(s) on a voice terminal that are located under the handset.

Synchronous Data Transmission

Transmission in which the data characters and bits are transmitted at a fixed rate with the transmitter and receiver synchronized (same clock). This method of transmission eliminates the need for start-stop elements and provides greater efficiency. For comparison see *Asynchronous Data Transmission*.

System Administrator

An executive responsible for specifying features and/or services available to system users.

System Management Terminal (SMT)

An administration device which is similar to the MAAP. The SMT provides limited administration capability to the customer.

System Manager

The administrator of a partitioned switch. The system manager of a System 85 is responsible for sharing the services of the switch among the various tenants.

System Status Indicator

A lamp on an SSI panel that indicates the busy/idle condition of a Release Link Trunk. System Status Indicators can also monitor the queue warning status for ACD (previously, EUCD, UCD, or DDC) splits.

Tail-End Hop Off

A service provided by ETNs (Electronic Tandem Networks) and TTNs (Tandem Tietrunk Networks) which allows calls destined for an end point on the public network to route part way over private network facilities. With tail-end hop-off, a public network call is routed over private network trunks to a node on the private network that is close to the final destination of the call. At the final private network node, the call "hops off" the private network and enters the public network for final routing. Tail-end hop off is provided by the ARS (Automatic Route Selection) feature and the WCR (World Class Routing) feature.

Tandem Access Avoidance (TAA)

See Tandem Routing Efficiency.

Tandem Node

An intervening switch between the origin and destination switch in a network. In a network, a tandem node receives signals from one switch and passes these signals on to another switch.

Tandem Tie Trunk Network (TTTN)

A private network where several customer switching systems are interconnected by dial repeating tie trunks.

Tandeming

The act or process of passing a signal through a network node.

Tandeming Switch

For Look-Ahead Interflow, a private-network switch (with Look-Ahead Interflow assigned) that first accepts and receives a Look-Ahead Interflow call from the sending switch. Then, based on the vector programming within its receiving vector, this switch decides to interflow the same call on a Look-Ahead basis to another receiving switch.

Tap Button

Another term for "recall button" that is used by some other switch vendors. After a recall button press (or tap button press) the switch returns recall dial tone to the voice terminal user. Throughout this manual, the term "recall button" is used in preference to "tap button."

Terminal Equipment Location (TEL)

The hardware coordinates for the physical location of circuits on the switch that support a specific terminal; most specifically, a voice terminal. *Synonym*: Equipment Line Location (ELL).

TCM

See Traveling Class Mark.

Temporary Bridged Appearance

A function of the Call Coverage feature. This function allows a principal with a multiappearance terminal or a straight line set to bridge onto a coverage call by going off-hook on the appearance that was redirected to coverage. (A temporary bridged appearance is also known as a "simulated bridged appearance.")

Terminating/Originating Appearance

One of the two kinds of appearances assigned in Procedure 052, Word 1: terminating/originating and originating (only). When a terminating/originating appearance is idle, calls can either be received or placed using the appearance.

Tie Trunk

A telecommunications channel connecting two switching systems within the *private* network. This term is used in this manual for private network trunks only. Public network trunks are referred to by the public network function (such as, CO trunks, FX trunks, toll trunks, etc).

Time-Division Multiplexing

A type of multiplexing that divides the transmission channel into successive time slots.

Time Multiplexed Switch (TMS)

A time-shared digital space switch that interconnects modules in a multimodule System 85.

Time Slot Interchanger (TSI)

A processor that operates under the control of the Module Processor. The TSI performs the switching, digital attenuation, and conferencing functions for the switching network. A maximum of 256 simultaneous port-to-port connections can be supported by the TSI.

Timed Reminder Tone

A 1950-hertz tone provided by System 85 as part of the Timed Reminder feature. This tone is provided to remind an attendant that a call has been waiting or held on the console for longer than 30 seconds.

Toll Table

An attribute of the ARS and WCR features. A toll table is a software array (assigned in Procedure 309, Word 2 for ARS or in Procedure 319, Word 1 for WCR) that identifies the local and toll office codes (for ARS) or digit strings (for WCR) corresponding to the serving CO or other non-toll office for a particular routing preference. (By default, unidentified office codes are considered *toll* office codes.)

Tone Detector

An SN255 (or TN748C for universal modules) circuit (identified as Trunk Type 100) that detects call-progress tones for and provides signals to the System 85 during Modem Pooling calls and DS1 AVD calls.

Touch-Tone

A signaling system where specific tone pairs are used to represent dialing characters (0 through 9, *, and #). Also, known as DTMF (Dual Tone Multifrequency) signaling.

Traffic

The flow of voice and data communications through a switching system.

Transfer Rate of Information Bits (TRIB)

The number of intelligence (information, not control and signaling) bits passing a given point in the data stream per second. If 64,000 bits per second are transmitted and 8,000 of those bits are control and signaling bits, the TRIB rate is 56,000 bps.

Transient Condition

A constituent part of call processing on System 85 that quickly passes into and out of existence (also referred to as a "transient state"). The following are examples of transient conditions: a line is ringing; a line is in a dialing state (dialing, hearing dial tone, etc.); the line is receiving Call Waiting, Attendant Call Waiting, or Priority Calling tones; a line is receiving busy, intercept, reorder, or ringback tone.

Translation Information

Tabular data that defines durable (but changeable) criteria for the switch. These criteria include feature options, trunk and line addresses, button assignments, extension numbers, dial access codes, and some feature activations within a switching system. In a duplicated switch, translation information is stored and updated in both switch processors.

Traveling Class Mark (TCM)

Information sent to a distant switch with the outpulsed digits. There are two separate types of traveling class marks. The first type of TCM provides the FRL (Facility Restriction Level) to the distant (receiving) switch to determine if access to a particular route or facility is permitted. If one TCM is present, it will be this type. If two TCMs are present, this will always be the first TCM. The second TCM, (if used, provides the Satellite Hop Count to the distant switch.

TRE

See Tandem Routing Efficiency.

Tributary Location

An attended location in a Main/Satellite/Tributary complex that has a unique listed directory number and accesses the public and private network directly or through the main switch.

Trunk

A communications channel between two switching systems.

Trunk Data Module (TDM)

A digital interface device that provides the interface for DCP (Digital Communications Protocol) connections to trunk facilities. It is used between off-premises private line trunk facilities and the local switch, and for connections to DDD modems as the DCP member of a Modem Pooling conversion resource. The TDM provides conversion between the RS-232 protocol and the DCP protocol.

Trunk Group

Telecommunications channels assigned as a group for certain functions.

Trunk Group-Oriented Routing

A method of routing calls into a PBX. Using trunk group-oriented routing, a call is recognized by the serving switch (usually, the serving CO) as a call that is routed to the local PBX over a specific trunk group. In turn, the local switch accepts the call from over the trunk group, and recognizes that the call completes to a specific destination (such as, the attendant queue, an ACD split, or a VDN).

Trunk Port

The hardware providing an access point to the switch network for each circuit associated with a trunk.

Trunk Vectoring

Another term for "Call Vectoring" that is used by some other ACD vendors. Call Vectoring (or the similar concept, Trunk Vectoring) provides an enhanced method of defining calling-party interfaces for incoming calls (usually to an ACD). In this manual, the term "Call Vectoring" is used in preference to "Trunk Vectoring."

UNIX Operating System

A versatile time-sharing software operating system for data processing equipment.

Universal Attendant Code

The digits ''0111'' used for routing calls to an attendant serving a different ETN switch. An ETN tandem recognizes the digit string ''RNX + 0111'' as an attendant-seeking call destined for the ETN switch identified by the dialed RNX. To continue routing the call, the ETN tandem's AAR pattern can either select a private-network trunk group or, with proper subnetwork trunking assignments, overflow the attendant-seeking call to the public network.

Universal Data Module (UDM)

A generic term for at data module that can function as both a DCE and a DTE.

Universal Module

A 5-carrier, single cabinet call processing module available with Generic 2 that replaces the traditional multicabinet module used with System 85, Release 2. The universal module uses high density circuit technology to provide increased circuitry in an single cabinet. The universal module is sometimes referred to as the hybrid module.

Unmeasured Agent

A member of an ACD split whose activity is not measured by CMS (Call Management System).

Unmeasured Split

A group of ACD agents whose activity is not measured by CMS (Call Management System).

Unstable Condition

See Transient Condition.

Vector

An attribute of the Call Vectoring feature. A vector is comprised of a discrete set of predefined call-processing steps that specifies a way of treating certain incoming calls.

Vector Directory Number (VDN)

A "soft" extension number that is assigned an internal line number (but not assigned to an equipment location). A vector is assigned to a VDN (or group of VDNs) to specify the call-processing sequence according to the dialed number. Each VDN can be included as part of a published number for public access to a vector's call-processing sequence.

Virtual Circuit

The entire path between two end processors, which may consist of more than one communications link. In the DCIU application, the term "data path" is used instead of virtual circuit.

Virtual Nodepoint Identifier (VNI)

An index number that represents the destination of a call, used with the World Class Routing feature. A VNI is assigned to a call during network digit analysis, based on administered values, and is not a part of the dialed number (even if it is the same as the office code that is part of the dialed number).

Voice Coupler

An electrical isolation device used for passing audio signals into a system.

Voice Terminal

A single-appearance or multiappearance telephone.

Warning Tone

A tone applied by the local switch (PBX) to advise users that a change in call routing or connected party presence is about to take place. System 85 and DEFINITY Generic 2.1 switches can be administered to return warning tone when a call would unexpectedly route over higher-cost toll facilities. On Generic 2.2 switches, warning tone can be administered to apply to a wider variety of call routing cases. The features where the switch can provide this type of warning tone include: AAR (Automatic Alternate Routing), ARS (Automatic Route Selection), and WCR (World Class Routing).

Another type of warning tone, also called "intrusion tone," is applied to alert talking parties to the presence of an unexpected party within the connection. The features where the switch is able to provide this type of warning tone include: ACD (Automatic Call Distribution), Busy Verification of Lines, EUCD (Enhanced Uniform Call Distribution), Override, Trunk Verification—Attendant, and Trunk Verification—Voice Terminal.

WATS (Wide Area Telecommunications Service)

A service that allows users to place toll calls for a flat monthly charge. Specific charges are based on the size of the calling area (WATS band) and on the amount of expected usage.

WATS Trunk

A telecommunications channel used to place a WATS call.

Wild Card Digit

A term used with the WCR (World Class Routing) feature to refer to a leading digit or group of digits in a dialed number that are not used for string identification purposes. That is, a wild card digit represents any possible digit in its digit position. A wild card digit is represented by the asterisk character (*) and must be one or more leading digits. Wild card digits cannot be intervening digits (that is, they cannot occur between groups of specific digits), nor can they be trailing digits.

Wink Start Signaling

A trunk-signaling protocol that uses a "wink" (on-hook to off-hook and return to on-hook) that lasts from 0.14 to 0.29 seconds to indicate that the receiving (far end) switch is ready to receive digits.

Work-Related Call

Calling activity by an ACD agent that serves to remove the agent from the agent queue. When outgoing calling is deemed to be work related, removal of the agent from the queue can be provided for outgoing calling.

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