AT&T

INTUITY Integration with System 85 and DEFINITY Communications System Generic 2

Contents

Contents

Contents

Contents

Contents

Contents

About This Document

Purpose

This document, *Intuity Integration with System 85 and DEFINITY Communications System G2*, 585-310-215, contains the procedures needed to administer a DEFINITY Generic 2 or System 85 switch to integrate with an Intuity system. It also contains procedures to administer the Intuity system to work with these switches. Planning and installation information specific to these switches is also included.

Intended Audience

This document is intended for system administrators, on-site technicians, and Remote Service Center personnel supporting the Intuity system.

Conventions Used

The following conventions were used in this document:

■ Rounded boxes represent keyboard keys that you press.

For example, an instruction to press the enter key is shown as

Press (ENTER).

- Square boxes represent phone pad keys that you press.

  For example, an instruction to press zero on the phone pad is shown as

  Press $\boxed{0}$.

- The word "enter" means to type a value and press $\boxed{\text{ENTER}}$.

  For example, an instruction to type y and press $\boxed{\text{ENTER}}$ is shown as

  Enter **y** to continue.

- Two or three keys that you press at the same time (that is, you hold down the first key while pressing the second and/or third key) are shown as a rounded box that contains two or more words separated by hyphens. For example, an instruction to press and hold $\boxed{\text{ALT}}$ while typing the letter d is shown as

  Press $\boxed{\text{ALT-d}}$

- Commands and text you type or enter appear in **bold**.

- Values, instructions, and prompts that you see on the screen appear as follows: `Press any key to continue.`

- Variables that the system supplies or that you must supply appear in *italics*.

  For example, an error message including one of your filenames appears as

  `The file` *filename* `is formatted incorrectly`

Trademarks and Service Marks

The following trademarked products may be mentioned in this book:

Product Name	Company
AUDIX®	Registered trademark of AT&T
DEFINITY®	Registered trademark of AT&T
Intuity™	Trademark of AT&T
UNIX®	Registered trademark of UNIX Systems Laboratories, Inc.
VT100™	Trademark of Digital Equipment Corporation

Related Resources

In addition to this book, you may need to reference the following books:

Title	Order Number
Intuity System Description	585-310-211
Intuity AUDIX Feature Descriptions	585-310-212
Intuity Documentation Guide	585-310-540
Migration to the Intuity System	585-310-650
Intuity New System Planning	585-310-603
Intuity MAP/40 Hardware Installation	585-310-138
Intuity MAP/40 Installation Checklist	585-310-141
Intuity MAP/100 Hardware Installation	585-310-139
Intuity MAP/100 Installation Checklist	585-310-137
Intuity Software Installation	585-310-140
Intuity Integration with System 75 and DEFINITY Communications System G1and G3	585-310-214
Intuity Integration with 5ESS	585-310-219
Intuity Integration with DMS-100	585-310-220
Intuity Integration with 1AESS	585-310-221
Integration with NEAX	585-310-216
Intuity AUDIX Digital Networking Administration	585-310-533
AMIS Analog Networking	585-300-512
Intuity Intro Voice Response	585-310-716
Intuity Platform Administration and Maintenance	585-310-534
Intuity AUDIX Administration	585-310-539
Intuity AUDIX Announcement Customization-American English	585-310-535
Intuity AUDIX Announcement Customization-British English	585-310-536
Intuity AUDIX Announcement Customization- Latin Spanish	585-310-537

Title	Order Number
Intuity AUDIX Announcement Customization-French Canadian	585-310-538
AUDIX Administration and Data Acquisition Package	585-302-502
A Portable Guide to Voice Messaging	585-300-701
Voice Messaging Quick Reference	585-300-702
Multiple Personal Greetings Quick Reference	585-300-705
Voice Messaging Wallet Card	585-300-704
Outcalling Quick Reference	585-310-721
Voice Messaging Business Card Stickers	585-304-705
Voice Messaging Subscriber Artwork Package	585-310-724

How to Make Comments About This Document

A reader comment card is behind the title page of this document. While we have tried to make this document fit your needs, we are interested in your suggestions for improving it and urge you to complete and return a reader comment card.

If the reader comment card has been removed, send your comments to:

AT&T
Product Documentation Development Department
Room 22-2C11
11900 North Pecos Street
Denver, Colorado 80234

Please include the name and order number of this document.

System Security and Toll Fraud

Telecommunications fraud is the unauthorized use of another company's telecommunications service. This type of fraud has been in existence since the 1950's when AT&T first introduced Direct Distance Dialing (DDD).

Twenty years later, Remote Access became a target of individuals seeking unauthorized network access. Now, with the added capabilities of voice mail and automated attendant services, customer premises equipment-based toll fraud has expanded as a new type of communications abuse. With its subculture of "hackers" and "phreakers," telecommunications fraud has rapidly become a highly profitable criminal activity.

Protecting Your Voice Messaging System

Voice Messaging toll fraud has risen dramatically in recent years. Now more than ever, it is imperative that you take steps to secure your system. Securing your system means protecting both standard voice messaging and automated attendant applications.

Voice Messaging

There are two types of voice mail fraud. The first type occurs when a hacker takes over a mailbox and uses it to communicate with other hackers. This can be expensive if access is gained to the voice mail system via an 800 number. In this situation, a hacker typically hacks the mailbox password and changes it along with the greeting.

Once thieves transfer to dial tone, they may dial a Trunk Access Code (TAC), Feature Access Code (FAC), or extension number, which is the second type of abuse. If the system is not properly secured, thieves can make fraudulent long distance calls or request a company employee to transfer them to a long distance number.

Automated Attendant

Auto attendants are used by many companies to augment or replace a switch-board operator. When an auto attendant answers, the caller is generally given several options. A typical greeting is: "Hello, you've reached XYZ Bank. Please enter **1** for Auto Loans, **2** for Home Mortgages. If you know the number of the person you are calling, please enter that now."

In some switches, button 9 is to access dial tone. In addition, when asked to enter an extension, the hacker enters 9180 or 9011. If the system is not properly configured, the auto attendant passes the call back to the PBX. The PBX reacts to 9 as a request for a dial tone. The 180 becomes the first numbers of a 1-809 call to the Dominican Republic. The 011 is treated as the first digits of an international call. The hacker then enters the remaining digits of the phone number and the call is completed. You, the PBX owner, pay for it. This hacker scenario works the same way with a voice mail system.

Switch Administration

To minimize the risk of unauthorized people using the AUDIX system to make toll calls, administer your switch in any of the following ways.

Restrict Outward Dialing

The measures you can take to minimize the security risk of outcalling depend on how it is used. When outcalling is used only to alert on-premises subscribers who do not have AUDIX message indicator lamps on their phones, you can assign an outward-restricted Class of Restrictions (COR) to the AUDIX voice ports.

Use **P010 W3 F19** to assign outward restriction to the voice mail ports' Class of Service (COS).

Assign Low Facilities Restriction Level (FRL)

The switch treats all the PBX ports used by voice mail systems as stations. Therefore, each voice mail port can be assigned a COR/COS with an FRL associated with the COR/COS. FRLs provide eight different levels of restrictions for Automatic Alternate Routing (AAR), Automatic Route Selection (ARS), or World Class Routing (WCR) calls. They are used in combination with calling permissions and routing patterns and/or preferences to determine where calls can be made. FRLs range from 0 to 7, with each number representing a different level of restriction (or no restrictions at all).

The FRL is used for the AAR/ARS/WCR feature to determine call access to an outgoing trunk group. Outgoing call routing is determined by a comparison of the FRLs in the AAR/ARS/WCR routing pattern to the FRL associated with the COR/COS of the call originator.

The higher the FRL number, the greater the calling privileges. For example, when voice mail ports are assigned to a COR with an FRL of 0, outside calls are disallowed. If that is too restrictive, the voice mail ports can be assigned to a COR with an FRL that is higher, yet low enough to limit calls to the calling area needed.

⇒ NOTE:
Voice Messaging ports that are outward restricted via COR cannot use AAR/ARS/WCR trunks. Therefore, the FRL level doesn't matter since FRLs are not checked.

FRLs can be assigned to offer a range of calling areas. Choose the one that provides the most restricted calling area that is required.

Table 1 provides suggested FRL values.

Table 1. Suggested Values for FRLs

FRL	Suggested Value
0	No outgoing (off-switch) calls permitted.
1	Allow local calls only; deny 0+ and 1-800 calls.
2	Allow local calls, 0+, and 1-800 calls.
3	Allow local calls plus calls on FX and WATS.brtrunks.
4	Allow calls within the home NPA.
5	Allow calls to certain destinations within the continental USA.
6	Allow calls throughout the continental USA.
7	Allow international calling. Assign attendant console FRL 7. Be aware, however, if Extension Number Portability is used, the originating endpoint is assigned FRL 7.

⟹ NOTE:
In Table 1-1, FRLs 1 through 7 include the capabilities of the lower FRLs. For example, FRL 3 allows private network trunk calls and local calls in addition to FX and WATS trunk calls.

To set FRLs on G2 and System 85:

- Use **P010 W3 F23** to assign FRLs for use with AAR/ARS/WCR trunks. Assign higher FRLs to restricted patterns in **P309** than the FRL in the COS for the voice mail ports.

- For G2.2, do not use **P314** to mark disallowed destinations with a higher FRL value. **P314 W1** assigns a Virtual Nodepoint Identifier (VNI) to the restricted dial string. **P317 W2** maps the VNI to the pattern, and **P317 W2** shows the pattern preference, with the FRL in field 4.

  For earlier releases, use **P313** to enter disallowed destinations in the Unauthorized Call Control table.

Restrict Toll Areas

For G2 and System 85:

- Use **P311 W2** to establish 6-digit translation tables for foreign NPAs, and assign up to 10 different routing designators to each foreign NPA (area code).

■ Use **P311 W3** to map restricted and unrestricted exchanges to different routing designators.

■ If the unrestricted toll exchanges are in the Home NPA, use **P311 W1** to map them to a routing designator.

■ If the Tenant Services feature is used, use **P314 W1** to map routing designators to patterns. If Tenant Services is not used, the pattern number will be the same as the routing designator number.

■ Use **P309 W3** to define the restricted and unrestricted patterns. For G3:

■ Use **change ars analysis** to display the ARS Analysis screen.

■ Enter the area codes or telephone numbers that you want to allow and assign an available routing pattern to each of them.

■ Use **change routing pattern** to give the pattern preference an FRL that is equal to or lower than the FRL of the voice mail ports.

For G2.2:

■ Use **P314 W1** to assign a Virtual Nodepoint Identifier (VNI) to the unrestricted dial string.

Map the VNI to a routing pattern in **P317 W2**, and assign a low FRL to the pattern in **P318 W1**. If you permit only certain numbers, consider using Network 3, which contains only those numbers.

Block Subscriber Use of Trunk Access Codes

Station-to-Trunk Restrictions can be assigned to disallow stations from dialing specific outside trunks. By implementing these restrictions, callers cannot transfer out of voice mail to an outside facility using Trunk Access Codes.

For G2 and System 85, if TACs are necessary for certain users to allow direct dial access to specific facilities, such as tie trunks, use the Miscellaneous Trunk Restriction feature to deny access to

others. For those stations and all trunk-originated calls, always use ARS/AAR/ WCR for outside calling.

⇒ NOTE:
Allowing TAC access to tie trunks on your switch may give the caller access to the Trunk Verification feature on the next switch.

Restrict AMIS Networking Number Ranges

To increase security for AMIS analog networking, including the Message Delivery service, restrict the number ranges that may be used to address messages. Be sure to assign all the appropriate PBX outgoing call restrictions on the AUDIX voice ports.

Subscriber Password Guidelines

To minimize the risk of unauthorized people accessing AUDIX subscriber mailboxes and using them for toll fraud, educate subscribers in the following guidelines for AUDIX passwords.

- When password protection into voice mailboxes is offered, require the maximum number of digits allowed, or a minimum of five digits. Also, be sure that the password length is at least one digit longer than the extension length.

- Make sure subscribers change the default password the first time they log in to the AUDIX system. To insure this, make the default password fewer digits than the minimum password length.

- Establish your password as soon as your AUDIX extension is assigned. This ensures that only YOU will have access to your mailbox, not anyone who enters your extension number and #. (The use of only the "#" indicates the lack of a password. This fact is well-known by telephone hackers.)

- Never have your greeting state that you will accept third party billed calls. A greeting like this allows unauthorized individuals to charge calls to your company. If you call someone at your company and get a greeting like this, point out the vulnerability to the person and recommend that they change the greeting immediately.

- Never use obvious or trivial passwords, such as your phone extension, room number, employee identification number, social security number, or easily guessed numeric combinations (for example, 999999).

- Change administered default passwords immediately; never skip the password entry. Hackers find out defaults. To change your password, press **5** at the main AUDIX menu. Then press **4**.

- Discourage the practice of writing down passwords, storing them, or sharing them with others. If a password needs to be written down, keep it in a secure place and never discard it while it is active.

- Never program passwords onto auto dial buttons.

- If you receive any strange AUDIX messages, or your greeting has been changed, or if for any reason you suspect that your AUDIX facilities are being used by someone else, contact AT&T Network Corporate Security.

Intuity AUDIX Administration

To minimize the risk of unauthorized people using the Intuity AUDIX system to make toll calls, you can administer the AUDIX system in any of the following ways.

Outcalling

When outcalling is used for subscribers who are off-site (often the message notification is forwarded to a call pager number), three options exist to minimize toll fraud: 1) the AUDIX voice ports can be assigned to a toll-restricted COR that allows calling only within a local area; 2) the outcalling numbers can be entered into an unrestricted calling list for either ARS or Toll Analysis, or 3) outcalling numbers can be limited to 7 or 10 digits.

- On the Subscriber form, turn off outcalling by using the proper COS for each user.

- On the System Parameters Outcalling form, limit the number of digits that can be dialed for outcalling.

> **NOTE:**
> If outcalling is to a pager, additional digits may be required.

Mailbox Administration

- To block break-in attempts, allow a low number of consecutive unsuccessful attempts to log into a voice mailbox. Administer this on the System Parameters Features screen.

- Deactivate unassigned voice mailboxes. When an employee leaves the company, remove the subscriber and, if necessary, reassign the voice mailbox.

- Do not create voice mailboxes before they are needed.

- The Intuity AUDIX system offers password and password time-out mechanisms that can help restrict unauthorized users. Subscribers can have passwords up to 15 digits for maximum security, and you can specify the minimum length required. Use a minimum of 5 digits, and a length at least one digit greater than the extension number length.

  AUDIX callers are given three attempts in one call to correctly enter their mailbox before they are automatically disconnected. You can also specify how many consecutive invalid attempts are allowed before a voice mailbox is locked.

Enhanced Call Transfer

With Enhanced Call Transfer, the AUDIX system uses a digital control link message to initiate the transfer and the switch verifies that the requested destination is a valid station in the dial plan. With Enhanced Call Transfer, when AUDIX callers enter ⊛ Ⓣ followed by digits (or ⊛ Ⓐ for name addressing) and Ⓗ, the following steps are performed:

1. The AUDIX system verifies that the digits entered contain the same number of digits as administered on the AUDIX system for extension lengths.

   If call transfers are restricted to subscribers, the AUDIX system also verifies that the digits entered match the extension number for an administered subscriber.

   ### ➡ NOTE:
   When callers request a name addressing transfer, the name must match the name of an AUDIX subscriber (either local or remote) whose extension number is in the dial plan.

2. If step 1 is successful, the AUDIX system sends a transfer control link message containing the digits to the switch. If step 1 is unsuccessful, the AUDIX system plays an error message to the caller and prompts for another try.

3. The switch verifies that the digits entered match a valid extension in the dial plan.

   - If step 3 is successful, the switch completes the transfer, disconnects the AUDIX voice port, and sends a "successful transfer" control link message to the AUDIX system.

   - If step 3 is unsuccessful, the switch leaves the AUDIX voice port connected to the call, sends a "fail" control link message to the AUDIX system, and then the AUDIX system plays an error message requesting another try.

Coverage Limitations with Enhanced Call Transfer

With Enhanced Call Transfer, the reason for a transfer is included in the control link message that the AUDIX system sends to the switch. For Call Answer calls, such as calls that are redirected to the AUDIX system when an extension is busy or doesn't answer, when a caller enters ⓪ to Escape to Attendant, the AUDIX system normally reports the transfer to the switch as "redirected."

The switch uses this reason to determine how to proceed with the call. If the reason for the transfer is "redirected," the call will not follow the destination's coverage path or its call forwarding path. This is because the switch will not redirect a previously redirected call.

This restriction may not be acceptable where it is desirable to have the call follow the coverage path of the "transferred-to" station. Enhanced Call Transfer can be administered to allow this type of transfer.

Detecting Voice Mail Fraud

Table 2 shows the reports that help determine if your voice mail system is being used for fraudulent purposes.

Table 2. Reports and Monitoring Techniques for the AUDIX system

Monitoring Technique	Switch
Call Detail Recording (SMDR)	All
Traffic Measurements and Performance	All
Automatic Circuit Assurance	All
Busy Verification	All
Call Traffic Report	All
Trunk Group Report	G1, G3, System 75
AUDIX Traffic Reports	All

Call Detail Recording

With Call Detail Recording activated for the incoming trunk groups, you can check the calls into your voice mail ports. A series of short holding times may indicate repeated attempts to enter voice mailbox passwords.

➡ NOTE:
Most call accounting packages discard this valuable security information. If you are using a call accounting package, check to see if this information can be stored by making adjustments in the software. If it cannot be stored, be sure to check the raw data supplied by the CDR.

Review CDR for the following symptoms of voice messaging abuse:

- Short holding times on any trunk group where voice messaging is the originating endpoint or terminating endpoint

- Calls to international locations not normal for your business

- Calls to suspicious destinations

- Numerous calls to the same number

- Undefined account codes

⇒ **NOTE:**
Since CDR only records the last extension on the call, internal toll abusers transfer unauthorized calls to another extension before they disconnect so that the CDR does not track the originating station. If the transfer is to your voice messaging system, it could give a false indication that your voice messaging system is the source of the toll fraud.

For G2:

- Use **P275 W1 F14** to turn on the CDR for incoming calls.

- Use **P101 W1 F8** to specify the trunk groups.

Call Traffic Report

This report provides hourly port usage data and counts the number of calls originated by each port. By tracking normal traffic patterns, you can respond quickly if an unusually high volume of calls begins to appear, especially after business hours or during weekends, which might indicate hacker activity.

For G2 and System 85, traffic data is available via Monitor I which can store the data and analyze it over specified periods.

Trunk Group Report

This report tracks call traffic on trunk groups at hourly intervals. Since trunk traffic is fairly predictable, you can easily establish over time what is normal usage for each trunk group. Use this report to watch for abnormal traffic patterns, such as unusually high off-hour loading.

ARS Measurement Selection

The ARS Measurement Selection can monitor up to 20 routing patterns for traffic flow and usage.

Automatic Circuit Assurance

This monitoring technique detects a number of short holding time calls or a single long holding time call which may indicate hacker activity. Long holding times on Trunk-to-Trunk calls can be a warning sign. The ACA feature allows you to establish time limit thresholds defining what is considered a short holding time and a long holding time. When a violation occurs, a designated station is visually notified.

When an alarm occurs, determine if the call is still active. If toll fraud is suspected (for example, a long holding time alarm occurs on a Trunk-to-Trunk call), you may want to use the busy verification feature (see ''Busy Verification'' that follows) to monitor the call in progress.

For G2 and System 85:

- Use **P285 W1 F5** and **P286 W1 F1** to enable ACA systemwide.

- Use **P120 W1** to set ACA call limits and number of calls thresholds.

- Choose the appropriate option:

    — To send the alarms and/or reports to a designated maintenance facility, use **P497 W3**.

    — To send the alarms and/or reports to an attendant, use **P286 W1 F3**.

Busy Verification

When toll fraud is suspected, you can interrupt the call on a specified trunk group and monitor the call in progress. Callers will hear a long tone to indicate the call is being monitored.

For G2 and System 85:

- Administer a Busy Verification button on the attendant console.

- ■ To activate the feature, press the button and enter the trunk access code and the member number.

AUDIX Traffic Reports

The Intuity AUDIX system tracks traffic data over various timespans. Reviewing these reports on a regular basis helps to establish traffic trends. If increased activity or unusual usage patterns occur, such as heavy call volume on ports assigned to outcalling, they can be investigated immediately. In addition, the AUDIX Administration and Data Acquisition Package (ADAP) uses a PC to provide extended storage and analysis capabilities for the traffic data. You can also use the AUDIX Administration Log and Activity Log to monitor usage and investigate possible break-in attempts.

AT&T's Statement of Direction

The telecommmunications industry is faced with a significant and growing problem of theft of customer services. To aid in combating these crimes, AT&T intends to strengthen relationships with its customers and its support of law enforcement officials in apprehending and successfully prosecuting those responsible.

No telecommunications system can be entirely free from risk of unauthorized use. But diligent attention to system management and to security can reduce that risk considerably. Often, a tradeoff is required between reduced risk and ease of use and flexibility. Customers who use and administer their systems make this tradeoff decision. They know best how to tailor the system to met their unique needs and, necessarily, are in the best position to protect the system from unauthorized use. Because the customer has ultimate control over the configuration and use of AT&T services and products it purchases, the customer properly bears responsibility for fraudulent uses of those services and products.

To help customers use and manage their systems in light of the tradeoff decisions they make and to ensure the greatest security possible, AT&T commits to the following:

■ AT&T products and services will offer the widest range of options available in the industry to help customers secure their communications systems in ways consistent with their telecommunications needs.

■ AT&T is committed to develop and offer services that, for a fee, reduce or eliminate customer liability for PBX toll fraud, provided the customer implements prescribed security requirements in its telecommunications systems.

■ AT&T's product and service literature, marketing information and contractual documents will address, wherever practical, the security features of our offerings and their limitations, and the responsibility our customers have for preventing fraudulent use of their AT&T products and services.

■ AT&T sales and service people will be the best informed in the industry on how to help customers manage their systems securely. In their continuing contacts with customers, they will provide the latest information on how to do that most effectively.

■ AT&T will train its sales, installation and maintenance, and technical support people to focus customers on known toll fraud risks; to describe mechanisms that reduce those risks; to discuss the tradeoffs between enhanced security and diminished ease of use and flexibility; and to ensure that customers understand their role in the decision-making process and their corresponding financial responsibility for fraudulent use of their telecommunications system.

■ AT&T will provide education programs for customers and our own people to keep them apprised of emerging technologies, trends, and options in the area of telecommunications fraud.

■ As new fraudulent schemes develop, we will promptly initiate ways to impede those schemes, share our learning with our customers, and work with law enforcement officials to identify and prosecute fraudulent users whenever possible.

We are committed to meeting and exceeding our customers' expectations, and to providing services and products that are easy to use and are of high value. This fundamental principle drives our renewed assault on the fraudulent use by third parties of our customers' communications services and products.

AT&T Security Offerings

AT&T has developed a variety of offerings to assist in maximizing the security of your system. These offerings include:

■ Security Audit Service of your installed systems

- ■ Fraud Intervention Service

- ■ Individualized Learning Program, a self-paced text that uses diagrams of system administration screens to help customers design security into their systems. The program also includes a videotape and the GBCS Products Security Handbook.

- ■ Call Accounting package that calls you when preset types and thresholds of calls are established.

- ■ Remote Port Security Device that makes it difficult for computer hackers to access the remote maintenance ports

- ■ Software that can identify the exact digits passed through the voice mail system.

For more information about these services, see the *GBCS Products Security Handbook*.

AT&T Toll Fraud Crisis Intervention

If you suspect you are being victimized by toll fraud or theft of service and need technical support or assistance, call the AT&T GBCS Technical Service Center (TSC) immediately.

DEFINITY/System 75/85 PBX Repair	800 242-2121
AUDIX Help Line	800 562-8349

⇒ **NOTE:**
These services are available 24 hours a day, 365 days a year. Consultation charges may apply.

AT&T Corporate Security

Whether or not immediate support is required, please report all toll fraud incidents perpetrated on AT&T services to AT&T Corporate Security. In addition to recording the incident, AT&T Corporate Security is available for consultation on product issues, investigation support, law enforcement, and education programs.

Switch Integration Requirements

1

This chapter contains information that explains switch integration processes, terms, and requirements including:

- An introduction to switch integration that provides you with a brief explanation of the switch integration processes

- An explanation of the switches supported by the Intuity system

- Configuration descriptions that explain each of the components required to establish a link with the switch.

- Configuration diagrams that show you the different hardware, physical connections, and cables used to connect the Intuity system and the switch

Read the information in this chapter to understand the basic requirements of an Intuity system switch integration *before* you attempt to administer the integration.

An Introduction to Switch Integration and DCIU

Switch integration refers to the sharing of information between a voice messaging system and a switch to provide a seamless interface to callers and subscribers. A fully integrated voice messaging system answers calls with information taken directly from the switch.

To create an integrated environment for the Intuity system and an AT&T System 85 or DEFINITY® Communication System Generic 2 (G2) switch, the system uses a Digital Communications Interface Unit (DCIU) link to the switch. The DCIU link transfers digital call information, such as called party and calling party informa-

tion, to the Intuity system. The system exchanges analog voice information with the switch through analog telephone lines.

DCIU acts as a processor with nine physical links. One of the links connects to the switch processor. The remaining eight links can connect to external processors, such as an Intuity system, an AUDIX[®] system, another switch on a Distributed Communications System (DCS), or a Call Management System (CMS). Each of the DCIU physical links has 64 logical channels. The 64 channels can be distributed to the external adjuncts using various methods.

When integrated through a DCIU link, the Intuity system sends message packets to the switch using the BX.25 protocol at 9.6 Kbps. The messages received by the DCIU from the Intuity system can be routed to something else, such as the host switch, or they can be routed on another outgoing channel. This processing power allows a remote switch on a DCS, a host switch, and an Intuity system to work together.

DCIU serves as a message router, receiving information on one side and sending the information out to various places, because DCIU routes messages from the Intuity system to switch or hops messages from the Intuity system to another switch.

Switch Releases Supported by the Intuity System

The Intuity system supports several AT&T switches, also called *Private Branch Exchanges* (PBX). Table 1-1 shows you the supported switches and the required software releases.

Table 1-1.   Intuity System Supported Switches

Switch	Release
System 75	Release 1 Version 3 and above
DEFINITY Generic 1	All[*].
DEFINITY Generic 3i	All[*].
DEFINITY Generic 3r	All[*].
DEFINITY Generic 3s	All[*].
DEFINITY Generic 3vs	All[*].
DEFINITY G2	All.
System 85	Release 2 Version 4

[*]   For information, refer to *Intuity Integration with System 75 and DEFINITY Communications Systems G1 and G3 (585-310-214)*

GPSC/AT/E

For all AT&T switch integrations with the Intuity system, a general-purpose synchronous controller AT-enhanced (GPSC/AT/E) card is required. The GPSC card communicates with the switch through the DCIU link and transfers digital call information. For GPSC card installation instructions, refer to one of the following documents:

■   *Intuity MAP/40 Hardware Installation,* 585-310-138

■   *Intuity MAP/100 Hardware Installation,* 585-310-139

Intuity System Switch Connections

Use the information and diagrams in this section to understand the different configurations for connecting an Intuity system with a System 85 and DEFINITY G2. You can use only the Isolating Data Interface (IDI) to connect the Intuity system to the switch, in either of the following configurations:

■   Using a Single Common Control

■   Using a Duplicated Common Control

Using a Single Common Control

Use the following IDI connection for the Intuity system and the System 85/G2 switch with a single common control. Figure 1-2. shows you the connections for the System 85 and DEFINITY G2. Study the diagram to understand the connections.

Since the GPSync card uses an Electronic Industries Association (EIA) RS-449 serial data electrical interface, an Intuity system platform and a switch connected through an IDI cannot be over 50 feet apart.

Hardware Required for the Connection

■ One IDI, which is used for electrical protection

■ One ED-1E434-11, Group 175 cable (RS-232C to RS-449 transition cable, 3.0-ft) and a 25-pin male connector at the RS-232 connection on the MAP computer's faceplate

■ One ED-1E434-11, Group 304 cable (RS-449 male). The length may not exceed 50 feet (Attribute LNG11)
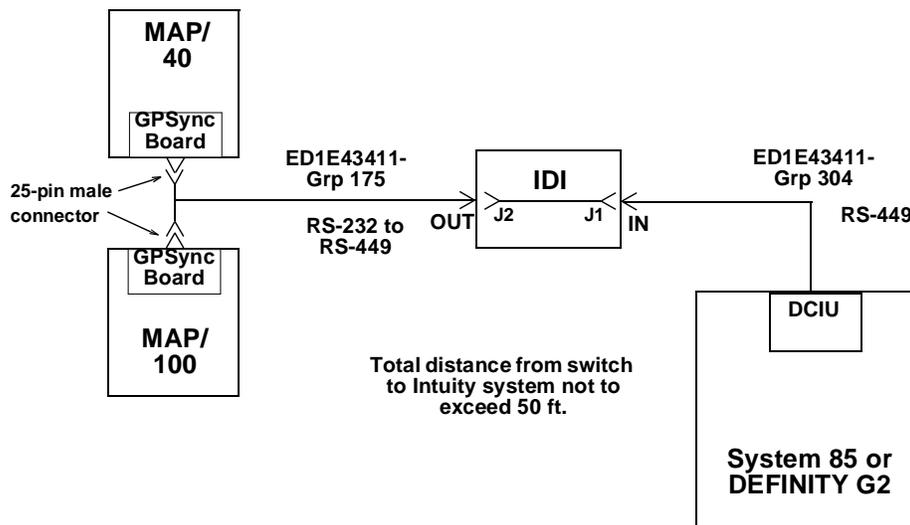
Figure 1-1. System 85 or G2 with Single Common Control IDI Connection to the Intuity System

Using a Duplicated Common Control

Use the following IDI connection for an Intuity system and a System 85/G2 switch with a duplicated common control. Figure 1-2.   shows you the connections for the System 85 and DEFINITY G2. Study the diagram to understand the connections.

Since the IDI uses a Electronic Industries Association (EIA) RS-232-C serial data electrical interface, an Intuity system platform and a switch connected through an IDI cannot be over 50 feet apart.

Hardware Required for the Connection

■   One IDI

■   One ED-1E434-11, Group 175 cable (RS-232C to RS-449 transition cable, 3.0-ft) and a 25-pin male connector at the RS-232 connection on the MAP computer's faceplate.

■   One ED-1E434-11, Group 304 cable (RS-449 male). The length may not exceed 50 feet (Attribute LNG11).

■   One ED-1E434-11, Group 342 cable (RS-449 male).
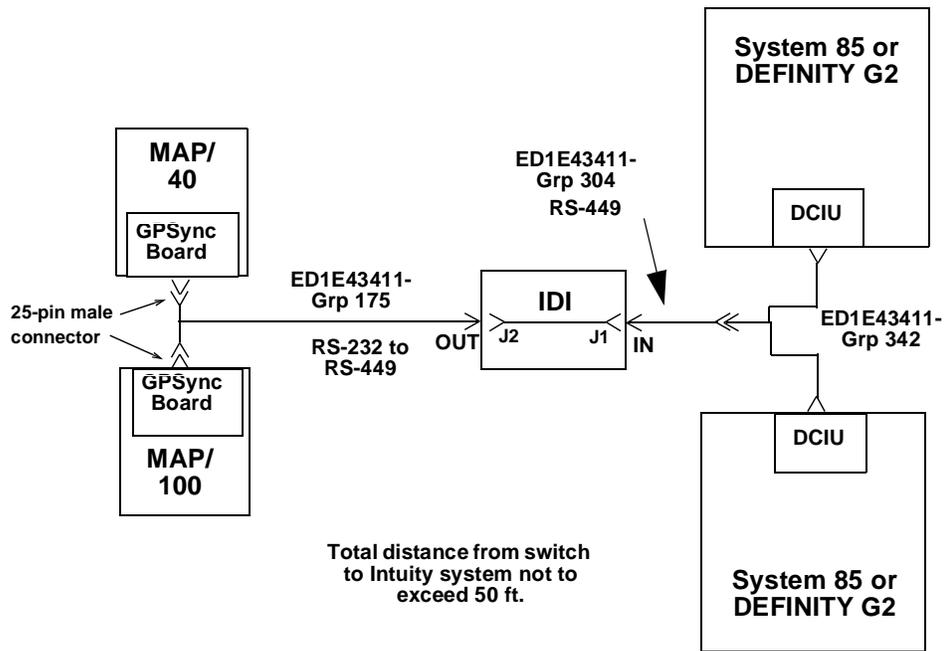
Figure 1-2. System 85 or G2 with Duplicated Common Control IDI Connection to the Intuity System

Switch Integration Planning

2

Before you integrate the Intuity system with a switch, you must plan the process. This chapter provides worksheets and information to help you plan and record the integration. You use the worksheets later to complete the switch integration process. The planning and worksheets in this chapter must be completed before the Intuity system is installed. This chapter includes worksheets to collect the following information:

- Voice port information

- Local and remote switch hunt group information

- Remote and local data link information

- Call coverage assignments

- Hop channel assignments

You may be referred to *Intuity New System Planning*, 585-310-603, to verify or copy information. Continue with the instructions on the next page to plan the switch integration.

General Switch Integration Planning

Worksheet A: General Voice Port Information

Item	Your Entry
Call Vectoring Used for Intuity AUDIX? Enter yes or no to indicate whether calls will arrive at the Intuity AUDIX system via a VDN and call vector.	
Number of ports Enter the number of voice ports the Intuity AUDIX will use.	
Class of Service (COS) # for Voice Ports Enter the number of the class of service that will be assigned to each voice port	
Facilities Restriction Level (FRL) for Voice Port COS Enter the FRL number that will be assigned to the voice port COS. The FRL chosen may depend on whether the customer will have a DCS or use the AMIS/outcalling feature. This FRL should also match the Call Control FRL assigned for attendant use.	

Worksheet B: Voice Port Extensions and Names

Enter the location, name, and extension for each of the purchased (maximum of 64) voice-ports in the following worksheet.

Date:

PreparedBy: ___

ContactTelephoneNumber: ___

➡ **NOTE:**
SN228B (required for the AMIS and outcalling features) and SN229 analog line circuit packs are used in traditional modules.TN742 and TN746B analog line circuit packs are used in universal modules.

You should administer the Intuity system to have no more than four ports per half-carrier in a traditional module or a universal module that uses TN742s. Eight ports per TN746B are allowed per half-carrier, with the first four and last four ports used per circuit pack.

Intuity Port	Analog Port Equipment Location[*]	Name[†]	Extension
1		AUDIX 1	
2		AUDIX 2	
3		AUDIX 3	
4		AUDIX 4	
5		AUDIX 5	
6		AUDIX 6	
7		AUDIX 7	
8		AUDIX 8	
9		AUDIX 9	
10		AUDIX 10	
11		AUDIX 11	
12		AUDIX 12	

Intuity Port	Analog Port Equipment Location[*]	Name[†]	Extension
13		AUDIX 13	
14		AUDIX 14	
15		AUDIX 15	
16		AUDIX 16	
17		AUDIX 17	
18		AUDIX 18	
19		AUDIX 19	
20		AUDIX 20	
21		AUDIX 21	
22		AUDIX 22	
23		AUDIX 23	
24		AUDIX 24	
25		AUDIX 25	
26		AUDIX 26	
27		AUDIX 27	
28		AUDIX 28	
29		AUDIX 29	
30		AUDIX 30	
31		AUDIX 31	
32		AUDIX 32	
33		AUDIX 33	
34		AUDIX 34	
35		AUDIX 35	
36		AUDIX 36	
37		AUDIX 37	
38		AUDIX 38	
39		AUDIX 39	
40		AUDIX 40	
41		AUDIX 41	

Intuity Port	Analog Port Equipment Location[*]	Name[†]	Extension
42		AUDIX 42	
43		AUDIX 43	
44		AUDIX 44	
45		AUDIX 45	
46		AUDIX 46	
47		AUDIX 47	
48		AUDIX 48	
49		AUDIX 49	
50		AUDIX 50	
51		AUDIX 51	
52		AUDIX 52	
53		AUDIX 53	
54		AUDIX 54	
55		AUDIX 55	
56		AUDIX 56	
57		AUDIX 57	
58		AUDIX 58	
59		AUDIX 59	
60		AUDIX 60	
61		AUDIX 61	
62		AUDIX 62	
63		AUDIX 63	
64		AUDIX 64	

---

* The equipment location is a 5-part identifier; the first part identifies the module, the 2nd identifies the cabinet, the 3rd identifies the port carrier, the 4th identifies the slot, and the 5th identifies the circuit number. As an example, a valid location for Generic 2 is module 0, cabinet 0, port carrier c, slot 10, and circuit number 6. For traditional modules, the port carrier is a number 0-3. For universal modules, the port carrier is a letter c-e.

† These are the recommended names.

Worksheet C: Assign the Intuity AUDIX Split

The following information is required to define a hunt group (containing the voice port members) for the Intuity system voice ports.

⇒ NOTE:

Only the number of ports actually purchased should be administered in the hunt group

Date:

PreparedBy:

ContactTelephoneNumber:

Item	Your Entry
Intuity AUDIX Machine Number Enter the number of the AUDIX you are administering on the local switch. The recommended number is 1 on a switch or DCS with a single AUDIX.	
Trunk Group Number for the Intuity AUDIX Split Enter the number of the queuing trunk group (1-256) to carry calls to the Intuity AUDIX split. Normally the first available trunk group starting from 256 and counting down is used.	
Intuity AUDIX Split Number Enter the number of the Intuity AUDIX split	
Extension to Access Intuity AUDIX Split Enter the split's Queue Directory Number (QDN), or Vector Directory Number (VDN).	
Vector Number (if vectoring used) Enter the number of the vector to which the VDN is assigned and which directs calls to Intuity AUDIX.	

Worksheet D: Assign the Data Link

Use this worksheet to plan the DCIU (BX.25) data link.

⟹ NOTE:

You should regard the values and terms used in the following table as those used for administering the switch to work with the Intuity system.

Date:

PreparedBy:

ContactTelephoneNumber:

Item	Your Entry
Switch Number Enter the number of the switch to which the Intuity system is connected.	
Interface Link Number Enter the number(1-8) of the DCIU link that will connect to the Intuity system.	
Local DCIU Port Number to Intuity AUDIX Enter the DCIU port number (1-64) connected to the Intuity AUDIX. This will equal the switch port number administered on the Intuity system.	
Remote DCIU Port Number (and Logical Channel on the Intuity System) Enter the remote DCIU port number (1-64) of the Intuity AUDIX. This will equal the logical channel (local port) administered on the Intuity system.	
Network Adjunct Number (if Transfer Into AUDIX used) Enter any unused number (1-99) to identify the Intuity AUDIX as a network adjunct.	

Worksheet E: Assign the Call Coverage Path for Subscribers

Complete this worksheet to define call coverage paths for subscribers.

Date:

PreparedBy:

ContactTelephoneNumber:

Item	Your Entry
COS Number for Subscriber Stations Enter the number of the Class of Service subscribers will have.	
Call Coverage Group Number Enter the number of the call coverage group for subscribers	
Calls Go to Coverage When Appearance 1 is Busy? Enter yes if the stations will be analog sets and no if they will be digital sets. **Note:** For testing Intuity AUDIX stations, telephone sets are not required. Therefore, this parameter is optional.	

You have completed the worksheets and planning necessary for an Intuity system switch integration. If you do not have a DCS environment, proceed to the switch administration chapter. If you are placing an Intuity system in a DCS network, proceed to the next collection of planning worksheets in the ''DCS Worksheets'' section.

DCS Worksheets

Complete the following worksheets if the Intuity system operates in a DCS environment. If you have an existing DCS network or if you are installing one, the GBCS Design Center may have designed the DCS network with an Intuity system. The worksheets in this section contain the same information the Design Center may have already created. Use these worksheets to verify that you have all required information and as a single point of reference.

This section contains worksheets for BX.25 signaling. For each remote switch in the DCS network, complete one set of DCS worksheets. Before you complete the worksheets, remove the worksheets from the binder and make copies for each switch in the network.

Worksheet F: Assign a DCS Remote Node

Use this worksheet to plan the remote DCS nodes. Complete one copy of this worksheet for each remote switch in the DCS network.

➡ **NOTE:**
Except where noted, you should regard the values and terms used in the following table as those used for administering a switch that is a remote node in a DCS.

Date:

PreparedBy:

ContactTelephoneNumber:

Item	Your Entry
DCS Node Link and Channel Enter the number of the DCIU local port (1-64) on the remote switch and its logical channel (1-64). The switch's local port equals the remote port number and logical channel administered on the host switch.	
DCS Node Number Enter the DCS node number of the remote switch. This is the switch number administered on the Intuity AUDIX system.	
Local DCIU Port Number to Intuity AUDIX Enter the DCIU port number (1-64) connected to the Intuity AUDIX. This will equal the switch port number administered on the Intuity system.	

Item	Your Entry
Remote DCIU Port Number Enter the remote DCIU port number (1-64) of the Intuity AUDIX. This should equal: ■ The logical channel (local port) administered on the Intuity system ■ The logical channel on the host link that connects to this remote node ■ A additional logical channel administered on the host's DCIU link to the Intuity system. This channel hops signalling from the remote node to the Intuity system.	
Host Link Enter the number (1 to 8) of the DCIU link **on the host switch** that will be physically connected to this remote node.	
Host Local Port Enter the DCIU port number (1 to 64) **of the host switch** that will be connected to this remote node. This number must equal: ■ The logical channel on the Intuity system assigned to the remote node ■ The remote DCIU port number and logical channel administered on this remote node	

Worksheet G: Assign a Split at the Remote Switch

Use this worksheet to plan the split on each remote switch in the DCS network.

Date:

PreparedBy:

ContactTelephoneNumber:

Item	Your Entry
COS for ACD Split on Remote Switch Enter the COS number of members of the ACD split. Unaswered calls to subscribers on the remote switch will go to coverage to this split. Calls are then forwarded to the Intuity AUDIX split on the host switch.[*]	
Extension of Split Member 0 Enter an extension for member 0 in the split.	
Queuing Trunk Group Number Enter the number of the trunk group that will carry calls to the ACD split.	
ACD Split Number Enter the split number on the remote switch to which subscribers will queue when calling or forwarding to Intuity AUDIX.	
ACD Split Extension Enter the extension to which unanswered calls to remote subscribers go for coverage on the remote switch. From this coverage point, calls are then forwarded to the Intuity AUDIX on the host switch.	

---

[*] If the remote switch uses vectoring, unanswered calls can simply go to a VDN for coverage. The VDN can then terminate at a vector. The vector should contain a ''route to'' step which routes to the Intuity AUDIX system (via a QDN or AD list number). A ''stop'' step should then immediately follow the route to step

Worksheet H: Assign the Call Coverage Path for Remote Subscribers

Complete this worksheet to define call coverage paths for subscribers.

Date:

PreparedBy:

ContactTelephoneNumber:

Item	Your Entry
COS Number for Remote Subscriber Stations Enter the number of the Class of Service remote subscribers will have.	
Call Coverage Group Number Enter the number of the call coverage group for remote subscribers	
Calls Go to Coverage When Appearance 1 is Busy? Enter yes if the stations will be analog sets and no if they will be digital sets. **Note:** For testing Intuity AUDIX stations, telephone sets are not required. Therefore, this parameter is optional.	

Switch Administration

3

This chapter describes how to administer an Intuity AUDIX system on a Generic 2 or System 85. See *Intuity AUDIX Digital Networking Administration*, 585-310-533, for information on administering the switch for Intuity AUDIX Digital Networking.

For information about what equipment is required on the Generic 2 or System 85 to work with the Intuity AUDIX system, see *Intuity System Description*, 585-310-211.

The following sections are presented in Maintenance and Administration Panel (MAAP) format. Manager II™, in its simplest form, emulates the operations of the MAAP.

DEFINITY Manager III™ and Manager IV™ are covered in their own documentation sets. Refer to the appropriate manual for more information on administering systems using Manager III or Manager IV:

- *DEFINITY Manager III Operations*, 585-222-701

- *DEFINITY Manager IV Facilities Management Operations*, 585-223-702

- *DEFINITY Manager IV Terminal Change Management Operations*, 585-223-701

- *DEFINITY Manager IV System Administration*, 585-223-700

This section contains step-by-step procedures to administer an Intuity system on a Generic 2 or System 85. You assign voice ports and the Intuity AUDIX system ACD split, assign a data link, and then assign switch features for Intuity AUDIX system subscribers.

Assign Voice Ports and the Intuity
AUDIX System ACD Split

This section provides information about Call Vectoring

as well as the procedures to:

■   Assign a new class of service (COS) to the extension numbers

■   Assign the extension numbers to each voice por

■   tAssign the Automatic Call Distribution (ACD) split.

In the following procedures, you will identify each Intuity AUDIX system voice port as a member of one or more call distribution groups (hunt groups). This group (split) is a set of analog port boards on the switch that connects subscribers and users to the Intuity AUDIX system by distributing new calls to idle ports. System 85 R2V4 and Generic 2 use ACD for call distribution. See the appropriate switch documentation for more information about call distribution groups.

Call Vectoring

 A Generic 2 or System 85 R2V4 may be set up with either a regular ACD split or with ACD Call Vectoring. Call Vectoring uses a vector (switch program) that allows the customer to customize the behavior of specific incoming calls. For example, a vector can be programmed to provide automatic Intuity AUDIX system night coverage for calls that would otherwise redirect to an unstaffed Message Center split.

If your switch uses Call Vectoring, do *not* enter an Intuity AUDIX system ACD extension for the queue directory number (QDN) in Procedure 026, Word 2. Instead, assign the Intuity AUDIX system a Vector Directory Number (VDN). This is the number subscribers dial to access the Intuity AUDIX system directly. Tie the VDN to a vector using Procedure 031, Word 1; the vector processes and directs calls to the Intuity AUDIX system ACD split. The split itself does not have an externally accessibl e number.

The table on the following page is an overview of the procedures that are explained in detail in the following text.

Table 3-1. Voice Port and ACD Split Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	Set Modes	None	Maintenance, Administration, Tape	*M 1 2 3*	
2	010 Word 1	1	Class of Service	*COS*	
		14	Conference 3-Party/Transfer	1	
		15	Touch-tone Dialing	1	
		20	ACD Member	1	Change
3	010 Word 3	18	Origination	0	
		23	FRL	[0-7*]	Change
4	000 Word 1	1	Extension or VDN	*ext #*	
		2-6	Module, Cabinet, Carrier, Slot, Circuit	*equip loc*	
		7	Class of Service	*COS*	
		8	Port Type	1	Add
5	000 Word 2	1	Extension	*ext #*	
		10	LWC Destination	*machine #*	Add
6	000 Word 3	1	Extension	*extension*	
		5	Bearer Capability Class of Service	0	Add
7	100 Word 1	1	Trunk Group	*trk grp #*	
		6	Trunk Type	6	
		11	Personal CO Line Appearance	0	Add
8	026 Word 1	1	ACD Split	*split #*	
		2	Split Size	*# of Intuity AUDIX system ports in one of these increments — 16,32,48,64*	
		4	Queuing Trunk Group	*trk grp #*	
		8	Inflow Level	0	
		9	Hunt Type	0	
		10	Split Type	2	
		11	Machine Number	*machine #*	Add
9	001 Word 1	1	Primary Extension	*ext #*	
		2	Associated Extension	*Intuity AUDIX system ext #* (used if vectoring not used)	Add
10	026 Word 2	1	ACD Split	*split #*	
		2	Supervisory Extension	*ext #*	
		3	Queue Directory Number	*Intuity AUDIX system ext #* (leave blank if vectoring used)	Add
11	026 Word 3‡	1	ACD Split	*split #*	
		2	Member	0 - 63	Next Data
		3	Member Extension	*ext # for split mbr 0*	Add

---

  *   FRL should match the Call Control FRL. Check Proc275, Word 3, Field 10. If the FRL is 0 and AMIS and outcalling are to be used, the Call Control FRL may need to be increased.

Set Modes for Administration Changes

Set the mode of the administration tool to the maintenance, administration, and tape modes. To do this, press **m** and enter **1 2 3**.

Assign a New Class of Service (COS) to Extension Numbers

Assign a class of service (COS) (1-63) to every extension assigned to the Intuity AUDIX system. A COS specifies the features a voice terminal user is allowed to access and the calling restrictions that apply to the voice terminal.

010 Word 1   Administer the features assigned to a station line COS.

Field	Manager II Field Name	Enter
1	Class of Service	[COS]*
14	Conference 3-Party/Transfer	1
15	Touch-tone Dialing	1
20	ACD Member	1

---

* From Worksheet A: General Voice Port Information

Press [CHANGE] and [EXECUTE]   .

010 Word 3   Administer the restrictions that are applicable to a COS.

Field	Manager II Field Name	Enter
18	Origination	0
23	FRL	*

---

* Verify that this field equals Procedure 275, Word 3, Field 10.

Press [CHANGE] and [EXECUTE]   .

Assign Extension Numbers to Each Voice Port

000 Word 1   Assign an extension number to each voice port using the COS from Procedure 010, Word 1, Field 1.

Field	Manager II Field Name	Enter
1	Extension	[extension]*
2-6	Module, Cabinet, Carrier, Slot, Circuit	†
7	Class of Service	[COS]‡
8	Port Type	1

---

* From Worksheet B: Voice Port Extensions and Names
† Enter the equipment location of the switch line circuit wired to the Intuity AUDIX system voice port 1.
‡ Enter the new COS from Procedure 010, Word 1, Field 1.

Press (ADD) and (EXECUTE).

Repeat Procedure 000, Word 1 for the other voice port extension numbers.

000 Word 2   Administer the hunt-to extensions and controlled restriction groups associated with an extension.

Field	Manager II Field Name	Enter
1	Extension	[extension]*
10	LWC Destination	[Intuity AUDIX system machine #]†

---

* Enter the extension number assigned to the Intuity AUDIX system voice port number 1.
† This is usually 1.

Press (ADD) and (EXECUTE).

Repeat Procedure 000 Word 2 for the other voice port extension numbers.

000 Word 3   Administer the bearer capability class of service for each voice port.

Field	Manager II Field Name	Enter
1	Extension	[extension]*
5	Bearer Capability Class of Service	0

---

* Enter the extension number assigned to the Intuity AUDIX system voice port number 1.

Press ADD and EXECUTE.

Repeat Procedure 000 Word 3 for the other voice port extension numbers.

Assign the Intuity AUDIX Split

100 Word 1 Assign the Trunk Group and the Trunk Type to trunk groups.

Field	Manager II Field Name	Enter
1	Trunk Group	[trunk group #]*
6	Trunk Type	6
8	Personal CO Line Appearance	0

---

* From Worksheet C: Assign the Intuity AUDIX Split

Press ADD and EXECUTE.

026 Word 1   Administer the split characteristics for the ACD feature.

Field	Manager II Field Name	Enter
1	ACD Split	[split #]*
2	Split Size	[number of ports in one of these increments: 16,32,48, 64]
4	Queuing Trunk Group	[queue trunk group #]*
8	Inflow Level	0†
9	Hunt Type	0 or 2
10	Split Type	2
11	Machine Number	[Intuity AUDIX system machine #]*‡

---

* From Worksheet C: Assign the Intuity AUDIX Split
† If Call Vectoring is used, put a dash in this field.
‡ Use the same number when assigning the data link with Proc 256 Word 1.

You can only enter this number in multiples of 16.

Press [ADD] and [EXECUTE].

001 Word 1   Administer the extensions associated with existing extensions. These associated extensions provide access to ACD splits unless your system uses vectoring.

Do *not* assign an extension that was assigned already in Procedure 000, Word 1.

The Intuity AUDIX system associated extension should be a Direct Inward Dialing (DID) type so outside users can reach the Intuity AUDIX system.

Administer this procedure before going to Procedure 026, Word 2.

Field	Manager II Field Name	Enter
1	Primary Extension	[extension]*
2	Associated Extension	[extension]†

---

* Enter the extension number assigned to the Intuity AU-DIX system split member 0 (the Intuity AUDIX system voice port number 1). From Worksheet B: Voice Port Extensions and Names
† Enter the number dialed by the Intuity AUDIX system subscribers to access the Intuity AUDIX system. From Worksheet C: Assign the Intuity AUDIX Split. Do not enter if vectoring is used.

Press [ADD] and [EXECUTE].

3-**7**

If your switch has been previously assigned, error code 12 may display when the associated extension number is assigned already as an extension number. Remove this extension as a primary extension number by doing the following:

1. Go to Procedure 000, Word 1.

   a. Set Field 1 (Extension or VDN) to the primary extension number.

   b. Press (DISPLAY), (EXECUTE), (REMOVE), and (EXECUTE).

2. Go to Procedure 003, Word 1.

   a. Set Field 1 (Extension) to the [primary extension #].

   b. Press (DISPLAY) and (EXECUTE).

   c. Set Field 2 (Days Remaining in Recent Disconnect) to 0

3. Press (CHANGE) and (EXECUTE).

026 Word 2   Administer the ACD split supervisor and QDN.

⟹ **NOTE:**

If you are using the Call Management System (CMS) to administer splits, you should busy out the CMS before doing the following procedure.

Field	Manager II Field Name	Enter
1	ACD Split	[Intuity AUDIX system split #]*
2	Supervisory Extension	†
3	Queue Directory Number	[Intuity AUDIX system extension]‡
5	Multiple Call Handling	-
6	Auto Available	- (do not activate)

---

* From Worksheet C: Assign the Intuity AUDIX Split
† Enter the extension number assigned to the Intuity AUDIX system split member 0 (the Intuity AUDIX system voice port number 1). From Worksheet B: Voice Port Extensions and Names
‡ From Worksheet C: Assign the Intuity AUDIX Split. If you use Call Vectoring to process calls to the Intuity AUDIX system ACD, leave this field dashed.

Press (ADD) and (EXECUTE).

After administering this procedure, do the following if you have the vectoring feature:

1. If the switch has a CMS, busy it out (Procedure 028 Word 2).

2. Assign a vector (Procedure 030 Word 3).

⟹ **NOTE:**

These steps are easier to do in the CMS.

026 Word 3   Administer the ACD split member characteristics.

Field	Manager II Field Name	Enter
1	ACD Split	[Intuity AUDIX system split #]
2	Member	1
3	Member Extension	[extension number of split member 1]

Press (ADD) and (EXECUTE) after each entry.

Repeat Fields 2 and 3 to add the other members of the Intuity AUDIX system split.

➡ NOTE:

Error code 88 is displayed when the member extension number is not assigned to the Intuity AUDIX system machine number in Procedure 000 Word 2, Field 9. Assign a machine number first.

Assign a Data Link

The data link is the connection from the Intuity system cabinet to the switch Data Communications Interface Unit (DCIU) that enables nonvoice (data) messages to pass between the Intuity AUDIX system and the switch. A Generic 2 or System 85 switch requires one link on a DCIU to be administered for the Intuity AUDIX system.

This section describes how to busy out the DCIU, assign the link, administer the switch maintenance port, release-busy the DCIU, test the DCIU links, and check the system clocks.

Table 3-2. Data Link Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	275 Word 1	15	Tandem Tie Trunk	1	
		16	Trunk-Trunk Calling	1	
		17	DCIU	1	Change
2	275 Word 3	8	Local Switch Number	record #	
		10	Call control FRL	record #	Change
3	258 Word 1	2	Configuration	0	Display*
4	256 Word 1	1	Link	*link #*	Display
		2	Assigned	1	
		3	Baud	6	
		4	Local DTE/DCE	0	
		5	Dial-Up	0	
		6	Protocol	1	
		7	Destination Machine Type	3	
		8	Destination Machine Number	*machine #*†	Change
5	256 Word 2	1	Link	*link #*	
		2	Retransmission Timer	1	
		3	Idle Timer	10	
		4	Maximum Retransmissions	2	
		5	Maximum Unacknowledged Frames	7	Change
6	256 Word 3	1	Link	*link #*	
		2	Activity Timer	180	
		3	Acknowledge Timer	20	
		4	Interrupt Timer	180	
		5	Reset Timer	8	
		6	Restart Timer	8	
		10	Maximum Unacknowledged Packets	4	Change
7	257 Word 5‡	1	Port Number	*local port #* (59,60,61, and 62 are preferred)	
		2	Application Type	13	
		3	Instance Number	*machine #*	Add
8	257 Word 2**	1	Local Port	*local port #* (59,60,61, and 62 are preferred)	
		2	Remote Port	*remote port #* (1 preferred)	Change
9	257 Word 1††	1	Chan A — Link (switch)	0	
		2	Chan A — Logical Channel (local port)	*local port #* (normally 59)	
		3	Chan B — Link (switch)	*link #* (normally 1)	
		4	Chan B — Logical channel (local port)	*channel #* (normally 1)	
		5	Priority	1	
		6	Alternate Routing Flag	0	
		7	Table Indicator	0	Add
10	258 Word 1	1	Reboot DCIU	1	
		2	Configuration	verify = 1	Change
11	258 Word 2	1	Copy Tables	1	Change
12	350 Word 2	1	Feature	58	Add

Table 3-**2.** **Data Link Procedure Overview —** *Continued*

13	261 Word 1	1	Local Adjunct Class	2	
		2	Local Adjunct Number	*machine #*	
		3	Local Adjunct Type	3	
		5	N-digit Format	–	
		6	Message Scrolling	–	
		7	Network Adjunct Number	*ntwk adj # (1-99)*	Add
14	261 Word 2	1	Network Adjunct Class	2	
		2	Network Adjunct Number	*ntwk adj #*	
		3	Adjunct Extension	*Intuity AUDIX system ext/VDN*	Add

   *   If Field 2 does not display 0, enter 1 in Field 1 and press ⸤CHANGE⸥ and ⸤EXECUTE⸥ to change field 2 to 0.

   †   This number must match the machine number used when administering split characteristics in Proc 026 Word 1.

   ‡   Maintenance ports should also be established with the values Field 1=6, Field 2=10, Field 3=1 and Field 1=20, Field 2=10, Field 3=2.

  **   Maintenance ports should also be established with the values Field 1=6, Field 2=20.

  †† Maintenance channels should have the values Field 1=0, Field 2=6, Field 3=0, and Field 4=20.

Verify DCIU and Record Switch Number

275 Word 1   Administer the system COS for the DCIU.

Field	Manager II Field Name	Enter
15	Tandem Tie Trunk	1
16	Trunk-Trunk Calling	1
17	DCIU	1

Press ⸤CHANGE⸥ and ⸤EXECUTE⸥   .

3-**11**

275 Word 3 Use this procedure to record the local switch number and check the Caller Response Interval and the Coverage Point Don't-Answer Interval.

Field	Manager II Field Name	Action
3	Caller Response Interval	*
4	Coverage Point DA Interval	†
8	Local Switch Number	Record this number (if dashed, record 1)
10	Call Control FRL	Record this number.

---

* From Worksheet D: Assign the Data Link. Verify that this is set to the correct number of 2 s intervals. This determines the delay in transfer to the next coverage point. This delay, which causes a period of silence between the final ring at the subscriber's voice terminal and the first ring at the first coverage point, should not be so long as to cause the calling party to feel that the call has been dropped.

† From Worksheet D: Assign the Data Link. Verify that this is set to the correct number, 1-8, of ringing cycles. Local requirements determine the number of ringing cycles before the call continues to the next coverage point. This number must equal the Don't Answer Timing Interval number of ringing cycles specified in Proc 200 Word 1 Field 4. This number applies to ringing at the coverage points, not at the subscriber's voice terminal. The number of ringing cycles before coverage is determined on an individual group basis in Procedure 011, Word 1, Field 6.

Press [CHANGE] and [EXECUTE]   .

258 Word 1 Use this procedure to ensure the scratch-pad is unprotected.

Field	Manager II Field Name	Action
2	Configuration	Check that the number = 0*

---

* If Field 2 does not display 0, enter 1 in Field 1 and press [CHANGE] and [EXECUTE] to change field 2 to 0.

Assign a Link

256 Word 1   Administer the characteristics to a DCIU link.

   a. Set Field 1 (Link) to the [Intuity AUDIX system link #]

   b. Press ⌐DISPLAY⌐ and ⌐EXECUTE⌐   .

At this point, Field 2 should equal 0.

Field	Manager II Field Name	Enter
2	Link Assigned (the AUDIX link)	1 (assumed)
3	Baud Rate	6
4	Local DTE/DCE	0
5	Dial Up	0
6	Protocol	1
7	Destination Machine Type	3
8	Destination Machine Number	[Intuity AUDIX system machine #]*

---

   * From Worksheet C: Assign the Intuity AUDIX Split

Press ⌐CHANGE⌐ and ⌐EXECUTE⌐   .

256 Word 2   Administer the DCIU link BX.25 level two timers and counters.

Field	Manager II Field Name	Enter
1	Link (DCIU physical link)	[Intuity AUDIX system link # (1-8)]*
2	Retransmission Timer	1
3	Idle Timer	10
4	Maximum Retransmissions	2
5	Maximum Unacknowledged Frames	7

---

   * From Worksheet D: Assign the Data Link

Press ⌐CHANGE⌐ and ⌐EXECUTE⌐   .

256 Word 3   Administer the DCIU link BX.25 level 3 timers and counters.

Field	Manager II Field Name	Enter
1	Link (DCIU physical link)	[Intuity AUDIX system link # (1-8)]*
2	Activity Timer	180
3	Acknowledgement Timer	20
4	Interrupt Timer	180
5	Reset Timer	8
6	Restart Timer	8
10	Maximum Unacknowledged Packets	4

---

   *   From Worksheet D: Assign the Data Link

Press [CHANGE] and [EXECUTE]   .

257 Word 5   Administer port reservations for DCIU translations.

Field	Manager II Field Name	Enter
1	Port Number	*
2	Application Type	13
3	Instance Number	[Intuity AUDIX system machine #]

---

   *   From Worksheet D: Assign the Data Link. Enter the Intuity AUDIX system
       local port number (same as assigned in Word 2). The recommended num-
       ber should be 59, 60, 61, or 62.

Press [CHANGE] and [EXECUTE]   .

Verify the following switch maintenance ports:

   1. Set Field 1 to 6

   2. Press [DISPLAY] and [EXECUTE]   .

   3. Verify that Field 2 equals 10.

   4. Verify that Field 3 equals 1.

   5. Set Field 1 to 20.

   6. Press [DISPLAY] and [EXECUTE]   .

   7. Verify that Field 2 equals 10.

8. Verify that Field 3 equals 2.

257 Word 2   Administer DCIU ports for the network channels.

Field	Manager II Field Name	Enter
1	Local Port (administered as the switch port on Intuity system)	59*
2	Remote Port (logical channel on Intuity system)	1

---

* From Worksheet D: Assign the Data Link. Possible range is 1 to 62.

Press (CHANGE) and (EXECUTE)   .

Verify the following switch maintenance ports:

1. Set Field 1 (Local Port) to 6

2. Press (DISPLAY) and (EXECUTE)   .

3. Verify that Field 2 (Remote Port) equals 20.

4. Set Field 2 (Remote Port) to 20

5. Press (DISPLAY) and (EXECUTE)   .

6. Verify that Field 2 (Remote Port) equals 6.

   If these ports are unassigned, assign them as indicated. If they are assigned for some other purpose, call the Technical Service Center (TSC) at 1-800-248-1234 to have them reassigned.

257 Word 1   Administer the components, priority, and alternate routing status of DCIU network channels.

Field	Manager II Field Name	Enter
1	Channel A — Link (switch)	0
2	Channel A — Logical Channel (local port)	*
3	Channel B — Link (switch)	[Intuity AUDIX system link #, normally 1]
4	Channel B — Logical Channel (remote port)	†

5	Priority	1
6	Alternate Routing Flag	0
7	Table Indicator	0

---

* From Worksheet D: Assign the Data Link. Enter the Intuity AUDIX system switch port
number (same as Word 2). Normally this number is 59.
† From Worksheet D. Enter the channel number that matches the logical channel of the
Intuity system.

Press [ADD] and [EXECUTE].

Verify the switch maintenance channel by doing the following:

1. Field 1 [Component A — Link (switch)] equals 0

2. Press [NEXT-DATA] until Field 2 equals 6.

   Field 3 [Component B — Link (switch)] should equal 0 and Field 4 [Component B — Logical Channel (local port)] should equal 20

258 Word 1   Copy the scratch-pad translation tables (temporary tables) to the DCIU machine-used tables. This is used after all DCIU translation changes have been made.

Field	Manager II Field Name	Enter
1	Reboot DCIU	1
2	Configuration	*

---

* Verify that this field equals 1. (This verifies the
old translations in the scratch-pad tables are
protected.)

Press [CHANGE] and [EXECUTE]   .

⇒ **NOTE:**
ChanTran reboots all DCIU links.

⇒ **NOTE:**
The switch software will alarm a DCIU link that is translated but not in service. When the Intuity AUDIX system end of the link comes up during the Intuity AUDIX system testing, return to this procedure and reboot the DCIU.

258 Word 2   Copy the hardware table to the scratch-pad table so they are equal. This procedure also opens the scratch-pad table.

Field	Manager II Field Name	Enter
1	Copy Tables	1

Press $\boxed{\text{CHANGE}}$ and $\boxed{\text{EXECUTE}}$.

Administer and Call Transfer Into Intuity AUDIX

350 Word 2   Administer the dial access codes (DACs).

Field	Manager II Field Name	Enter
1	Feature	58
2	1st digit	[0-9]
3	2nd digit	[0-9]
4	3rd digit	[0-9]
5	4th digit	[0-9]

Press $\boxed{\text{ADD}}$ and $\boxed{\text{EXECUTE}}$.

261 Word 1   Administer the external adjunct message format.

Field	Manager II Field Name	Enter
1	Local Adjunct Class	2
2	Local Adjunct Number	Intuity AUDIX system machine #[*]
3	Local Adjunct Type	3
4	Version Number	—
5	N-Digit Format	—
6	Message Scrolling	—
7	Network Adjunct Number	1-99

---

    *   From Worksheet C: Assign the Intuity AUDIX Split

Press $\boxed{\text{ADD}}$ and $\boxed{\text{EXECUTE}}$.

261 Word 2   Administer the external network adjunct extension.

Field	Manager II Field Name	Enter
1	Network Adjunct Class	2
2	Network Adjunct Number	[network adjunct #]*
3	Adjunct Extension	[Intuity AUDIX system extension or VDN]†

---

* From Workshee D: Assign the Data Link. This is the same as Word 1, Field 7.
† From Worksheet C: Assign the Intuity AUDIX Split

Press [ADD] and [EXECUTE].

Save New Translations

Perform a Run Tape to save the new translations.

If the system has a duplicated common control, the Run Tape operation will update both tapes.

Test DCIU Links

The following procedure is used to test DCIU links from the switch side. This should be performed by local switch maintenance personnel. The appropriate Generic 2 or System 85 maintenance manual describes the equipment and procedures required.

Two types of tests are possible on a per link basis:

1. An internal, automatic loop-around test of the DCIU circuit packs.

2. An external, manual loop-around test providing a more thorough test of the circuit packs.

Internal Loop Test

After entering Procedure 650, press [NEXT^TEST] twice [Field 1 (Test) equals 3].

  a. Enter the link number in Field 6 (Data Link).

  b. Press [BUSY^OUT] .

  c. Wait for Error Code 80.

  d. Press [BUSY^OUT] again [Field 8 (Alarm Status) equals 1].

  e. Press [EXECUTE] (wait lamp is inactive for this test).

  f. Press [STOP] after 8000 bits are sent.

External Loop Test

Set the data module for a loopback test:

■   If a Data Service Unit (DSU) is used, press the $\boxed{\text{LL}}$ button.

⇒ NOTE:
The DSU connection is not officially supported by AT&T.

While still on Test 3 of Procedure 650:

a. Enter 1 in Field 7.

b. Press $\boxed{\text{EXECUTE}}$

c. Press $\boxed{\text{STOP}}$ after 8000 bits are sent.

d. Press $\boxed{\text{RLS^BUSY^OUT}}$.

If either of these tests fail, refer to the switch maintenance manual for procedures to correct the fault.

DCS Administration

4

The Intuity AUDIX system can serve more than one switch when the switches are part of a network such as the AT&T Distributed Communications System (DCS). The switch that hosts the Intuity AUDIX system connects it to the other switches in the network. The Intuity AUDIX system uses the switch's existing DCS trunks for both data and voice communication. This section describes the procedures for administering a Generic 2 or System 85 for an Intuity AUDIX system in a DCS environment.

> **NOTE:**
> The procedures in this section assume that the voice channels are already translated between the switch nodes and the DCS network is up. See the appropriate switch documentation for these procedures.

Data Link Administration

Figure 4-1. shows that DCS switch data connections involves a distant switch, a host switch, and an Intuity AUDIX system. Some coordination is required here when assigning port and channel numbers as described after this figure.

> **NOTE:**
> The GBCS Design Center can assist you when designing a multi-node Intuity Intuity AUDIX DCS system.
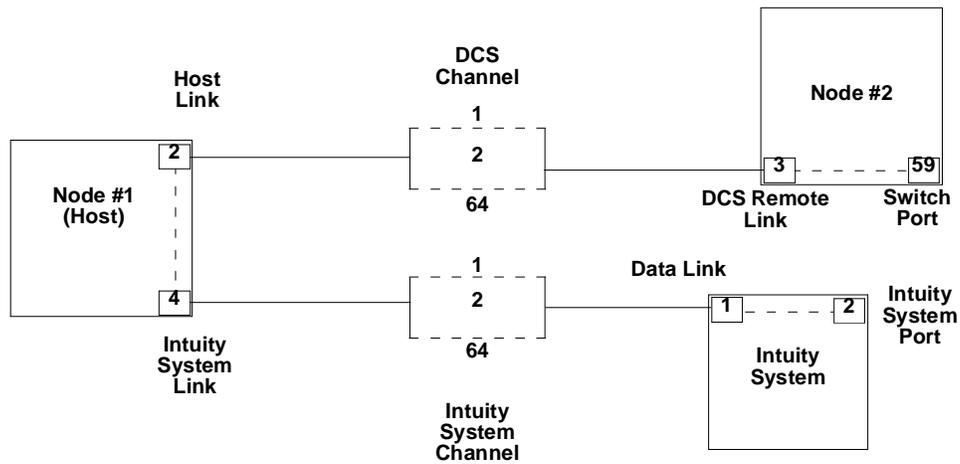
Figure 4-1.   Intuity AUDIX System Data Link to a DCS Switch

Assign a DCS Remote Node

Use the following steps to assign an Intuity AUDIX system switch port at the remote node. This switch processor port is assigned to a spare channel on the DCS link connected to the Intuity AUDIX system host.

Table 4-1.   DCS Remote Node Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	257 Word 5	1	Port Number	*switch port* (normally 59)	
		2	Application Type	`13`	
		3	Instance Number	*Intuity AUDIX system number* (normally 1)	Change
2	257 Word 2	1	Local Port	*switch port*	
		2	Remote Port	*Intuity AUDIX system port*	Change
3	257 Word 1	1	Component A — Link (switch)	`0`	
		2	Component A — Logical Channel (local port)	*switch port*	
		3	Component B — Link (switch)	*DCS node link*	
		4	Component A — Logical Channel (local port)	*DCS channel*	
		5	Priority	`1`	

Table 4-1.   DCS Remote Node Procedure Overview — *Continued*

		6	Alternate Routing Flag	`0`	Add
4	350 Word 2	1	Feature	`58`	
		2	1st digit	`[0-9]`	
		3	2nd digit	`[0-9]`	
		4	3rd digit	`[0-9]`	
		5	4th digit	`[0-9]`	Add
5	261 Word 1	1	Local Adjunct	`2`	
		2	Local Adjunct Number	`[1-8]`*	
		3	Local Adjunct Type	`3`	
		4	Version Number	`-`	
		5	N-digit format	`-`	
		6	N-digit scrolling	`-`	
		7	Network Adjunct Number	`[1-99]`	Change
6	261 Word 2	1	Network Adjunct Class	`2`	
		2	Network Adjunct Number	`[1-99]`†	
		3	Adjunct Extension	*Extension #*	
7	275 Word 3	8	Local System #	*DCS node # for remote switch [1-20]*‡	Change
8	258 Word 1	1	Reboot DCIU	`1`	Change
9	258 Word 2	1	Copy Tables	`1`	Change

---

* This number must equal the AUDIX number administered in Proc 257 Word 5.
† This number equals the number administered for the network adjunct in Proc 261 Word 1.
‡ This number must equal the CAS Main Switch Number in Field 9

257 Word 5   Assign the port application.

Field	Manager II Field Name	Enter
1	Port Number	[switch port]*
2	Application Type	13
3	Instance Number	[Intuity AUDIX machine #]†

---

* From Worksheet D: Assign the Data Link
† From Worksheet C: Assign the Intuity AUDIX Split

Press (CHANGE) and (EXECUTE)   .

257 Word 2   Assign the local/remote port pairing.

Field	Manager II Field Name	Enter
1	Local Port	1- 64 (on remote switch)
2	Remote Port	[Intuity AUDIX machine port]*

---

* From Worksheet D: Assign the Data Link. For simplicity, this number should equal the node # of the host switch.

Press (CHANGE) and (EXECUTE)   .

4-**4**

257 Word 1   Assign the Intuity AUDIX system switch port to the DCS link and channel.

Field	Manager II Field Name	Enter
1	Component A — Link (switch)	0
2	Component A — Logical Channel (local port)	[switch port 1-64]*
3	Component B — Link (switch)	[DCS node link 1-8]*
4	Component B — Logical Channel (local port)	[DCS channel 1-64]*†
5	Priority	1
6	Alternate Routing Flag	0

---

* From Worksheet F: Assign a DCS Remote Node.
† For simplicity, this number should equal the node #.

Press (ADD) and (EXECUTE).

350 Word 2   Administer the dial access codes (DACs).

Field	Manager II Field Name	Enter
1	Feature	58
2	1st digit	[0-9]
3	2nd digit	[0-9]
4	3rd digit	[0-9]
5	4th digit	[0-9]

Press (ADD) and (EXECUTE).

261 Word 1   Associate the internal AUDIX number with the network AUDIX number.

Field	Manager II Field Name	Enter
1	Local Adjunct	2
2	Local Adjunct Number	**[1-8]**
3	Local Adjunct Type	**3**
4	Version Number	**-**
5	N-digit format	-
6	N-digit scrolling	**-**
7	Network Adjunct Number	**[1-99]**

Press (CHANGE) and (EXECUTE)   .

261 Word 2   Administer the external network adjunct extension.

Field	Manager II Field Name	Enter
1	Network Adjunct Class	2
2	Network Adjunct Number	[network adjunct #]*
3	Adjunct Extension	[Intuity AUDIX system extension or VDN]†

---

   * From Workshee D: Assign the Data Link. This is the same as Word 1, Field 7.
   † From Worksheet C: Assign the Intuity AUDIX Split

Press (ADD) and (EXECUTE).

275 Word 3   Update the DCIU's on-line translations.

Field	Manager II Field Name	Enter
8	Local System #	DCS node #

Press (CHANGE) and (EXECUTE)   .

258 Word 1   Update the DCIU's on-line translations.

Field	Manager II Field Name	Enter
1	Reboot DCIU	1

Press (CHANGE) and (EXECUTE)   .

258 Word 2   Refresh the DCIU's scratch-pad.

Field	Manager II Field Name	Enter
1	Copy Tables	1

Press [CHANGE] and [EXECUTE]   .

Save New Translations

Perform a Run Tape to save the new translations.

If the system has a duplicated common control, the Run Tape operation will update both tapes.

Assign an ACD Split at the Remote Switch

Do the procedures in this section at the remote switch.

➡ NOTE:
The procedures in this section are unnecessary if the switch uses vectoring.

When all tie trunks to the host are busy, calls can be routed to the host over alternate facilities. Calls to an Intuity AUDIX system subscriber that must route to the Intuity AUDIX system for coverage must use a tie trunk or the subscriber data will be lost. Make sure these calls stay queued on tie trunks.

In these procedures, use a regular ACD group with only a single member. Call forward the ACD split to the Intuity AUDIX at the host switch.

Table 4-2.   Voice Port Access Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	010 Word 1	1	Class of Service	COS	
		5	Follow Me	1	
		15	Touch-tone Dialing	1	
		20	ACD Member	1	Change
2	000 Word 1	1	Extension or VDN	member 0 ext	
		7	Class of Service	COS	Add
3	100 Word 1	1	Trunk Group	Q trk grp	
		6	Trunk Type	6	Add
4	026 Word 1	1	ACD Split	DCS Intuity AUDIX system split	
		2	Split Size	16	
		4	Queuing Trunk Group	Q trk grp	
		8	Inflow Level	0	
		9	Hunt Type	0 or 2	
		10	Split Type	0	Add
5	001 Word 1	1	Primary Extension	member 0 ext	
		2	Associated Extension	DCS Intuity AUDIX system ext	Add
6	026 Word 2	1	ACD Split	DCS Intuity AUDIX system split	
		2	Supervisor Extension	member 0 ext	
		3	Queue Directory Number	DCS Intuity AUDIX system ext	Add
7	026 Word 3	1	ACD Split	DCS Intuity AUDIX system split	
		2	Member	1–63	
		3	Member Extension	member 0 ext	Add

010 Word 1   Set up a COS for the ACD members.

Field	Manager II Field Name	Enter
1	Class of Service	[COS]*
5	Follow Me	1
15	Touch-tone dialing	1
20	ACD Member	1

---

* From Worksheet G: Assign a Split at the Remote Switch

Press (CHANGE) and (EXECUTE)   .

000 Word 1   Assign an extension number for ACD member 0.

Field	Manager II Field Name	Enter
1	Extension	[member 0 ext]*
7	Class of Service	[COS]†

---

* From Worksheet G: Assign a Split at the Remote Switch
† Enter the [COS] assigned in Procedure 010, Word 1.

Press (ADD) and (EXECUTE).

100 Word 1   Assign a queue trunk group for the ACD.

Field	Manager II Field Name	Enter
1	Trunk Group	[queuing trunk group #]*
6	Trunk Type	6

---

* From Worksheet G: Assign a Split at the Remote Switch

Press (ADD) and (EXECUTE).

026 Word 1   Assign the ACD.

Field	Manager II Field Name	Enter
1	ACD Split	[DCS Intuity AUDIX system split]*
2	Split Size	16
4	Queuing Trunk Group	[queuing trunk group #]†
8	Inflow Level	0
9	Hunt Type	0 or 2‡
10	Split Type	0

---

* From Worksheet G: Assign a Split at the Remote Switch. If you have a
  Call Management System (CMS), use the last available split that is not
  measured.
† From Worksheet G: Assign a Split at the Remote Switch
‡ A circular hunt, 0 is preferred.

Press (ADD) and (EXECUTE).

Administer Procedure 001 Word 1 before going to Procedure 026, Word 2.

001 Word 1   Assign extensions associated with existing extensions to provide
                  access to the ACD split.

Field	Manager II Field Name	Enter
1	Primary Extension	[member 0 extension]*
2	Associated Extension	[DCS Intuity AUDIX system extension]*

---

* From Worksheet G: Assign a Split at the Remote Switch

Press (ADD) and (EXECUTE).

Error code 12 is displayed if the extension number is already assigned as an
extension number. Do *not* remove this extension if it is a working station. If it is not
a working station, remove it according to the procedures in *DEFINITY Communica-
tions System Generic 2 Administration of Features and Hardware*, 555-104-507, or the
appropriate System 85 documentation.

026 Word 2   Administer the ACD split supervisor.

Field	Manager II Field Name	Enter
1	ACD Split	[DCS* Intuity AUDIX system split]
2	Supervisor Extension	[member 0 extension]*
3	Queue Directory Number	[DCS Intuity AUDIX system extension]*

   * From Worksheet G: Assign a Split at the Remote Switch

Press (ADD) and (EXECUTE).

026 Word 3   Administer ACD split member characteristics.

Field	Manager II Field Name	Enter
1	ACD Split	[DCS Intuity AUDIX system split]*
2	Member	1-63
3	Member Extension	[member 0 extension]

   * From Worksheet G: Assign a Split at the Remote Switch

Press (ADD) and (EXECUTE).

Go to the attendant console (if you're on the customer premises) and Call Forward the supervisor extension to the Intuity AUDIX system QDN at the remote location.

Assign a Hop Channel

At the host switch, use the following steps to assign a node's Intuity AUDIX system data channel to hop through the host to the Intuity AUDIX system.

Table 4-3. Hop Channel Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	258 Word 1	2	Configuration	0	Display[*]
2	257 Word 1	1	Component A — Link (switch)	*DCS host link*	
		2	Component A — Logical Channel (local port)	*DCS channel*	
		3	Component B — Link (switch)	*Intuity AUDIX system link*	
		4	Component B — Logical Channel (local port)	*Intuity AUDIX system channel*	
		5	Priority	1	
		6	Alternate Routing Flag	0	Add
3	258 Word 1	1	Reboot DCIU	1	Change
4	258 Word 2	1	Copy Tables	1	Change

---

* If Field 2 does not display 0, enter 1 in Field 1 and press (CHANGE) and (EXECUTE) to change field 2 to 0.

258 Word 1   Use this procedure to ensure the scratch-pad is unprotected.

Field	Manager II Field Name	Action
2	Configuration	Check that the number = 0[*]

---

* If Field 2 does not display 0, enter 1 in Field 1 and press (CHANGE) and (EXECUTE) to change field 2 to 0.

257 Word 1   Assign the hop.

Field	Manager II Field Name	Enter
1	Component A — Link (switch)	[DCS host link]*
2	Component A — Logical Channel (local port)	[DCS channel]*
3	Component B — Link (switch)	[Intuity AUDIX system link]*
4	Component B — Logical Channel (local port)	[Intuity AUDIX system channel]*
5	Priority	1
6	Alternate Routing Flag	0

*   From Worksheet D: Assign the Data Link

Press [ADD] and [EXECUTE].

258 Word 1   Update the DCIU's on-line translations.

Field	Manager II Field Name	Enter
1	Reboot DCIU	1

Press [CHANGE] and [EXECUTE]   .

258 Word 2   Refresh the DCIU scratch-pad translation tables.

Field	Manager II Field Name	Enter
1	Copy Tables	1

Press [CHANGE] and [EXECUTE]   .

Save New Translations

Perform a Run Tape to save the new translations.

If the system has a duplicated common control, the Run Tape operation will update both tapes.

Subscriber Administration on the Remote Node

Assign those subscribers at this DCS node. Subscribers on the host node can use Call Coverage, Send All Calls, LWC, Enhanced Call Transfer, and Call Forwarding.

Table 4-4.   Subscriber Administration on Remote Node Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	011 Word 1	1	Call Coverage Group	grp #	
		2	Extension Activity	1	
		7	Coverage Point Indicator	1	
		8	Coverage Point	1	
		9	Coverage Point Ext/ACD Split/VDN	DCS Intuity AUDIX system split	Add
2	000 Word 2*	6	Coverage Group	coverage path	
		9	LWC Destination	3 (AUDIX) or 1 (switch)	
		10	Intuity AUDIX	machine #	Add
3	063 Word 1	1	Extension	ext #	
		2-6	Module, Cabinet, Carrier, Slot, Circuit	equip loc	Add
4	063 Word 2	1	Extension	ext #	
		3	Intuity AUDIX	1	Display
5	350 Word 2	1	Feature	58	
		2	Digit 1	1st # of DAC	
		3	Digit 2	2nd # of DAC	
		4	Digit 3	3rd # of DAC	
		5	Digit 4	4th # of DAC	Add
6	261 Word 1	1	Local Adjunct Class	2	
		2	Local Adjunct Number	1	
		3	Local Adjunct Type	3	
		7	Network Adjunct Number	net adj #	Add
7	261 Word 2	1	Network Adjunct Class	2	
		2	Network Adjunct Number	net adj #	
		3	Adjunct Extension	Intuity AUDIX system ext #	Change

* Without this procedure, calls cannot forward to the Intuity system.

011 Word 1   Add a coverage group with the Intuity AUDIX system as the coverage point.

Field	Manager II Field Name	Enter
1	Call Coverage Group	[group #]*
2	Extension Activity	1†
7	Coverage Point Indicator	1‡
8	Coverage Point	1 (must be the last coverage point)
9	Coverage Point Ext/ACD Split/VDN	[DCS Intuity AUDIX system split]**

---

* From Worksheet H: Assign the Call Coverage Path for Remote Subscribers
† This prevents calls from ringing on the second or third appearance of the subscriber's extension number. During testing, calls will forward to the Intuity AUDIX system instead of ringing on another appearance.
‡ This shows that the last point is an ACD split rather than an extension.
** From Worksheet G: Assign a Split at the Remote Switch

Press ADD and EXECUTE.

000 Word 2   Administer the CALL COVERAGE fields.

Field	Manager II Field Name	Enter
6	Coverage Group	[coverage path]*
9	LWC Destination	3
10	Intuity AUDIX	[machine #]†

---

* From Worksheet H: Assign the Call coverage Path for Remote Subscribers
† From Worksheet C: Assign the Intuity AUDIX Split. Enter the same number from Procedure 256, Word 1, Field 8 (`Intuity AUDIX`).

⇒ NOTE:

With early releases of software, Message Retrieval cannot be used to check LWC status (digital voice terminal display modules).

Press ADD and EXECUTE.

Repeat Word 2 for the next voice terminal.

063 Word 1   Assign Message Waiting.

Field	Manager II Field Name	Enter
1	Extension	[extension #]
2-6	Module, Cabinet, Carrier, Slot, Circuit	[equipment location]
7	Device Type	[device type]*
8	Member (button)	[member]*

---

   *   From Worksheet H: Assign the Call Coverage Path for Remote Subscribers.   For more information about these fields, see the appropriate Generic 2 or System 85 Administration manual.

Press [ADD] and [EXECUTE].

063 Word 2   Display the extensions that are assigned AMW.

Field	Manager II Field Name	Enter
1	Extension	[extension]*
3	Intuity AUDIX	[machine #]†

---

   *   From Worksheet B: Voice Port Extensions and Names.
   †   Must match the machine number entered for call coverage, procedure 000, Word 2.

Press [DISPLAY] and [EXECUTE]   .

Repeat Procedure 063 for the next new extension.

261 Word 1   Assign Call Transfer Into Intuity AUDIX.

Field	Manager II Field Name	Enter
1	Local Adjunct Class	2
2	Local Adjunct Number	1
3	Local Adjunct Type	3
7	Network Adjunct Number	[1-99]

Press [ADD] and [EXECUTE].

261 Word 2   Administer the external network adjunct extension.

Field	Manager II Field Name	Enter
1	Network Adjunct Class	2
2	Network Adjunct Number	*
3	Adjunct Extension	[Intuity AUDIX system extension]†

---

* Enter the same number as in Procedure 261, Word 1.
† From Worksheet C: Assign the Intuity AUDIX Split

Press [CHANGE] and [EXECUTE]   .

350 Word 2   Assign a dial access code to feature code 58.

Field	Manager II Field Name	Enter
1	Feature	58
2	Digit 1	[first # of DAC]
3	Digit 2	[second # of DAC]
4	Digit 3	[third # of DAC]
5	Digit 4	[fourth # of DAC]

Press [ADD] and [EXECUTE].

Intuity System Administration for Switch Integration

5

In addition to administering the System 85 or G2 to work with the Intuity system, you must administer the Intuity system to work with the switch. The Intuity system needs to know specific information about the switch, such as the switch link or connection type, the switch release, and the switch port. You must define the switch link from the Intuity system to the switch.

This chapter describes how you administer the Intuity system for integration with the switch. Use the Switch Interface Administration screen to enter the required information.

Administer the Intuity System for a Non-DCS Switch Integration

Use the instructions in this section to administer the Intuity system for a Non-DCS switch integration. If you do need to integrate your Intuity system with a DCS network, proceed to the "Administer the Intuity System for a DCS Network Switch Integration" section.

⚠ **CAUTION:**
When you update the Switch Interface Administration screen, the Intuity system resets the DCIU switch link.

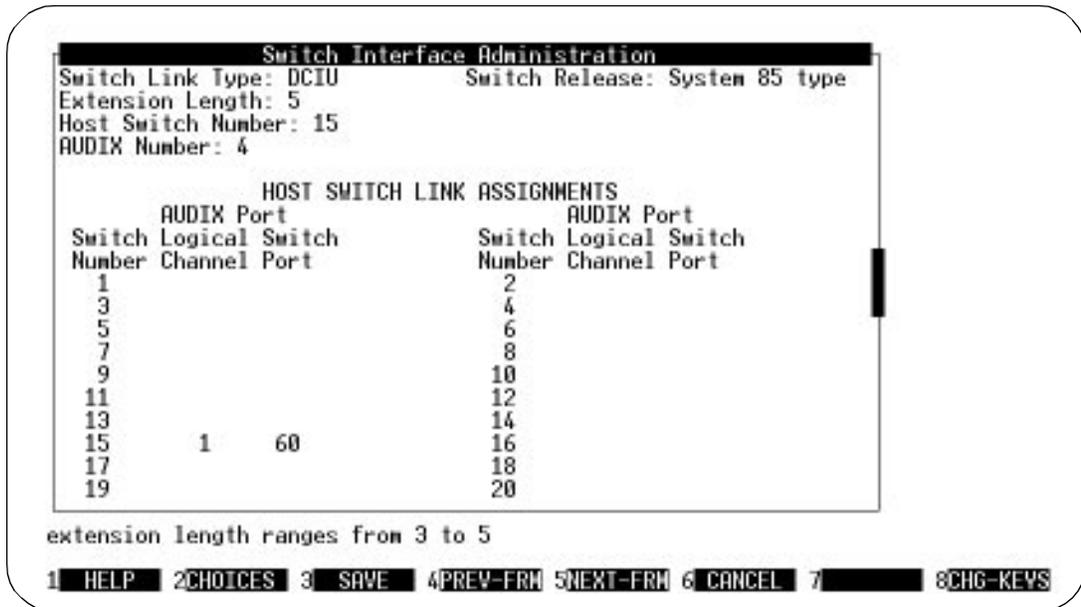1. Access the Intuity system main menu, shown in Figure 5-1.
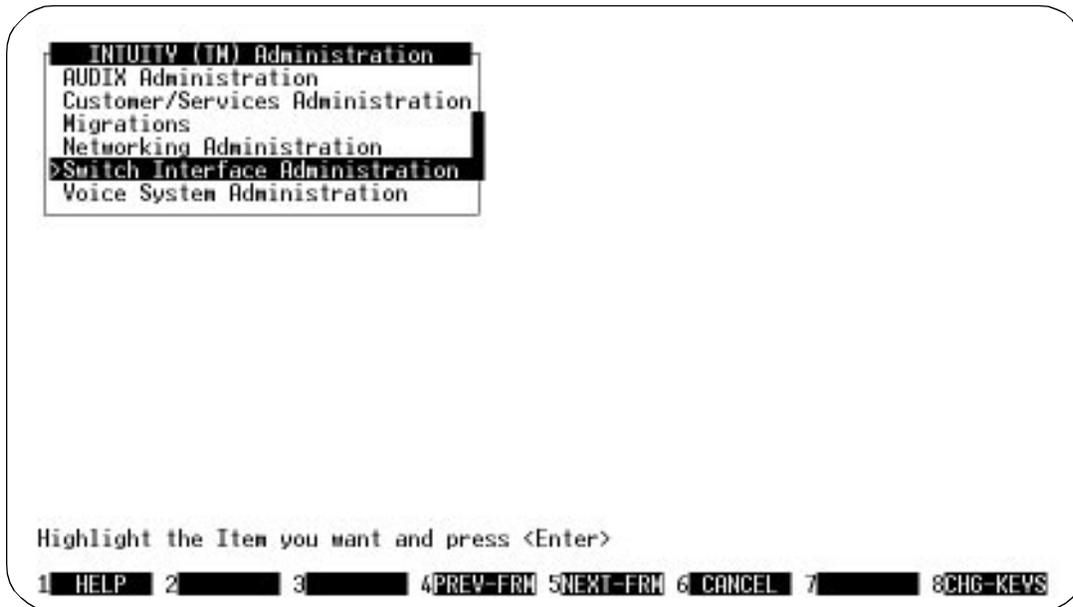
Figure 5-1. Intuity System Main Menu

➡ **NOTE:**
   If you need instructions for logging on to the system and accessing
   the Intuity system main menu, refer to *Intuity AUDIX Administration*.

2. Select Switch Interface Administration from the Intuity system main menu.

   After you select the option, you see the Switch Interface Administration
   screen as shown in Figure 5-2.

```
┌──────────────────────────────────────────────────────────────┐
│            Switch Interface Administration                     │
│ Switch Link Type: DCIU          Switch Release: System 85 type │
│ Extension Length: 5                                            │
│ Host Switch Number: 15                                         │
│ AUDIX Number: 4                                                │
│                                                                │
│                HOST SWITCH LINK ASSIGNMENTS                    │
│           AUDIX Port                       AUDIX Port          │
│ Switch Logical Switch           Switch Logical Switch          │
│ Number Channel Port             Number Channel Port            │
│   1                                2                           │
│   3                                4                           │
│   5                                6                           │
│   7                                8                           │
│   9                               10                           │
│  11                               12                           │
│  13                               14                           │
│  15        1        60            16                           │
│  17                               18                           │
│  19                               20                           │
│                                                                │
│ extension length ranges from 3 to 5                            │
│                                                                │
│ 1  HELP    2CHOICES  3  SAVE   4PREV-FRM 5NEXT-FRM 6 CANCEL  7       8CHG-KEYS │
└──────────────────────────────────────────────────────────────┘
```

Figure 5-2.   Switch Interface Administration window

In Chapter 2, *Switch Integration Planning*, you completed worksheets to help you administer the system. Refer to the worksheets in Chapter 2 as you continue with the DCIU link administration process.

When you access the screen, the cursor appears in the Extension Length field. The Switch Link Type and Switch Release fields are display only. When the switch integration software was installed, the switch link type and switch release information was entered. You cannot change the information in these fields. For more information on the installation process, refer to *Intuity System Software Installation*, 585-310-140.

3. Enter the extension length, 3, 4, or 5, of the dial plan in the Extension Length field. Refer to worksheet B in Chapter 2 to determine the extension length.

4. Enter the number of the host switch in the Host Switch Number field. Valid host switch numbers range from 1 to 20.

5. Enter the logical channel number in the AUDIX Port Logical Channel field. Logical channels range from 1 to 64.

The logical channel is the same number as the Interface Link and the Local DCIU Port Number on the switch. Refer to worksheet D to find the number.

5-3

6. Enter the switch port in the `AUDIX Port Switch Port` field. Valid switch port numbers range from 1 to 64.

7. Press `SAVE` to update the system with the changes you entered.

   After you press the key, you see the message `Update successful` to indicate that the switch link is resetting.

8. Press `CANCEL` to exit the Switch Interface Administration screen and return to the Intuity system main menu.

You have completed the Intuity system administration required for a DCIU switch integration. Proceed to Chapter 6, *Acceptance Test Administration*, and complete the procedures in that chapter.

Administer the Intuity System for a DCS Network Switch Integration

Use the instructions in this section to administer the Intuity system for a DCS network switch integration. Do not perform the procedure in this section unless you have a DCS network already up and functional. Refer to the "Administer the Intuity System for a Non-DCS Switch Integration" section for instructions on administering the Intuity system without DCS.

⚠ CAUTION:
When you update the Switch Interface Administration screen, the Intuity system resets the DCIU switch link.

1. Access the Intuity system main menu, shown in Figure 5-1.

   ### ➡ NOTE:
   If you need instructions for logging on to the system and accessing the Intuity system main menu, refer to *Intuity AUDIX® Voice Messaging Administration and Forms*.

2. Select Switch Interface Administration from the Intuity system main menu.

   After you select the option, you see the Switch Interface Administration screen as shown in Figure 5-2.

   In Chapter 2, *Switch Integration Planning*, you completed worksheets to help you administer the system. Refer to the worksheets in Chapter 2 as you continue with the DCIU link administration process.

   When you access the screen, the cursor appears in the `Extension Length` field. The `Switch Link Type` and `Switch Release` fields are display only. When you installed the switch integration software, you

entered the switch link type and switch release information. You cannot change the information in these fields. For more information on the installation process, refer to *Intuity System Software Installation*, 585-310-140.

3. Enter the extension length, 3, 4, or 5, of the dial plan in the `Extension Length` field. Refer to worksheet B in Chapter 2 to determine the extension length.

4. Enter the number of the host switch in the `Host Switch Number` field. Valid host switch numbers range from 1 to 20.

   In a DCS network, enter the number of the host switch that connects directly to the Intuity system. The number must match the DCS node number on the switch.

5. Enter the AUDIX number in the `AUDIX Number` field. Refer to the Machine-ID field on worksheet D, section 3, or worksheet E, section 3, to find the number.

6. Enter the logical channel number in the `AUDIX Port Logical Channel` field. Logical channels range from 1 to 64.

7. Enter the switch port in the `Switch Port` field. Valid switch port numbers range from 1 to 64.

8. Press SAVE to update the system with the changes you entered.

   After you press the key, you see a message that indicates that the switch link is resetting.

9. Press CANCEL to exit the Switch Interface Administration screen and return to the Intuity system main menu.

You have completed the Intuity system administration required for a DCIU switch integration. Proceed to Chapter 6, *Acceptance Test Administration,* and complete the procedures in that chapter.

Acceptance Test Administration

6

Do not perform any tasks in this chapter until you complete the required tasks in the following appropriate documents:

- *Intuity MAP/40 Voice Processing Hardware Installation*, 585-310-138

- *Intuity MAP/100 Voice Processing Hardware Installation,* 585-310-139

- *Intuity Software Installation*, 585-310-140

The installation documents explain when you must use the instructions in this chapter. If you have not performed the tasks in the installation documents, complete the tasks now. This chapter explains how to administer the switch to perform acceptance tests for the Intuity system. You must perform the following two tasks to administer a System 85 or DEFINITY G2 switch for acceptance tests.

- Administer the coverage path

- Administer the test subscriber stations

As explained in *Intuity New System Planning*, 585-310-603, two test subscribers should have been administered on the switch for acceptance tests. If the test subscribers have not been established, refer to the instructions in the planning document and administer the two test subscribers. After administering the test subscribers, continue with the procedures in this chapter to administer the switch for acceptance tests.

Use the following procedures to cut the Intuity system into service. The procedure describes how to administer the subscribers on the switch and provide them with Intuity system service. Complete this task when you are ready to place the subscribers into service. This task is required to place the Intuity system in an in-service usable state. Make sure that all tasks in *Intuity Software Installation*, 585-310-140, have been completed before you perform the subscriber administration.

You may do the procedures described in this chapter using any of the following switch administration tools.

■   Maintenance and Administration Panel (MAAP)

■   Manager II, III, or IV

Subscriber administration on the switch includes:

■   Defining a coverage path with the Intuity system hunt group as a coverage point.

■   Changing the feature options to enable Leave Word Calling (LWC) reception to the Intuity system.

Assign Switch Features for Intuity AUDIX System Subscribers

To complete administration of the switch for acceptance testing, you must assign to the test subscribers the appropriate switch features and the coverage path to the Intuity AUDIX system. The following table summarizes procedures on this acceptance test administration.

Table 6-1.   Intuity Switch Features Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	010 Word 1	1	Class of Service	COS #	
		4	Busy and Don't Answer	1	
		5	Follow Me	1	
		14	Conference 3-Party/Transfer	1	
		15	Touch-tone Dialing	1	Add
2	010 Word 2	1	Class of Service	COS #	
		2	Originating	1	
		3	Terminating	1	Add
3	011 Word 1	1	Call coverage Group	split #	
		2	Extension Active	0 or nonzero #	
		7	Coverage Point Indicator	1	
		8 or 9	Coverage Point	Intuity AUDIX split	Add
4	000 Word 1	1	Extension or VDN	ext #	
		2-6	Module, Cabinet, Carrier, Slot, Circuit	equip loc	
		7	Class of Service	COS #	Add
5	000 Word 2	1	Extension	ext #	
		6	Coverage Group	coverage grp #	
		9	LWC Destination	3	
		10	AUDIX	machine #	Add
6	063 Word 1	1	Extension	ext	
		2-6	Module, Cabinet,Carrier,Slot,Circuit	equip loc	
		7	Device type	device type	
		8	Member (button)	member	Add

Assign a New COS and New Call Coverage Group to Test Subscribers

Define a call coverage path for test subscribers with the Intuity hunt group as a coverage point. You may need to define several call coverage paths depending on how the customer wants to handle call coverage for groups of subscribers. If the Intuity system has been integrated with an existing switch, you may need to add the Intuity hunt group as another coverage point for existing coverage paths. Refer to worksheet E, *Assign the Call Coverage Path for Subscriber*s, to find the selected coverage paths.

010 Word 1 Administer the features assigned to a station line class of service (COS).

Field	Manager II Field Name	Enter
1	Class of Service	[COS]
4	Busy and Don't Answer	1
5	Follow Me	1
14	Conference 3-Party/Transfer	1
15	Touch-tone Dialing	1

Press CHANGE and EXECUTE .

010 Word 2 Administer the LWC—Origination and LWC—Termination to a COS.

Field	Manager II Field Name	Enter
1	Class of Service	[COS]*
2	Originating	1
3	Terminating	1

___
* This is the same COS as in Word 1.

Press CHANGE and EXECUTE .

6-4

011 Word 1 Administer the criteria, principle don't answer interval, and coverage points of a call coverage group.

Field	Manager II Field Name	Enter
1	Call coverage Group	[group split #]*
2	Extension Active	*0 or nonzero #*†
7	Coverage Point Indicator	1‡
7	ACD Split Indicator	1‡
8,9, or 10	Coverage Point;[Intuity AUDIX system split]**	

---

* If using Call Vectoring, enter the Call Coverage Group Number.

† If you enter, a second appearance of a number to answer on multiappearance voice terminals will appear when the first appearance is active.

If you enter a nonzero number in this field, this field will send subsequent calls to coverage when the first appearance is active. A nonzero value will speed up testing.

‡ This shows that the last point is an ACD split rather than an extension. If Call Vectoring is used, assign a Vector Directory Number (VDN) as the final coverage point.

** To simplify testing, make Intuity AUDIX system split the first and only point in the coverage path.

Press (ADD) and (EXECUTE).

Add the Test Subscriber Stations

After you administer the call coverage path, you must add the test subscriber stations. Each subscriber station must contain the correct information for the Intuity system to operate. For a list of subscriber extensions, refer to *Intuity New System Planning*, (585-310-603).

000 Word 1   Assign an extension number to each voice port using the COS from Procedure 010.

Field	Manager II Field Name	Enter
1	Extension	[extension #]*
2\x15 6	Module, Cabinet, Carrier, Slot, Circuit	[equipment location]
7	Class of Service	[COS]

---

* This must be the same length as the extension numbers assigned to the Intuity AUDIX voice ports.

Press (ADD) and (EXECUTE).

Repeat Procedure 000, Word 1 for the next voice terminal.

000 Word 2   Administer hunt-to extensions and controlled restriction groups associated with an extension.

Field	Manager II Field Name	Enter
1	Extension	[extension]
6	Coverage Group	[coverage group #]
9	LWC Destination	3
10	Intuity AUDIX	[Intuity AUDIX machine #]

Press (ADD) and (EXECUTE).

Repeat Procedure 000, Word 2 for the next extension number.

Assign AMW

063 Word 1   Assign the Automatic Message Waiting (AMW) feature to a straight line set.

Field	Manager II Field Name	Enter
1	Extension	[extension]
2-6	Module, Cabinet, Carrier, Slot, Circuit	[equipment location]
7	Device Type	[device type]*
8	Member (button)	[member]*

---

   *   For more information about these fields, see the appropriate Generic 2 or System 85 Administration manual.

Press [ADD] and [EXECUTE].

Repeat for the next voice terminal.

⇒ NOTE:

For sets that don't have message waiting lights, you will need to assign audible Message Waiting Indication (MWI) (stutter dial tone). See the appropriate Generic 2 or System 85 Administration manual for the procedures.

Cut-to-Service Administration

7

Do not perform any tasks in this chapter until you complete the necessary cut-to-service tasks in the *Cut-to-Service*, of *Intuity System Software Installation,* 585-310-140. The installation document explains when you must use the instructions in this chapter. If you have not performed the tasks in the installation document, complete the tasks now.

This chapter explains how to administer the switch for the Intuity system cut-to-service process. Cutting over an Intuity system requires you to change the coverage path used by all subscribers. Performing a cut-to-service provides all subscribers with voice messaging services. Make sure you have informed your subscribers and trained your attendants *before* you change the coverage path. All Intuity system initial administration, switch administration, and acceptance tests must be completed before you cut the system into service. To perform the cut-to-service process, you must perform the following two tasks:

- Administer the coverage path
- Administer the test subscriber stations

As explained in *Intuity New System Planning*, 585-310-603, two test subscribers should have been administered on the switch for acceptance tests. If the test subscribers have not been established, refer to the instructions in the planning document and administer the two test subscribers. After administering the test subscribers, continue with the procedures in this chapter to administer the switch for acceptance tests.

Continue with the procedures on this chapter to administer the switch for the cut-to-service.

Use the following procedures to cut the Intuity system into service. The procedure describes how to administer the subscribers on the switch and enable them to use the Intuity system. Complete this task when you are ready to place the subscribers into service. Make sure that all tasks in *Intuity System Software Installation*, 585-310-140, are complete before performing the subscriber administration.

You may do the procedures described in this chapter using any of the following switch administration tools.

- Maintenance and Administration Panel (MAAP)
- Manager II, III, or IV

Subscriber administration on the switch includes:

- Defining a coverage path with the Intuity system (split) hunt group as a coverage point.
- Changing the feature options to enable Leave Word Calling (LWC) reception to the Intuity system.

Assign Switch Features for Intuity AUDIX System Subscribers

To put the Intuity AUDIX system into service for your subscribers, you must assign to them the appropriate switch features and the coverage path to the Intuity AUDIX system. The following table summarizes procedures on this cut-to-service administration.

Table 7-1.   Switch Features Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	010 Word 1	1	Class of Service	COS #	
		4	Busy and Don't Answer	1	
		5	Follow Me	1	
		14	Conference 3-Party/Transfer	1	
		15	Touch-tone Dialing	1	Add
2	010 Word 2	1	Class of Service	COS #	
		2	Originating	1	
		3	Terminating	1	Add
3	011 Word 1	1	Call coverage Group	split #	
		2	Extension Active	0 or 1	
		7	Coverage Point Indicator	1	
		8 or 9	Coverage Point	Intuity AUDIX split	Add
4	000 Word 1	1	Extension or VDN	ext #	
		2-6	Module, Cabinet, Carrier, Slot, Circuit	equip loc	
		7	Class of Service	COS #	Add
5	000 Word 2	1	Extension	ext #	
		6	Coverage Group	coverage grp #	
		9	LWC Destination	3	
		10	AUDIX	machine #	Add
6	063 Word 1	1	Extension	ext	
		2-6	Module, Cabinet,Carrier,Slot,Circuit	equip loc	
		7	Device type	device type	
		8	Member (button)	member	Add

Assign a New COS and New Call Coverage Group to Test Subscribers

Define a call coverage path for subscribers with the Intuity hunt group as a coverage point. You may need to define several call coverage paths depending on how the customer wants to handle call coverage for groups of subscribers. If the Intuity system has been integrated with an existing switch, you may need to add the Intuity hunt group as another coverage point for existing coverage paths. Refer to worksheet E, *Assign the Call Coverage Path for Subscriber*s, to find the selected coverage paths.

010 Word 1   Administer the features assigned to a station line class of service (COS).

Field	Manager II Field Name	Enter
1	Class of Service	[COS]
4	Busy and Don't Answer	1
5	Follow Me	1
14	Conference 3-Party/Transfer	1
15	Touch-tone Dialing	1

Press (CHANGE) and (EXECUTE) .

010 Word 2   Administer the LWC—Origination and LWC—Termination to a COS.

Field	Manager II Field Name	Enter
1	Class of Service	[COS]*
2	Originating	1
3	Terminating	1

*   This is the same COS as in Word 1.

Press (CHANGE) and (EXECUTE) .

011 Word 1   Administer the criteria, principle don't answer interval, and coverage points of a call coverage group.

Field	Manager II Field Name	Enter
1	Call coverage Group	[group split #]*
2	Extension Active	0 or 1†
7	Coverage Point Indicator	1‡
7	ACD Split Indicator	1‡
8,9, or 10	Coverage Point;[Intuity AUDIX system split]**	

---

*   If using Call Vectoring, enter the Call Coverage Group Number.
†   If you enter, a second appearance of a number to answer on multiappearance voice terminals will appear when the first appearance is active.

   If you enter a nonzero number in this field, this field will send subsequent calls to coverage when the first appearance is active. A nonzero value will speed up testing.
‡   This shows that the last point is an ACD split rather than an extension. If Call Vectoring is used, assign a Vector Directory Number (VDN) as the final coverage point.
** To simplify testing, make Intuity AUDIX system split the first and only point in the coverage path.

Press ⌈ADD⌉ and ⌈EXECUTE⌉.

Add the Subscriber Stations

After you administer the call coverage path, you must add or change the sub-scriber stations. Each subscriber station must contain the correct information for the Intuity system to operate. For a list of subscriber extensions, refer to *Intuity New System Planning*, 585-310-603.

000 Word 1   Assign an extension number to each voice port using the COS from Procedure 010.

Field	Manager II Field Name	Enter
1	Extension	[extension #]*
2— 6	Module, Cabinet, Carrier, Slot, Circuit	[equipment location]
7	Class of Service	[COS]

---

* This must be the same length as the extension numbers assigned to the Intuity AUDIX voice ports.

Press (ADD) and (EXECUTE).

Repeat Procedure 000, Word 1 for the next voice terminal.

000 Word 2   Administer hunt-to extensions and controlled restriction groups associated with an extension.

Field	Manager II Field Name	Enter
1	Extension	[extension]
6	Coverage Group	[coverage group #]
9	LWC Destination	3
10	Intuity AUDIX	[Intuity AUDIX machine #]

Press (ADD) and (EXECUTE).

Repeat Procedure 000, Word 2 for the next extension number.

Assign AMW

063 Word 1 Assign the Automatic Message Waiting (AMW) feature to a straight line set.

Field	Manager II Field Name	Enter
1	Extension	[extension]
2-6	Module, Cabinet, Carrier, Slot, Circuit	[equipment location]
7	Device Type	[device type]*
8	Member (button)	[member]*

---

* For more information about these fields, see the appropriate Generic 2 or System 85 Administration manual.

Press (ADD) and (EXECUTE).

Repeat for the next voice terminal.

⇒ NOTE:

For sets that don't have message waiting lights, you will need to assign audible Message Waiting Indication (MWI) (stutter dial tone). See the appropriate Generic 2 or System 85 Administration manual for the procedures.

Optional Feature Administration

8

This section describes how to assign Automated Attendant, Call Transfer, Switch Recorded Announcement, and Switch Multiple Coverage Paths on Generic 2 or System 85.

⇒ NOTE:
Those procedures summarized in this section are explained in detail earlier in this chapter.

Automated Attendant Administration

Automated Attendant is an Intuity AUDIX system feature that provides a caller with menu options. The caller can request a department or extension by pressing a touch-tone key. Use the following procedures to administer Automated Attendant at the switch.

The following administration is for customers with DID Service. If DID Service is not provided, consult the AUCC or an AT&T certified services provider for an alternative arrangement.

1. Assign an Automated Attendant extension as a dummy extension.

   Enter a **[COS]** with Call Forwarding enabled.

2. Activate Call Forwarding—All Calls to the Intuity AUDIX system ACD group number.

Automated Attendant Substitute Strategies

A substitute for Automated Attendant is needed so that calls do not go unanswered when the Intuity AUDIX system is busy. Each Intuity AUDIX system must be individually tailored. Consult with AT&T Marketing before using the following suggestions.

Assign the Automated Attendant extension to a real voice terminal, member 0 in an ACD split. Call forward the extension to AUDIX.

For R2V4 1.0, assign a new vector.

- If there are no staffed agents, route to ATTENDANT.
- Queue to main split XX at low priority (XX equals the Intuity AUDIX system ACD number).
- Stop
- Route to ATTENDANT.

For R2V4 1.1 or later, assign a new vector.

System 85 R2V4 1.1 must have Patch 988. Otherwise, use the steps shown for R2V4 1.0.

- If the number of staffed members is less than 1, route to 0.
- If the number of staffed members is equal to or greater than one, calls are directed to the attendant console.

For more details on vectoring, the appropriate switch documentation.

Transfer Into Intuity AUDIX

This feature allows an attendant (or other party) to transfer a caller who has been sent to coverage (or otherwise redirected) back to the Intuity AUDIX system to record a message.

Table 8-1. Transfer Into Intuity AUDIX Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	350 Word 2	1	Feature	58	
		2	Digit 1	*1st # of DAC*	
		3	Digit 2	*2nd # of DAC*	
		4	Digit 3	*3rd # of DAC*	
		5	Digit 4	*4th # of DAC*	Add
2	261 Word 1	1	Local Adjunct Class	2	
		2	Local Adjunct Number	1	
		3	Local Adjunct Type	3	
		7	Network Adjunct Number	*ntwk adj #*	Add
3	261 Word 2	1	Network Adjunct Class	2	
		2	Network Adjunct Number	*ntwk adj #* (from Proc 261 Word 1)	
		3	Adjunct Extension/VDN	*main ext #*	Add
4	000 Word 2	9*	LWC Destination	3	
		10	Intuity AUDIX	*machine #*	Add

* optional step

Call Transfer Into Intuity AUDIX Administration

If used in a DCS, assign the Transfer Into Intuity AUDIX feature access code the same at each node.

350 Word 2   Assign a DAC to feature code 58.

Field	Manager II Field Name	Enter
1	Feature	58
2	Digit 1	[first # of DAC]
3	Digit 2	[second # of DAC]
4	Digit 3	[third # of DAC]
5	Digit 4	[fourth # of DAC]

Press (ADD) and (EXECUTE).

261 Word 1   Assign the Intuity AUDIX system machine to a network adjunct number.

Field	Manager II Field Name	Enter
1	Local Adjunct Class	2
2	Local Adjunct Number	1
3	Local Adjunct Type	3
7	Network Adjunct Number	[1-99]

Press [ADD] and [EXECUTE].

261 Word 2   Assign an external network adjunct extension.

Field	Manager II Field Name	Enter
1	Network Adjunct Class	2
2	Network Adjunct Number	*
3	Adjunct Extension	[main extension #]

---

* This is the same number assigned in Procedure 261, Word 1, Field 7.

Press [ADD] and [EXECUTE].

000 Word 2   Assign each extension to activate the Transfer Into Intuity AUDIX feature in the extension's coverage path. Do the following procedure for each user extension with this feature.

Field	Manager II Field Name	Enter
9	LWC Destination	3*
10	Intuity AUDIX	[Intuity AUDIX system machine #]

---

* This field is optional. Assign it if the users want LWC messages sent and stored in the Intuity AUDIX system instead of the switch.

Press [ADD] and [EXECUTE].

Transfer Into Intuity AUDIX Test

1. Place a voice extension number in the subscriber's call coverage path—coverage point 1. Make the Intuity AUDIX system point 2.

2. Activate Send All Calls for the subscriber.

3. Call the subscriber.

4. At the covering voice terminal, answer the call and (TRANSFER) .

5. Dial the Transfer Into Intuity AUDIX dial access code.

6. Press (TRANSFER) when ringing is heard and hang up.

7. The calling party is connected to the subscriber's mailbox.

8. Repeat this test from the subscriber's voice terminal:

   a. Deactivate Send All Calls.

   b. Call the subscriber's voice terminal from another set.

   c. Answer the call at the subscriber's voice terminal.

   d. Transfer the call using the Transfer Into Intuity AUDIX dial access code.

Switch Recorded Announcement

Use the following procedures to provide a recorded announcement at the switch for anyone that accesses the Intuity AUDIX system, either through a direct call or call redirection. The announcement is heard when all Intuity AUDIX system voice ports are busy and calls start entering the Intuity AUDIX system queue.

Table 8-2. Switch Recorded Announcement Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	100 Word 1	1	Trunk Group	*equip loc*	
		2-5	Digit 1\x15 4	*dial access code*	
		6	Trunk Type	90	Add
2	150 Word 1	1-5	Module, Cabinet, Carrier, Slot, Circuit	*announcement eq loc*	
		6	Trunk Group	*Q trk grp*	Add
3	027 Word 1	1	ACD Split	*ACD Split*	
		2-6	Module, Cabinet, Carrier, Slot, Circuit	*announcement eq loc*	
		7	First Wait Time	*desired delay*	Add

100 Word 1   Assign a 13A announcement system.

Field	Manager II Field Name	Enter
1	Trunk Group	[equipment location]
2-5	Digit 1-4	[DAC]
6	Trunk Type	90

Press (ADD) and (EXECUTE).

150 Word 1   Assign an announcement system to the Intuity AUDIX system queue trunk group.

Field	Manager II Field Name	Enter
1— 5	Module, Cabinet, Carrier, Slot, Circuit	[announcement eq loc]
6	Trunk Group	[Q trunk group]

Press (ADD) and (EXECUTE).

027 Word 1   Assign an announcement system to the Intuity AUDIX system ACD group.

Field	Manager II Field Name	Enter
1	ACD Split	[ACD split]
2— 6	Module, Cabinet, Carrier, Slot, Circuit	[announcement eq loc]
7	First Wait Time	*

---

*   Enter the delay desired before the announcement is heard (administered in 2 second intervals).

Press (ADD) and (EXECUTE).

Switch Multiple Coverage Paths

Multiple coverage paths provide greater flexibility for call-answer treatment. A Generic 2 or System 85 can have two paths linked together (even-odd pair).

A dual coverage path requires an even-odd coverage group pair administered in Procedure 000 and Procedure 011. (The even group number serves as Path 1 for internal calls and the odd as Path 2 for external calls.) Assign the coverage user's extension to the even group number using Procedure 000. Use only paths above 2000 for dual coverage.

Table 8-3. Switch Multiple Coverage Path Procedure Overview

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	000 Word 2	1	Extension	*extension #*	
		6	Coverage Group	*group #*	Add
2	011 Word 1	1	Call Coverage Group	*group #*	
		2	Extension Active	*0,1,2, or 3*	
		3	Extension Busy	*0,1,2, or 3*	
		4	All Calls	*0,1,2, or 3*	
		5	Don't Answer	*0,1,2, or 3*	Add

The procedures below are needed in addition to those required to establish the initial coverage path. These procedures assume that the Intuity AUDIX system uses Path 1.

⚠ CAUTION:
Do not use one-half of the dual coverage path.

000 Word 2   Administer the Extension Number and Coverage Group fields.

Field	Manager II Field Name	Enter
1	Extension	*
6	Coverage Group	[group #]†

---

* Enter the Intuity AUDIX system associated exten-
 sion number (same as Procedure 001, Word 1,
 Field 2).
† Enter the assigned even group number (Path 1).

Press ⌈ADD⌉ and ⌈EXECUTE⌉.

011 Word 1   Administer the Coverage Group and Characteristics fields.

Field	Manager II Field Name	Enter
1	Call Coverage Group	*
2	Extension Active	†
3	Extension Busy	†
4	All Calls	†
5	Don't Answer	†

---

*   For Path 1, enter the even group number assigned
    in Procedure 000, Word 2, Field 1. For Path 2, en-
    ter the odd group number assigned in Procedure
    000, Word 2, Field 1.

†   Enter **0** for no coverage, **1** for coverage on internal
    calls, **2** for coverage on external calls, or 3 for cov-
    erage on either internal or external calls.

Press (ADD) and (EXECUTE).

For example: Coverage (Send All Calls, Leave Word Calling, Busy/Don't Answer)
directs internal calls along Path 1 to the Intuity AUDIX system and external calls
along Path 2 to Message Center.

The following is an example of this administration.

Table 8-4. Example Translations for Switch Multiple Coverage Paths

Step	Procedure	Field	Manager II Field Name	Enter	Press
1	000 Word 2	1	Extension	5325	
		6	Coverage Group	2000	Add
2	011 Word 1	1	Call Coverage Group	2000	
		2	Extension Active	1 (for analog) or 0 (for digital)	
		3	Extension Busy	1	
		4	All Calls	0	
		5	Don't Answer	1	
		7	Coverage Point Indicator	1	
		8	Coverage Point	3	
		9	Cov Pt Ext/ACD Split/VDN	*ACD Split* (Intuity AUDIX system)	Add
		1	Call Coverage Group	2001	
		2	Extension Active	2	
		3	Extension Busy	2	
		4	All Calls	0	
		5	Don't Answer	2	
		7	Coverage Point Indicator	1	
		8	Coverage Point	2	
		9	Cov Pt Ext/ACD Split/VDN	*ACD Split* (MCS)	Add

Switch Administration for INTUITY Lodging

A

Hunt Group Administration

A hunt group is a set of extension numbers assigned to another single number. When a call goes to this number a programmed search of the hunt group is made to deliver the call to a member of the set that is not busy. For example, when two calls are made to the hunt-group extension, they are reconnected to two free extensions from the set. Hunt groups are a commonly-used switch feature. Your switch probably has hunt groups already assigned.

You will need to configure a hunt group for calls to the intuity system. Calls to the number serving the hunt group will then be redirected by the hunt group to the several Intuity system voice ports.

1. Administer your switch to create a hunt group for your Intuity system.

2. Have the voice ports on the Intuity MAP wired to the switch ports that terminate the hunted extensions. Wire them as described in Intuity Installation etc.

Message Retrieval Administration

The message retrieval number is a telephone number that subscribers call to retrieve voice mail messages. Like other calls to Intuity, message retrieval calls ultimately go to the Intuity hunt group.

Message Retrieval in Lodging Systems without AUDIX

1. Give the Intuity hunt group number to subscribers to your system to use for message retrieval.

Message Retrieval in Systems Shared with AUDIX

There must be two message retrieval numbers in a shared system, one to retrieve from the AUDIX application, and one to retrieve from the Lodging application.

Retrieval from the AUDIX Application

1. Give the Intuity hunt group number to your system's subscribers to use for message retrieval from the AUDIX application.

Retrieval from the Lodging Application

1. Administer on your switch an extension number that is not associated with a switch port. (These are often called phantom or dummy numbers.) This number becomes the Lodging message-retrieval number for your system.

2. Configure this number so that the Intuity hunt group is in its coverage path for all calls.

3. Give the Lodging message-retrieval number to subscribers to your system to use for message retrieval from the Lodging application.

Alternate Message Retrieval Method

Besides the message retrieval options offered above, you can allow guests to login from any extension to any mailbox for which they have a password. A guest calls a particular number to access this service then enters an extension number and a password to get messages in the mailbox of the extension of interest.

To provide such a service:

1. Administer on your switch an extension number that is not associated with a switch port. (These are often called phantom or dummy numbers.) This number is to be used to retrieve messages from a remote phone.

2. Configure this number so that the Intuity hunt group is in its coverage path for all calls.

3. If your switch has a password capability, assign a password to the new extension.

4. Assign to the new extension, the service: "ldg_ni_vm."

    a. Log into the Intuity system as sa or craft.

b. Begin at the Intuity Administration menu and pick the following sequence.

>Voice System Administration

Voice Equipment

c. From the Voice Equipment screen, press (F8) then (F3).

d. Select Services to Called Numbers from the Assign menu.

e. Press (F2) and select ldg_ni_vm.

f. Enter the called number that was administered on the switch for this purpose.

g. Press (F3). A command-output screen appears confirming your choice.

h. Press (F6) three times to exit to the Voice Equipment screen.

5. If you want the phantom extension to be available from outside your system, have the extension assigned to a Direct-Inward-Dialing number.

6. Give the Lodging message-retrieval number to subscribers to your system to use for message retrieval from the Lodging application.

Voice Mail Administration

Voice mail is enabled any time the switch sends a guest's call to coverage. The following procedure, however, makes available a separate number that can be used at any time to send voice mail to a guest.

To provide such a service:

1. Administer on your switch an extension number that is not associated with a switch port. (These are often called phantom or dummy numbers.) This number is to be used to send voice messages to your subscribers.

2. Configure this number so that the Intuity hunt group is in its coverage path for all calls.

3. Assign to the new extension, service: "ldg_ni_ca" as follows:

a. Login to the Intuity system as sa or craft.

b. Begin at the Intuity Administration menu and pick the following sequence.

c. From the Voice Equipment screen, press (F8) then (F3).

d. Select Services to Called Numbers from the Assign menu.

e. Press (F2) and select ldg_ni_ca

f. Enter the called number of your choice.

        g. Press (F3). A command-output screen appears confirming your choice.

        h. Press (F6) three times to exit to the Voice Equipment screen.

4. If you want the phantom extension to be available from outside your system, have the extension assigned to a Direct-Inward-Dialing number.

5. Give the Lodging voice-mail number to subscribers to your system so they can send voice mail among themselves.

Call Coverage Path

A coverage path directs the switch to transfer unanswerable calls to a hunt group, to a service, or to another extension. These may be calls that are unanswered or calls to a busy extension. When a call goes to coverage, the switch forwards the called number to the Intuity system. The Intuity system discovers that the called number is administered as a particular subscriber's extension and treats the call as one to be answered and recorded. Depending on how the extension is listed, the call may be answered by either the AUDIX or Lodging application.

1. Administer your switch to assign call coverage to the Intuity hunt group number for each guest's extension.

Do Not Disturb

Look for features on your switch that adapt themselves especially well to lodging situations. One example is the Do not Disturb feature on some switches. This feature makes it possible to request that a particular extension not receive calls until a specified time. At the specified time, the switch automatically deactivates the feature and allows calls to terminate normally at the extension.

If this extension is covered to the Intuity hunt group, then calls received while Do-not-Disturb is active will be recorded for later perusal.

The AT&T Definity G3 switches offer an example of a Do not Disturb feature. In this case, switch administration for the feature is covered in the implementation book for your switch.

Cut to Service

A cut to service of the Intuity Lodging application amounts to changing the coverage path for guest extensions to the Intuity hunt group. The associated system must have been completely installed before you cut the Intuity Lodging application into service. Furthermore, all Intuity system initial administration, associated switch administration, and acceptance tests must have been completed.

Some switching systems make it possible to define these extensions to be a set and to change the coverage path for all guests at a single stroke. Most switching systems make it possible to change the coverage path for guest extensions one extension at a time. You may choose to use either method.

Gradual Cut to Service

Using this cut-to-service strategy, you enter guests into the Intuity Lodging system as they check in. Only new guests, not current guests, receive Intuity Lodging services.

The advantages of this method include:

- Attendants can learn to cope with the new system without having to answer the questions of large numbers of guests

- No guest has to learn both the old system and the new one. Current guests use the old system, new guests use the Intuity Lodging system.

- You can assign custom passwords and language options to each guest as the guest is checked in.

Gradually cut to service as follows:

1. Administer your switch to send call coverage for the guest's telephone to the Intuity hunt group.

2. Check in each new guest as described in *Intuity Lodging Administration and Feature Operations*.

One-Step Cut to Service

On switches where a coverage path is separately defined and then applied to a class of stations, it is possible to subject all guest stations to Intuity Lodging at once. Using this cut-to-service strategy, you change all of the guest stations to Intuity Lodging at the same time.

The advantages of this method include:

- Since Intuity Lodging is brought up in one step, attendants must only cope with one call-answering system at a time.

- The cut-to-service job is over at once. Guests needn't wonder why some guests have one service and some another.

- You can assign reasonable coverage options to all guests at once and modify administration for the few that have unusual requirements.

Cut to service as follows:

1. Administer, by means of Intuity Lodging administration, the options your guests will enjoy.

A-**5**

2. Make sure your guests and attendants know when the change will take place and that they have some idea of how their new service will work.

3. On your switch, determine the coverage path that applies to your guests' stations.

4. Access your switch administration method for changing a coverage path. Set the new coverage path for your guests' stations to the Intuity hunt group.

Abbreviations

A

AC
alternating current

ACD
automatic call distribution

ADAP
administration and data acquisition package

ADU
asynchronous data unit

ALT
assembly load and test

AMIS
Audio Messaging Interchange Specification

API
application programming interface

AUDIX
Audio Information Exchange

AWG
American wire gauge

B

BIOS
basic input/output system

bit
binary digit

bps
bits per second

BRI
basic rate interface

BSC
binary synchronous communications

BTU
British thermal unit

C

CAS
call accounting system

CCA
call classification analysis

CDH
call data handler process

CELP
code excited linear prediction

CICS
customer information control system

CMS
call management system

CO
central office

COIN
central office implemented network

COM1
serial communications port 1

COM2
serial communications port 2

COR
class of restriction

COS
class of service

CPU
central processing unit

CSI
called subscriber information

CTS
clear to send

D

DAC
dial access code

DBP
database processor

DC
  direct current

DCE
  data communications equipment

DCIU
  data communications interface unit

DCP
  digital communications protocol

DCS
  distributed communications system

DID
  direct inward dialing

DIP
  data interface process

DMA
  direct memory access

DNIS
  dialed number identification service

DSP
  digital signal processor

DSR
  data set ready

DSU
  data service unit

DTE
  data terminal equipment

DTMF
  dual tone multifrequency

DTR
  data terminal ready

E

EIA
  Electronic Industries Association

ESD
  electrostatic discharge

ESS
  electronic switching system

F

F key
  function key

FIFO
  first-in first-out

FOOS
  facility out of service

G

GBCS
  Global Business Communications Systems

GOS
  grade of service

H

Hz
  hertz

I

I/O
  input/output

IDI
  isolating data interface

IMAPI
  Intuity messaging application programming interface

INADS
  initialization and administration system

IRQ
  interrupt request

ISDN
  integrated services digital network

IVC6
  integrated voice CELP card (6 channels)

IVR
  integrated voice response

ABB-2   Issue N   December 1994

K

Kbps
kilobits per second

Kbyte
kilobyte (1024 bytes)

kHz
kilohertz

L

LAN
local area network

LCD
liquid crystal display

LED
light-emitting diode

LIFO
last-in first-out

LWC
leave word calling

M

MANOOS
manually out of service

Mbyte
megabyte (one million bytes)

MHz
megahertz

modem
modulator/demodulator

MPDM
modular processor data module

ms
millisecond

MT
maintenance (Intuity software component)

MTBF
mean time between failures

MWI
message-waiting indicator

MWL
message-waiting lamp

N

NW
Intuity AUDIX Digital Networking

O

OA&M
operations, administration, and maintenance

OS
operating system

OSI
open systems interconnection

P

PBX
private branch exchange

PC
power converter or personal computer

PDM
processor data module

PEC
price element code

PIB
processor interface board

PMS
property management system

POST
power-on self test

R

RAM
random-access memory

REN
ringer equivalence number

ROM
read-only memory

RTS
request to send

RTU
right to use

S

SCA
switch communications adapter

SCSI
small computer systems interface

SID
switch integration device

SIMM
single in-line memory module

SMSI
simplified message service interface

SW
switch integration (Intuity software component)

T

TCP/IP
Transmission Control Protocol/Internet Program

TDD
telecommunications device for the deaf

TDM
time division multiplex

T/R
tip/ring

TRIP
tip/ring input process

TSC
AT&T's Technical Services Center

U

UCD
uniform call distribution

UPS
uninterruptible power supply

V

VM
Intuity AUDIX Voice Messaging

VP
voice platform (Intuity software component)

VROP
voice response output process

ABB-4 Issue N December 1994

Glossary

5ESS Switch
An AT&T central office switch that can be integrated with the AT&T Intuity system.

A

accessed message
A message that was received and scanned (either the entire message or just the header).

ACD
See *automatic call distribution*.

activity menu
The list of options spoken to subscribers when they first access a messaging system. Selecting an activity is the starting point for all user operations.

ADAP
See *administration and data acquisition package*.

address
Intuity AUDIX subscriber identification, containing the subscriber's extension and machine, that indicates where the system needs to deliver a message. An address may include several subscribers or mailing lists. Name or number addressing can be selected with the *A command.

adjunct
A separate system closely integrated with a switch, such as an AT&T Intuity system or a call management system (CMS).

administration
The process of setting up a system (such as a switch or a messaging system) to function as desired. Options and defaults are normally set up (translated) by the system administrator or service personnel.

administration and data acquisition package (ADAP)
A software package that allows the system administrator to transfer system subscriber, maintenance, or traffic data from an Intuity AUDIX system to a personal computer (PC).

ADU
See *asynchronous data unit*.

alarm log
A list of alarms that represent all of the active or resolved problems on an AT&T Intuity system. The alarm log is stored in a software file on disk and can be accessed either locally or remotely on a terminal connected to the system.

alarms
Hardware, software, or environmental problems that may affect system operation. Alarms are classified as major, minor, or warning.

alphanumeric
Alphabetic, numeric, or punctuation symbols.

ALT

See *assemble load and test.*

AMIS

See *Audio Messaging Interchange Specification*.

AMIS Prefix

A number added to the destination number to indicate that the destination number is an AMIS analog networking number.

ampere (amp)

The unit of measurement of electric current. One volt of potential across one ohm causes a current flow of one amp.

analog networking

A method of transferring a message from one messaging system to another whereby the message is played back (voiced) during the transmission from one system to another.

analog signal

A communications path that, in teleprocessing usage, usually refers to a voice-grade telephone line.

announcement fragment

A numbered piece of spoken information that makes up a system message or prompt.

antistatic

A material that is treated to prevent the build-up of static electricity.

API

See *application programming interface.*

application programming interface

A set of formalized software calls and routines that can be referenced by an application program to access underlying network services.

assemble load and test

The factory process that preloads software, installs hardware, and tests the system prior to shipping.

asynchronous communication

A method of data transmission in which bits or characters are sent at irregular intervals and bits or characters are spaced by start and stop bits and not by time. See also *synchronous communication*.

asynchronous data unit (ADU)

An electronic communications device that can extend data transmission over asynchronous lines more than 50 feet in length. Recommended ADUs include Z3A1 or Z3A4.

asynchronous transmission

A form of serial communications where each transmitted character is bracketed with a start bit and one or two stop bits. The AT&T Intuity system provides asynchronous RS-232 capabilities for Intuity AUDIX Digital Networking, if required.

attendant console

A special purpose phone with numerous lines and features located at the front desk. The front desk attendant uses the phone to answer and transfer calls.

Audio Messaging Interchange Specification (AMIS)
An analog networking protocol that allows subscribers to exchange messages with any messaging system that also has AMIS Analog Networking capabilities. Messages can be exchanged with subscribers on AT&T Intuity systems as well as with users on remote messaging systems made by vendors other than AT&T.

Audio Information Exchange (AUDIX)
A complete messaging system accessed and operated by touch-tone telephones and integrated with a switch.

audit
A software program that resolves filesystem incompatibilities and updates restored filesystems to a workable level of service. Audits are done automatically on a periodic basis, or can be performed on demand.

AUDIX
See *Audio Information Exchange*.

autodelete
An Intuity AUDIX feature that allows subscribers to indicate that faxes are automatically deleted from their mailbox after being printed.

automated attendant
A feature that allows a user of an Intuity system to set up a main extension number with a menu of options that routes callers to an appropriate department at the touch of a button.

automatic call distribution (ACD)
The System 85, Generic 2, or Generic 3 call-distribution group of analog ports that connects Intuity subscribers and users to the system. See also *call-distribution group*.

automatic message scan
An Intuity AUDIX feature that allows subscribers to scan all message headers and messages at the touch of two buttons. With Intuity FAX Messaging, this feature allows all new faxes to be bundled and transmitted over a single fax call delivery call. Also called *autoscan*.

autoprint
An Intuity AUDIX feature that allows subscribers to indicate that faxes are automatically sent to a specified print destination.

autoscan
See *automatic message scan*.

AWG
See *American wire gauge*.

American wire gauge
A standard measuring gauge for non-ferrous conductors.

B

background testing
Testing that runs continuously when the system is not busy doing other tasks.

backup
A duplicate copy of files and directories saved on a removable media such as floppy diskette or tape. The backup filesystem may be copied back (restored) if the active version is damaged (corrupted) or lost.

basic input/output system (BIOS)
A system that contains the buffers for sending information from a program to the actual hardware device the information should go to.

baud
A unit of measurement that describes the speed of transferred information.

baud rate
Transmission signaling speed.

basic call transfer
A switch hook-flash method used to send the Intuity AUDIX transfer command over analog voice ports.

basic rate access
See *basic rate interface*.

basic rate interface (BRI)
International standard protocol for connecting a station terminal to an integrated systems digital network (ISDN) switch. ISDN BRI supports two 64 Kbps information bearer channels (B1 and B2), and one 16 Kbps call status and control (D) channel (a 2B + D format). Also called b*asic rate access*.

binary digit (bit)
Two-number notation that uses the digits 0 and 1. Low-order bits are on the right (for example, 0001=1, 0010=2, and so forth). Four bits make a nybble; eight bits make a byte.

binary synchronous communications (BSC)
A character-oriented synchronous link protocol.

BIOS
See *basic input/output system*.

bit
See *binary digit*.

body
The part of subscriber voice mail that contains the actual spoken message. For a leave word calling (LWC) message, it is a standard system announcement.

boot
The operation to start a computer system by loading programs from disk to main memory (part of system initialization). Booting is typically accomplished by physically turning on or restarting the system. Also called *reboot*.

boot filesystem
The filesystem from which the system loads its initial programs.

bps (bits per second)
The number of binary units of information (1s or 0s) that can be transmitted per second. Mbps refers to a million bits per second; Kbps refers to a thousand bits per second.

BRI
See *basic rate interface*.

broadcast messaging
An Intuity AUDIX feature that enables the system administrator and other designated users to send a message to all subscribers automatically.

BSC
See *binary synchronous communications*.

buffer
Memory used to compensate for time differences in transmission by temporarily storing data.

bulletin board
An Intuity AUDIX feature that allows a message to be played to callers who dial the extension. Callers cannot leave a message since it is a listen-only service. Also called *information service*.

bundling
Combining several calls and handling them as a single call. See also *automatic message scan*.

bus
An electrical connection/cable allowing two or more wires, lines, or peripherals to be connected together.

busy-out/release
To remove an Intuity device from service (make it appear busy or in use), and later restore it to service (release it). The Intuity switch data link, voice ports, or networking ports may be busied out if they appear faulty or if maintenance tests are run.

byte
A unit of storage in the computer. On many systems, a byte is eight bits (binary digits), the equivalent of one character of text.

C

call accounting system (CAS)
A software device that monitors and records information about a calling system.

call-answer
An Intuity AUDIX or AT&T Intuity Lodging feature that allows the system to answer a call and record a message when the subscriber is unavailable. Callers may be redirected to the system through the call coverage or call forwarding switch features. Intuity AUDIX subscribers may record a personal greeting for these callers.

call-answer language choice
The capability of subscriber mailboxes to accept messages in different languages. For the Intuity AUDIX application, this capability exists when the multilingual feature is turned on.

callback number
In AMIS analog networking, the telephone number transmitted to the recipient machine to be used in returning messages that cannot be delivered.

call coverage
A switch feature that defines a preselected path for calls to follow if the first (or second) coverage points are not answered. The Intuity system may be placed at the end of a coverage path to handle redirected calls through call coverage, send all calls, go to cover, etc.

call delivery
See *message delivery.*

call-distribution group
The set of analog port cards on the switch that connects subscribers and users to the Intuity system by distributing new calls to idle ports. This group (or split) is called automatic call distribution (ACD) on System 85, Generic 2, and Generic 3 and uniform call distribution (UCD) on System 75, Generic 1, and Generic 3. See also *automatic call distribution* and *uniform call distribution*.

call management system (CMS)
An inbound call distribution and management reporting package.

called tone (CED tone)
The distinctive tone generated by a fax endpoint when it answers a call (constant 2100 Hz tone).

called subscriber information (CSI)
The identifier for the answering fax endpoint. This identifier is sent in the T.30 protocol and is generally the telephone number of the fax endpoint.

calling tone (CNG tone)
The distinctive tone generated by a fax endpoint when placing a call (constant 1100 Hz tone on for one-half second, off for three seconds).

call vectoring
A System 85 R2V4, Generic 2, and Generic 3 feature that uses a vector (switch program), allowing a switch administrator to customize the behavior of calls sent to an automatic call distribution (ACD) group.

card cage
An area within the Intuity hardware platform that contains and secures all of the standard and optional circuit cards used in the system.

cartridge tape drive
A high-capacity data storage/retrieval device that can be used to transfer large amounts of information onto high-density magnetic cartridge tape based on a predetermined format. This tape is to be removed from the system and stored as a backup.

CAS
See *call accouting system*.

CED tone
See *called tone.*

CELP
See *code excited linear prediction.*

central office (CO)
An office or location in which large telecommunication machines such as telephone switches and network access facilities are maintained. In a CO, private customer lines are terminated and connected to the public network through common carriers.

central processing unit (CPU)
   The component of the computer that manipulates data and processes instructions coming from software.

channel
   A telecommunications transmission path for voice and/or data.

channel capacity
   A measure of the maximum bit rate through a channel.

CICS
   See *customer information control system*.

class of service (COS)
   The standard set of Intuity AUDIX features given to subscribers when they are first administered (set up with a voice mailbox).

clear to send (CTS)
   Located on Pin 5 of the 25-conductor RS-232 interface, CTS is used in the transfer of data between the computer and a serial device.

client
   A computer that sends, receives and uses data, but that also shares a larger resource whose function is to do most data storage and processing. For Intuity Message Manager, the subscriber's PC running Message Manager is the client. See also *server*.

CMS
   See *call management system*.

CNG tone
   See *calling tone*.

CO
   See *central office*.

COS
   See *class of service*.

code excited linear prediction
   An analog-to-digital voice coding scheme.

collocated
   An Intuity system installed in the same physical location as the host switch. See also *local installation*.

collocated adjunct
   Two or more adjuncts that are serving the same switch (i.e., each has voice port connections to the switch) or that are serving different switches but can be networked through a direct RS-232 connection due to their proximity.

comcode
   AT&T's numbering system for telecommunications equipment. Each comcode is a nine digit number that represents a specific piece of hardware, software, or documentation.

command
   An instruction or request given by the user to the software to perform a particular function. An entire command consists of the command name and options. Also, one- or two-key touch tones that control a mailbox activity or function.

compound message
A message that combines both a message and a fax message into one unit, which is then handled by Intuity AUDIX as a single message.

configuration
The particular combination of hardware and software components selected for a system, including external connections, internal options, and peripheral equipment.

controller circuit card
A circuit card used on a computer system that controls its basic functionality and makes the system operational. These cards are used to control magnetic peripherals, video monitors, and basic system communications.

COS
See *class of service*.

coverage path
The sequence of alternate destinations to which a call is automatically sent when the call is not answered by a subscriber. This sequence is set up on the switch, normally with the AT&T Intuity system as the last or only destination.

CPU
See *central processing unit*.

cross connect
Distribution system equipment used to terminate and administer communication circuits.

cross connection
The connection of one wire to another, usually by anchoring each wire to a connecting block and then placing a third wire between them so that an electrical connection is made.

CSI
See *called subscriber information*.

CTS
See *clear to send*.

D

DAC
See *dial access code*.

database
A structured set of files, records, or tables. Also, a collection of filesystems and files in disk memory that store the voice and nonvoice (program data) necessary for AT&T Intuity system operation.

data communications equipment (DCE)
Standard type of data interface normally used to connect to data terminal equipment (DTE) devices. DCE devices include the data service unit (DSU), the isolating data interface (IDI), and the modular processor data module (MPDM).

data communications interface unit (DCIU)
A switch device that allows nonvoice (data) communication between an AT&T Intuity system and an AT&T switch. The DCIU is a high-speed synchronous data link that communicates with the

common control switch processor over a direct memory access (DMA) channel that reads data directly from FP memory.

data link

A term used to describe the communications link used for data transmission from a source to a destination. For example, a phone line for data transmission.

data service unit (DSU)

A device used to access digital data channels. DATAPHONE II 2500 DSUs are synchronous data communications equipment (DCE) devices used for extended-local AT&T Intuity system connections. The 2600 or 2700 series may also be used; these are more expensive DSU options and support diagnostic testing and the DATAPHONE II Service network system.

data set

AT&T term for a modem. A data set usually includes the telephone. See also *modem*.

data terminal equipment (DTE)

Standard type of data interface normally used for the endpoints in a connection. Normally the AT&T Intuity system, most terminals, and the switch data link are DTE devices.

data terminal ready (DTR)

A control signal sent from the data terminal equipment (DTE) to the data communications equipment (DCE) that indicates the DTE is on and ready to communicate.

DBP

See *data base processor*.

DCE

See *data communications equipment*.

DCIU

See *data communications interface unit*.

DCP

See *digital communications protocol*.

DCS

See *distributed communications system*.

debug

See *troubleshoot*.

dedicated line

A communications path that does not go through a switch. A dedicated (hard-wired) path may be formed with directly connected cables. MPDMs, DSUs, or other devices may also be used to extend the distance that signals can travel directly through the building wiring.

default

A value that is automatically supplied by the system if no other value is specified.

default print number

The subscriber-administered extension to which autoprinted faxes are redirected upon their receipt into the subscriber's mailbox. This default print destination is also provided as a print option when the subscriber is manually retrieving and printing faxes from the mailbox.

delivered message

A message that has been successfully transmitted to a recipient's incoming mailbox.

demand testing

Testing performed on request (usually by service personnel).

diagnostic testing
A program run for testing and determining faults in the system.

dial-ahead/dial-through
The act of interrupting or preceding Intuity AUDIX system announcements by typing (buffering) touch-tone commands in the order the system would normally prompt for them.

dialed number identification service (*DNIS_SVC)
An available channel service assignment on the AT&T Intuity system. Assigning this service to a channel permits the AT&T Intuity system to interpret information from the switch and operate the appropriate application for the incoming telephone call.

DID
See *direct inward dialing*.

digital
Discrete data or signals such as 0 and 1, as opposed to analog continuous signals.

digital communications protocol (DCP)
A 64 Kbps digital data transmission code with a 160 Kbps bipolar bit stream divided into two information (I) channels and one signaling (S) channel.

digital networking
A method of transferring messages between messaging systems in a digital format. See also *Intuity AUDIX Digital Networking*.

digital signal processor
A specialized digital microprocessor that performs calculations on digitized signals that were originally analog and then sends the results on.

DIP
See *data interface process*.

DIP switch
See *dual in-line package switch*.

direct inward dialing
The ability for a caller outside a company to call an internal extension without having to pass through an operator or attendant.

direct memory access (DMA)
A quick method of moving data from a storage device directly to RAM, which speeds processing.

directory
An Intuity AUDIX feature allowing you to hear a subscriber's name and extension after typing **N at the activity menu. Also, a group of related files accessed by a common name in software.

display terminal
A data terminal with a screen and keyboard used for displaying AT&T Intuity screens and performing maintenance or administration activities.

distributed communications system (DCS)
A network of two or more switches that uses logical and physical data links to provide full or partial feature transparency. Voice links are made using tie trunks.

distribution list
See *mailing list*.

DMA
See *direct memory access*.

DNIS
See *dialed number identification service*.

DSP
See *digital signal processor*.

DSU
See *data service unit*.

DTE
See *data terminal equipment*.

DTMF
See *dual tone multifrequency*.

dual in-line package (DIP) switch
A very small switch, usually attached to a printed circuit card, in which there are only two settings: on or off (or 0 or 1). DIP switches are used to configure the card in a semipermanent way.

dual language greetings
The capability of Intuity AUDIX subscribers to create personal greetings in two different languages — one in a primary language and one in a secondary language. This capability exists when the multilingual feature is turned on and the prompts for subscriber mailboxes can be in either of the two languages.

dual tone multifrequency
A way of signaling consisting of a pushbutton or touch tone dial that sends out a sound which consists of two discrete tones picked up and interpreted by telephone switches.

E

electrostatic discharge (ESD)
Discharge of a static charge on a surface or body through a conductive path to ground. An ESD can be damaging to integrated circuits.

enabled/disabled
The state of a hardware device that indicates whether the AT&T Intuity system can use it. Devices must be equipped before they can be enabled (made active). See also *equipped/unequipped*.

endpoint
See *fax endpoint*.

enhanced call transfer
An Intuity AUDIX feature that allows compatible switches to transmit messages digitally over the BX.25 (data) link. This feature is used for quick call transfers and requires a fully integrated digital switch. Callers can only transfer to other extensions in the switch dial plan.

enhanced serial data interface
A software- and hardware-controlled method used to store data on magnetic peripherals.

equipped/unequipped
The state of a networking channel that indicates whether AT&T Intuity software has recognized it. Devices must be equipped before they can be enabled (made active). See also *enabled/ disabled*.

error message
A message on the screen indicating that something is wrong and possibly suggesting how to correct it.

errors
Problems detected by the system during operation and recorded in the maintenance log. Errors can produce an alarm if they exceed a threshold.

escape from reply
The ability to quickly return to getting messages for a subscriber who gets stuck trying to respond to a message. To escape, the subscriber simply presses #.

escape to attendant
An Intuity AUDIX feature that allows a subscriber with the call answer feature to have a personal attendant or operator administered to potentially pick up an unanswered call. A system-wide extension could also be used to send callers to a live agent.

ESD
See *electrostatic discharge*.

events
Informational messages about the system's activities. For example, an event is logged when the system is rebooted. Events may or may not be related to errors and alarms.

F

facility out-of-service
The current channel is not receiving a dial tone and is not functioning.

fax endpoint
Any device capable of receiving fax calls. Fax endpoints include fax machines, individual PC fax modems, fax ports on LAN fax servers, and ports on fax-enabled messaging systems.

field
An area on a screen, menu, or report where information can be typed or displayed.

FIFO
See *first-in/first-out*.

file
A collection of data treated as a basic unit of storage.

filename
Alphanumeric characters used to identify a particular file.

file redundancy
See *mirroring*.

file system
A collection of related files (programs or data) stored on disk that are required to initialize an AT&T Intuity system.

first-in/first-out
The first call (or data) to be received is the first call (or data) to be processed.

F key
See *function key*.

FOOS
See *facility out-of-service*.

format
To set up a disk, floppy diskette, or tape with a predetermined arrangement of characters so that the system can interpret meaningful information.

function
Individual steps or procedures within a mailbox activity.

function key (F key)
A key on a computer keyboard that performs a defined function when pressed. The user interface for the AT&T Intuity system defines keys F1 through F8.

G

Generic 1, 2, or 3
AT&T switch system software releases. Generic 1, Generic 3i, and Generic 3s correspond to the new generation of System 75-based software. Generic 2 and Generic 3r correspond to the new release of System 85-based software.

generic tape
A copy of the standard software and stand-alone tape utilities that is shipped with a new AT&T Intuity system.

GOS
See *grade of service*.

grade of service (GOS)
A parameter that describes the delays in accessing a port on the AT&T Intuity system. For example, if the GOS is P05, 95% of the callers would hear the system answer and 5% would hear ringing until a port became available to answer the call.

guaranteed fax
A feature of AT&T Intuity FAX Messaging that temporarily stores faxes sent to a fax machine. In cases where the fax machine is busy or does not answer a call, the call is sent to an Intuity AUDIX mailbox.

guest password
A feature that allows users who are not Intuity AUDIX subscribers to leave messages on the system by dialing a subscriber's extension and entering a system-wide guest password.

H

hard disk drive
A high-capacity data storage/retrieval device that is located inside a computer platform. A hard disk drive stores data on non-removable high-density magnetic media based on a predetermined format for retrieval by the system at a later date.

hardware
The physical components of a computer system. The central processing unit, disks, tape and floppy drives are all hardware.

header
Information that the system creates to identify a message. A message header includes the originator or recipient, type of message, creation time, and delivery time.

help
A command run by pressing `HELP` or `CTRL` `?` on an AT&T Intuity display terminal to show the options available at your current screen position. In the Intuity AUDIX system, press `*` `H` on the telephone keypad to get a list of options. See also *on-line help*.

hertz (Hz)
A measurement of frequency in cycles per second. A hertz is one cycle per second.

host switch
The switch directly connected to the AT&T Intuity system over the data link. Also, the physical link connecting an AT&T Intuity system to a distributed communications system (DCS) network.

hunt group
A group of analog ports on a switch usually administered to search for available ports in a circular pattern.

Hz
See *hertz*.

I

I/O
Input/output.

IDI
See *isolating data interface*.

IMAPI
See *Intuity messaging application programming interface*.

INADS
See *initialization and administration system*.

information service
See *bulletin board*.

initialization
The process of bringing a system to a predetermined operational state. The start-up procedure tests hardware; loads the boot filesystem programs; locates, mounts, and opens other required filesystems; and starts normal service.

initialization and administration system (INADS)
A computer-aided maintenance system used by remote technicians to track alarms.

initialize
To start up the system for the first time.

input
A signal fed into a circuit or channel.

integrated services digital network (ISDN)
A network that provides end-to-end digital connectivity to support a wide range of voice and data services.

integrated voice processing CELP (IVC6) card
A computer circuit card that supports both fax processing and voice processing capabilities. It provides two analog ports to support six analog channels. All telephone calls to and from the AT&T Intuity system are processed through the IVC6 card.

integrated voice response
An application module that allows customers to write their own alternate applications, also known as a script builder.

interface
The device or software that forms the boundary between two devices or parts of a system, allowing them to work together. See also *subscriber interface*.

interrupt request (IRQ)
A device that signals the data bus and the CPU that it needs attention.

Intuity AUDIX Digital Networking
An AT&T Intuity feature that allows customers to link together up to 500 remote AT&T Intuity machines for a total of up to 500,000 remote subscribers. See also *digital networking*.

Intuity Message Manager
A Windows-based software product that allows Intuity AUDIX subscribers to receive, store, and send their voice/FAX messages from a PC.

Intuity messaging application programming interface (IMAPI)
A software function-call interface that allows Intuity AUDIX to interact with AT&T Intuity Message Manager.

I/O address
input/output address.

IRQ
See *interrupt request*.

ISDN
See *integrated services digital network*.

isolating data interface (IDI)
A synchronous, full duplex data device used for cable connections between an AT&T Intuity GPSC-AT/E card and the switch data communications interface unit (DCIU).

IVC6
See *integrated voice processing CELP (IVC6) card.*

IVR
See *integrated voice response*.

J

jumper
Pairs or sets of small prongs on circuit cards and mother boards that allow the user to instruct the computer to select one of its available operation options. When two pins are covered, an electrical circuit is completed.

K

Kbps
kilobits per second; one thousand bits per second.

Kbyte
kilobyte per second; 1024 thousand bytes per second.

L

label
The name assigned to a disk device (either a removable tape cartridge or permanent drive) through software. Cartridge labels may have a generic name (such as 3:3) to show the software release or a descriptive name if for backup copies (such as back01). Disk drive labels usually indicate the disk position (such as disk00 or disk02).

LAN
See *local area network*.

last-in/first-out
The last call (or data) to be received is the first call (or data) to be processed.

LCD
See *liquid crystal display*.

leave word calling (LWC)
A switch feature that allows the calling party to leave a standard (nonvoice) message for the called party using a feature button or dial access code.

LED
See *light emitting diode*.

LIFO
See *last-in/first-out*.

light emitting diode (LED)
A light indicator on the hardware platform that shows the status of operations.

liquid crystal display (LCD)
The 10-character alphanumeric display that shows status of the system, including alarms.

load
To read software from external storage (such as disk) and place a copy in system memory.

local area network (LAN)
   A network of PCs that communicate with each other and that normally share the resources of one or more servers. Operation of AT&T Intuity Message Manager requires that the Intuity AUDIX system and the subscribers' PCs are on a LAN.

local AUDIX machine
   The AT&T Intuity system where a subscriber's Intuity AUDIX mailbox is located. All subscribers on this home machine are called *local subscribers*.

local installation
   A switch, adjunct, or peripheral equipment installed physically near the host switch or system. See also *collocated*.

local network
   An Intuity AUDIX Digital Network in which all AT&T Intuity systems are connected to the same switch.

login
   A unique code used to gain approved access to the AT&T Intuity system. See also *password*.

login announcement
   A feature enabling the system administrator and other designated users to create a mail message that is automatically played to all Intuity AUDIX subscribers every time they login to the system.

LWC
   See *leave word calling*.

M

magnetic peripherals
   Data storage devices that use magnetic media to store information. Such devices include hard disk drives, floppy disk drives, and cartridge tape drives.

mailbox
   A portion of disk memory given to each subscriber for creating and storing outgoing and incoming messages.

mailing list
   A group of subscriber addresses assigned a list ID# and public or private status. A mailing list may be used to simplify sending messages to several subscribers.

maintenance
   The process of identifying system errors and correcting them, or taking steps to prevent problems from occurring.

major alarm
   An alarm detected by AT&T Intuity software that affects at least one fourth of the AT&T Intuity ports in service. Often a major alarm indicates that service is affected.

MANOOS
   See *manually out-of-service*.

manually out-of-service
   A unit has been intentionally taken out of service.

mean time between failures
 The average time a manufacturer estimates before a failure occurs in a component or system.

megabyte
 A unit of memory equal to 1,048,576 bytes (1024 x 1024). It is often rounded to one million.

memory
 A device which can store logic states such that data can be accessed and retrieved. Memory may be temporary (such as system RAM) or permanent (such as disk).

menu tree
 The way in which nested automated attendants are set up.

message categories
 Groups of messages in Intuity AUDIX subscribers' mailboxes. Categories include new, unopened, and old for the incoming mailbox and delivered, accessed, undelivered, undeliverable (not deliverable), and file cabinet for the outgoing mailbox.

message delivery
 An optional AT&T Intuity feature that permits subscribers to send messages to any touch-tone telephone, as long as the telephone number is in the range of allowable numbers. This feature is an extension of the AMIS analog networking feature and is automatically available when the AMIS feature is activated.

Message Manager
 See *Intuity Message Manager*.

message-waiting indicator (MWI)
 An indicator that alerts subscribers that they have received new mail messages. An MWI can be LED, neon, or audio (stutter dial tone).

message waiting lamp (MWL)
 An lamp that alerts subscribers that they have received new mail messages. An MWL can be LED, neon, or audio (stutter dial tone). Also known as a message-waiting indicator.

migration
 An installation that moves data from another messaging system to the AT&T Intuity system.

minor alarm
 An alarm detected by maintenance software that affects less than one fourth of the AT&T Intuity ports in service, but has exceeded error thresholds or may impact service.

mirroring
 An AT&T Intuity system feature that allows data from crucial filesystems to be continuously copied to backup (mirror) filesystems while the system is running. If the system has some problem where an original filesystem cannot be used, the backup filesystem is placed in service automatically.

mode code
 A string of touch-tones from a MERLIN LEGEND switch. A mode code may send the AT&T Intuity AUDIX system information such as call type, calling party, called party, and on/off signals for message waiting lamps.

modem
 A device that converts data from a form that is compatible with data processing equipment (digital) to a form compatible with transmission facilities (analog), and vice-vera.

modular
 A term that describes equipment made of plug-in units that can be added together to make the system larger, improve its capabilities, or expand its size.

GL-18   Issue N   December 1994

modular processor data module (MPDM)
 A data device that converts RS-232C or RS-449 protocol signals to digital communications
 protocol (DCP) used by System 75/85, Generic1, and Generic 3 switches. MPDMs may connect
 AT&T Intuity to a switch DCIU or SCI link or connect terminals to a switch port card.

MPDM
 See *modular processor data module*.

MTBF
 See *mean time between failures*.

multi-application platform (MAP)
 The computer hardware platform used by the AT&T Intuity system. Currently, a MAP/5, MAP/40,
 and MAP/100 are available.

multilingual feature
 A feature that allows simultaneously-active language announcement sets on the system. With this
 feature, mailboxes can be administered so that subscribers can hear prompts in the language of
 their choice.

MWI
 See *message-waiting indicator*.

MWL
 See *message waiting lamp*.

N

networking
 See *Intuity AUDIX Digital Networking*.

networking prefix
 A set of digits that identifies an AT&T Intuity machine.

night attendant
 The automated attendant created on a MERLIN LEGEND switch that automatically becomes
 active during off-hours. The night attendant substitutes for one or more daytime attendants.

not deliverable message
 Al message that could not be delivered after a specified number of attempts. This usually means
 that the subscriber's mailbox is full.

O

on-line help
 An AT&T Intuity feature that provides information about AT&T Intuity user interface screens by
 pressing a predetermined key. See also *help*.

open systems interconnection (OSI)
 Internationally accepted framework of standards for communication between two systems made
 by different vendors.

operating system (OS)
The set of programs that runs the hardware and interprets software commands.

option
A choice selected from a menu, or an argument used in a command line to modify program output by modifying the execution of a command. When you do not specify any options, the command will execute according to its default options.

OS
See *operating system*.

OSI
See *open systems interconnection*.

outcalling
An AT&T Intuity feature that allows the system to dial subscribers' numbers to inform them they have new messages.

outgoing mailbox
A storage area for subscribers to keep copies of messages for future reference or action.

P

parallel transmission
The transmission of several bits of data at the same time over different wires. Parallel transmission of data is usually faster than serial transmission.

password
A code assigned to every AT&T Intuity terminal user and Intuity AUDIX subscriber for security reasons. After dialing the system, subscribers must dial their personal password correctly to log on. Passwords are also assigned to local and remote networked machines to identify the machines or the network. See also *login.*

password aging
An Intuity AUDIX feature that allows administrators to set a length of time after which a subscriber's password expires. The subscriber is then forced to change the password.

PBX
See *private branch exchange*.

PC
See *power converter*.

PDM (processor data module)
See *modular processor data module (MPDM)*.

PEC
See *price element code*.

peripheral device
Equipment external to the AT&T Intuity cabinet, such as printers or terminals, necessary for full operation and maintenance of the AT&T Intuity system. Also called *peripherals*.

personal directory
An Intuity AUDIX feature allowing each subscriber to create a private list of customized names.

personal fax extension
See *secondary extension*.

pinouts
The signal description per pin number for a particular connector.

PMS
See *property management system*.

port
A connection or link between two devices, allowing information to travel to a desired location. For example, a switch port connects to an AT&T Intuity voice port to allow a subscriber to leave a message.

POST
See power-on self test.

priority call answer
An Intuity AUDIX feature that allows callers to designate a call answer message as a priority message. To make a message priority, the caller presses 2 after recording the message.

priority messaging
An Intuity AUDIX feature that allows some subscribers to send messages that are specially marked and preferentially presented to recipients. See also *priority outcalling*.

priority outcalling
Works with the priority messaging feature by allowing the message recipient to elect to be notified by outcalling only when a priority message has been received. See also *priority messaging*.

private branch exchange (PBX)
An analog, digital, or electronic system where data and voice transmissions are not confined to fixed communications paths, but are routed among available ports or channels. See also *switch*.

private mailing list
A list of addresses that only the owning subscriber can access.

private messaging
A feature of Intuity AUDIX that allows a subscriber to send a message that cannot be forwarded by the recipient.

processor data module (PDM)
See *modular processor data module (MPDM)*.

processor interface (PI)
A System 75, Generic 1, Generic 3i, Generic 3s, and Generic 3vs switch data link. Also called *processor interface board (PIB)*.

programmed function key
See *function key*.

property management system
Term used in hospitality industry referring to the database used by hotels for guest records and billing information.

protocol
A set of conventions or rules governing the format and timing of message exchanges (signals) to control data movement and the detection and possible correction of errors.

public mailing list

A list of addresses that any Intuity AUDIX subscriber can use if that subscriber knows the owner's list ID# and extension number. Only the owner can modify a public mailing list.

pulse-to-touchtone converter

A device connected to the switch that converts signals from a rotary phone to touch tones. This device allows callers to use rotary phones to access options in a subscriber's mailbox or to access options in an automated attendant.

R

RAM

See *random access memory*.

random access memory (RAM)

The primary memory in a computer that can be overwritten with new information.

read-only memory

A memory device which is programmed at the factory and whose contents thereafter cannot be altered.

reboot

See *boot*.

remote access

Sending and receiving data to and from a computer or controlling a computer with terminals or PCs connected through communications links.

remote installation

A system, site, or piece of peripheral equipment that is installed in a different location from the host switch or system.

remote network

A network in which the systems are integrated with more than one switch.

remote service center

An AT&T or AT&T-certified organization that provides remote support to AT&T Intuity customers. Depending upon the terms of the maintenance contract, your remote service center may be notified of all major and minor alarms and have the ability to remotely log into your system and remedy problems.

remote subscribers

Intuity AUDIX subscribers whose mailboxes reside on a remote Intuity AUDIX Digital Networking machine.

remote terminal

A terminal connected to a computer over a phone line.

REN

See *ringer equivalence number*.

reply loop escape

An Intuity AUDIX feature that allows a subscriber the option of continuing to respond to a message after trying to reply to a nonsubscriber message.

reply to sender
>An Intuity AUDIX feature that allows subscribers to immediately place a call to the originator of an incoming message if that person is in the switch's dial plan.

request to send (RTS)
>One of the control signals on a RS-232 connector that places the modem in the originate mode so that it can begin to send.

restart
>An AT&T Intuity feature that allows Intuity AUDIX subscribers who have reached the system through the call answer feature to access their own mailboxes by typing the *R (Restart) command. This feature is especially useful for long-distance calls or for users who wish to access the AT&T Intuity system when all the ports are busy. Also, the reinitialization of certain software. For example, restarting the messaging system.

restore
>The process of recovering lost or damaged files by retrieving them from available backup tapes, floppy diskette, or another disk device.

retention time
>The amount of time messages are saved on disk before being automatically deleted from a subscriber's mailbox.

ringer equivalence number (REN)
>A number required in the United States for registering your telephone equipment with the phone company.

ROM
>See *read-only memory*.

RS-232
>A set of standards developed by the Electrical Industries Association (EIA) that specifies various electrical and mechanical characteristics for interfaces between computers, terminals, and modems.

RTS
>See *request to send*.

S

sales representative
>An AT&T or AT&T-certified person who assists you in the purchasing, planning, and implementation of AT&T equipment and solutions.

SCA
>See *switch communications adapter*.

scan
>To automatically play mail messages, headers, or both.

scheduled delivery time
>A time and/or date that an Intuity AUDIX subscriber optionally assigns to a message that tells the system when to deliver it. If a delivery time is omitted, the system sends the message immediately.

SCSI
See *small computer system interface*.

secondary extension
A second, fax-dedicated extension that directs incoming faxes directly into a subscriber's mailbox without ringing the telephone. The secondary extension shares the same mailbox as the voice extension, but acts like a fax machine. Also called *personal fax extension*.

serial transmission
The transmission of one bit at a time over a single wire.

server
A computer that processes and stores data that is used by other smaller computers. For AT&T Intuity Message Manager, Intuity AUDIX is the server. See also *client*.

shielded cables
Cables that are protected from interference with metallic braid or foil.

SID
See *switch integration device*.

SIMMs
See *single in-line memory modules*.

simplified message service interface (SMSI)
Type of data link connection to an integrated 1A ESS switch or 5ESS switch in the AT&T Intuity system.

single in-line memory modules (SIMMs)
A method of containing random access memory (RAM) chips on narrow circuit card strips that attach directly to sockets on the CPU circuit card. Multiple SIMMs are sometimes installed on a single CPU circuit card.

small computer systems interface (SCSI)
An interface standard defining the physical, logical, and electrical connections to computer system peripherals such as tape and disk drives.

SMSI
See *simplified message service interface*.

split
Group (or queue) of analog ports on the switch. See also *call-distribution group*.

subscriber
An AT&T Intuity user who has been assigned the ability to access the Intuity AUDIX Voice Messaging system.

subscriber interface
The devices that subscribers use to access their mailboxes, manage mailing lists, administer personal greeting, and use other messaging capabilities. Subscriber interfaces include a touch-tone telephone keypad and a PC using AT&T Intuity Message Manager.

surge
A sudden voltage rise and fall in an electrical circuit.

surge protector
A device that plugs into the phone system and the commercial AC power outlet. It is designed to protect the phone system from high voltage surges that could be damaging to the phone system.

SW

See *switch integration*.

switch

An automatic telephone exchange that allows the transmission of calls to and from the public telephone network. See also *private branch exchange (PBX)*.

switched access

A connection made from one endpoint to another through switch port cards. This allows the endpoint (such as a terminal) to be used for several applications.

switch hook

The device at the top of most telephones which is depressed when the handset is resting in the cradle (on hook). This device is raised when the handset is picked up (the phone is off hook).

switch hook flash

A signaling technique in which the signal is originated by momentarily depressing the switch hook.

switch integration

Sharing of information between a messaging system and a switch in order to provide a seamless interface to callers and subscribers.

switch integration device

Operates as a digital telephone set emulator.

switch network

Two or more interconnected switching systems.

synchronous communication

A method of data transmission in which bits or characters are sent at regular time intervals, rather than being spaced by start and stop bits. See also *asynchronous communication*.

synchronous transmission

A type of data transmission where the data characters and bits are exchanged at a fixed rate with the transmitter and receiver synchronized. This allows greater efficiency and supports more powerful protocols.

system configuration

See *configuration*.

T

T.30

The standard for Group III fax machines that covers the protocol used to manage a fax session and negotiate the capabilities supported by each fax endpoint.

tape cartridge

One or more spare removable cartridges required to back up system information.

tape drive

The physical unit that holds, reads, and writes magnetic tape.

TCP/IP

See *transmission control protocol/internet program*.

TDD

See *telecommunications device for the deaf*.

TDM

See *time division multiplex*.

telecommunications device for the deaf (TDD)

A device with a keyboard and display unit that connects to or substitutes for a phone. The TDD allows a deaf or hearing-impaired person to communicate over the phone lines with other people who have TDDs. It also allows a deaf person to communicate with the Intuity AUDIX system.

terminal

See *display terminal*.

terminal type

A number indicating the type of terminal being used to log on to the AT&T Intuity system. Terminal type is the last required entry before gaining access to the AT&T Intuity display screens.

terminating resistor

A grounding resistor placed at the end of bus, line, or cable to prevent signals from being reflected or echoed.

time division multiplex

A device which derives multiple channels on a single transmission facility by connecting bit streams one at a time at regular intervals.

tip/ring

A term used to denote the analog telecommunications interface.

tone generator

A device acoustically coupled to a rotary phone, used to produce touch-tone sounds when subscribers cannot use a regular touch-tone generating voice terminal.

traffic

The flow of attempts, calls, and messages across a telecommunications network.

translations

Software assignments that tell a system what to expect on a certain voice port or the data link, or how to handle incoming data. They customize the AT&T Intuity system and switch features for users.

transmission control protocol/internet program (TCP/IP)

A set of protocols developed by the Department of Defense to link dissimilar computers across many kinds of networks. It is the protocol commonly used over Ethernet, as well as x.25, networks. Although committed to an eventual migration to an Open Systems Interconnection (OSI) architecture. TCP/IP currently divides networking functionality into only four layers: network interface, Internet, transport, and application.

T/R

See *tip/ring*.

troubleshoot

The process of locating and correcting errors in computer programs. Also called *debug*.

U

UCD

See *uniform call distribution*.

Undelete

An Intuity AUDIX feature that allows subscribers to restore the last message deleted. The subscriber presses * U to restore a deleted message.

undelivered message

A message that has not yet been sent to an Intuity AUDIX subscriber's incoming mailbox. The message resides in the sender's outgoing message and may be modified or redirected by the sender.

Unequipped

See *equipped/unequipped*.

unfinished message

A message that was recorded but not approved or addressed, usually the result of an interrupted Intuity AUDIX session. Also called *working message*.

uniform call distribution (UCD)

The type of call-distribution group (or hunt group) of analog port cards on some switches that connects subscribers and users to the Intuity AUDIX system. System 75, Generic 1, Generic 3, and some central office switches use UCD groups. See also *call-distribution group*.

uninterruptable power supply

An auxiliary power unit for a telephone system that provides continuous power in cases where commercial power is lost.

UNIX operating system

A multi-user, multi-tasking computer operating system.

upgrade

An installation that moves an AT&T Intuity system to a newer release.

untouched message

An Intuity AUDIX feature that allows a subscriber to keep a message in its current category by using the **H (Hold) command. If the message is in the new category, message-waiting indication remains active (for example, the message-waiting lamp will remain lit).

UPS

See *uninterruptable power supply*.

U. S. 123

An alternate announcement set in U. S. English whose prompts use numbers, not letters, to identify phone keypad presses. For example, a prompt might say, "press star three," instead of, "press star D."

user population

A combination of light, medium, and heavy users on which AT&T Intuity configuration guidelines are based.

V

vector
A customized program in the switch for processing incoming calls.

voice link
The AT&T Intuity analog connection(s) to a call-distribution group (or hunt group) of analog ports on the switch.

voice mail
See *voice message*.

voice mailbox
See *mailbox*.

voice message
Digitized information stored by the AT&T Intuity system on disk memory. Also called *voice mail*.

voice port
The IVC6 port that provides the interface between the AT&T Intuity system and the analog ports on the switch.

voice terminal
A telephone used for spoken communications with the AT&T Intuity system. A touch-tone telephone with a message-waiting indicator is recommended for all Intuity AUDIX subscribers.

voicing
Either speaking a message into the AT&T Intuity system during recording, or having the system playback a message or prompt to a subscriber.

volt
The unit of measurement of electromotive force. One volt is the force required to product a current of one ampere through a resistance of one ohm.

W

watt
A unit of electrical power that is required to maintain a current of one amp under the pressure of one volt.

Index

T

U

V