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11 Using the ADAP Command Line Language
Overview

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Using the ADAP Command Line Language

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Overview

This chapter describes how to use the ADAP command line language. It tells you:

- How to log into or out of the voice mail system from your PC.

- How to use ADAP commands to retrieve data directly from the ADAP-supported voice mail screens.

- How to use ADAP commands to modify subscriber records in the voice mail database, activity log parameters in the DEFINITY AUDIX or INTUITY database, and call detail recording (CDR) screens data and adjunct machine data in the AUDIX database.

You can use these commands from the MS-DOS prompt C>, from an MS-DOS batch file, or from within an application program.

This chapter focuses on the basic knowledge you need to use these commands, including input and output requirements and basic strategies. Individual commands for retrieving and modifying data in the database are summarized in this chapter and then described individually in the next two chapters.

These ADAP commands give you a UNIX-like PC interface for:

- retrieving data to the PC for further processing.

- modifying subscriber data directly in the voice mail database.

Commands may be upper or lower case; options are case sensitive.

MS-DOS limits program names to eight characters, plus an optional suffix of up to three characters. All commands described here have a suffix of .exe, which indicates the files are executable from the DOS prompt.

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Logging Into the Voice Mail System

To use ADAP commands, you must first log into the voice mail system from your PC. You can login from the MS-DOS prompt C>, from an MS-DOS batch file, or from within an application program. Once you are logged into the voice mail system, you may execute a series of instructions with intermixed ADAP and MS-DOS commands.

You can log in to the voice mail system from the PC using:

- An automatic login procedure (**alogin**), which combines all of the login identification information in one step

  OR

- A manual login procedure (**login**), which requires that you enter individual responses for the login prompts

These two procedures are described in this section.

Automatic Login Procedure

Use the **alogin** command to log into the voice mail system automatically without further interaction. The format for this command is shown below. Optional arguments are enclosed by square brackets ([...]).

alogin -d *device* [**-b** *baud rate*] [**-p** *communications port*]
[**-I** *modem initialization string*] [**-i**] [**-R**] [**-t**] [**-r** *release*]
[**-v**] [**-w**] [**-V**] [**-P** *System Password*] *loginID password*
[*phone number*]

alogin	Automatic login.
-d	Device type flag; must be followed by *device*.
device	Valid device types are: pdm (MPDM data modules), hayes (Hayes-compatible modems), att4000 (AT&T's 1200-baud modem) and direct (direct cable connection).
-b	Baud rate flag; must be followed by *baud rate*. If no baud rate is specified, defaults to 4800.
baud rate	Valid transfer baud rates are 1200, 2400, 4800, or 9600. The AUDIX R1 system supports only 1200 and 4800.
-p	Communications port flag; must be followed by *communications port*. If no port is specified, defaults to 1.
communications port	Valid communications ports are 1 or 2.

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-I	Modem initialization string flag; must be followed by *modem initialization string*.
modem initialization string	Specifies an initialization string to be sent to the modem before connection to the voice mail system is attempted. The default is a null string.
-i	Causes the system to bypass the search for the *data set ready* (DSR) signal. Use this option only with a Hayes-compatible modem.
-R	If errors occur during the login (such as an invalid login attempt), causes the connection to be dropped and automatically retried from the beginning, up to three times.
-t	Causes the system to inhibit the terminal code prompt. Include this option only when using the 513 BCT emulator software on the PC. This causes software control to be returned to operating system at the point the AUDIX system sends the terminal code or Terminal Type prompt to the ADAP machine.
-r	Release flag; must be followed by *release*.
release	Retrieves data for the specified release of the voice mail system software (D-r3.2, D-r3.1, D-r3.0, D-r2.0, D-r1.0, r1v8, r1v7, r1v6, r1v5, r1v4_5, r1v4, r1v3, r1v2, I-r5.0, I-r4.0, I-r3.3, I-r3.2, or I-r2.0). For DEFINITY AUDIX, the default is D-r3.2. For INTUITY AUDIX, the default is I-r5.0.
-w	Writes a one-line summary of the exit status of this command into the file **alogin.rc**.
-v	Writes detailed transfer statistics of the **alogin** command status and the voice mail system connect responses to the screen. This is primarily a debugging aid.
-V	Writes the ADAP version number for this command and exits without logging in.
-P	System password flag; must be followed by *System Password*. This flag is only valid when connecting to an INTUITY AUDIX or DEFINITY AUDIX system under the **cust** login.
System Password	Identifies your DEFINITY AUDIX or INTUITY system password. If you have a null system password, use a space followed by "" .

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loginID	Identifies your voice mail system login ID.
password	Identifies your voice mail system login password.
phone number	Identifies the voice mail system phone number. This number is not required for direct cable configurations. If you have a Hayes-compatible or AT&T 4000 modem, enter **t** in front of the phone number for touch-tone dialing.

⇒ **NOTE:**
The **-P** option is required when logging into a DEFINITY AUDIX system as **cust** and is invalid otherwise.

While executing this command, the software makes three attempts to connect with the voice mail system. If the **-R** (retry) option flag is set and errors occur during the login (such as an invalid login attempt), the connection is dropped and automatically retried from the beginning, up to three times.

If you specify an invalid option or omit a required option, the following message appears:

```
Usage: ALOGIN -d device [-b baud_rate] [-p communications_port] [-r release]
       [-P system_passwd] [-I modem_init_string] [-iRtvwU]
       log_name passwd [phone_num]

       device can be pdm, direct (does not need phone_num), hayes, or att4000
       baud_rate can be 1200, 2400, 4800 or 9600 (4800 is the default)
       communications_port can be 1 or 2 (1 is the default)
       release is the name of the release of the voice mail machine
       system_passwd is the Definity AUDIX system password
       modem_init_string can be any modem initialization string
       phone_num is the phone number of the AUDIX or Definity AUDIX system
       -i means ignore data set ready
       -R means redial on login fail
       -t means exit prior to term code
       -v means use verbose mode
       -w means to write the program exit status to a file
       -U means print out the ADAP version and exit
```

If this happens, check your options and re-enter the command.

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The **-I** feature is intended to send initialization strings to Hayes and Hayes-compatible modems. However, you can use the **-I** option to send a startup string to *any* local connection-establishing device, such as a PDM or modem, that returns the string "OK" to the computer upon processing and acting on a valid string.

The **alogin** command does no checking of the validity of the initialization string but relies on the connection device returning an "OK" to the COM1 or COM2 port when the device is successful in using the string. Spaces are legal in Hayes initialization strings. If strings containing spaces are used with this **-I** option, you must enclose the string in double quotes when following the **-I** on the command line.

If you attempt to log in without using the **-i** option when your modem does not generate a DSR signal, the following message (with the appropriate port number) appears:

```
alogin: connect: eopen of port 1 failed, rc = Ox85
processing stopped
```

If this happens, re-enter the **alogin** command and include the **-i** option.

DEFINITY AUDIX Release 3.2 introduces password aging of the AUDIX login password (password argument of the **alogin** command). Should this password expire, choose a new one and login manually. The AUDIX system prompts you through the password changing procedure.

Manual Login Procedure

Use the **login** command to log into the voice mail system manually. The format for this command is shown below. Optional arguments are enclosed by square brackets ([...]).

login [**-b** *baud rate*]   [**-p** *communications port*] [**-i**] [**-V**] [**-r** *release*]

login	Specifies a manual login.
-b	Baud rate flag; must be followed by *baud rate*. If no baud rate is specified, defaults to 4800.
baud rate	Valid transfer baud rates are 1200, 2400, 4800, or 9600. The AUDIX R1 system supports only 1200 and 4800. The DEFINITY AUDIX and INTUITY systems support 1200, 2400, 4800, and 9600.
-p	Communications port flag; must be followed by *communications port*.

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communications port	Specifies that the communications port is either 1 or 2. If no port is specified, port 1 is the default.
-i	Directs the system to bypass the search for the *data set ready* (DSR) signal. Use this option only with Hayes-compatible modems.
-V	Writes the ADAP version number for this command and exits without logging in.
-r	Release flag; must be followed by *release*.
release	Retrieves data for the specified release of the voice mail system software (D-r3.2, D-r3.1, D-r3.0, D-r2.0, D-r1.0, r1v8, r1v7, r1v6, r1v5, r1v4_5, r1v4, r1v3, r1v2, I-r5.0, I-r4.0, I-r3.3, I-r3.2, or I-r2.0). For DEFINITY AUDIX, the default is D-r3.2. For INTUITY AUDIX, the default is I-r5.0.

If you enter an invalid argument with the **login** command, the following message appears:

```
C:\PCIFCE\LOGIN.EXE: illegal option -- option
Usage:  login [b <1200/2400/4800/9600>] [p <1/2>] [r
release] [iV]
```

If all arguments are correct, the following messages appear on the screen with the cursor positioned on the next line (no prompt appears):

```
<F1> = break; <esc> = quit; Ready to Send
```

This message is for information only. The F1 key acts as the BREAK key for the **login** command — for example, to get the attention of the modular processor data module (MPDM) if the keyboard break option is enabled on the MPDM, press F1.

If you attempt to log in without using the **-i** option when your modem does not generate a DSR signal, the following message (with the appropriate port number) appears:

```
alogin: connect: eopen of port 0 failed, rc = Ox85
processing stopped
```

If this happens, re-enter the login command and include the **-i** option.

If you need to exit the manual login procedure at any time, press Ctrl-c.

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After you run the **login** command, perform the following steps:

1. Use one of the following procedures, depending on your PC configuration:

   Hayes or AT&T 4000 modem connection:

   a. Type **atdt**

   b. Enter the phone number of the voice mail machine administration port.

   MPDM connection:

   a. Press F1 (Break).

   b. Enter the phone number of the voice mail machine administration port.

   Direct connection:

   a. Go directly to step 2.

2. Press ENTER until you see the login prompt appears on the screen.

3. Enter your voice mail *login ID*. The Password (or password for the AUDIX system) prompt appears on the screen.

4. Enter your voice mail *password*.

5. If you are connecting to a DEFINITY AUDIX, a System Password prompt appears on the screen. Enter your *System Password*.

6. If you enter an invalid login ID or password(s), the following AUDIX system message appears:

   ```
   login id/password invalid
   ```

   OR

   the following DEFINITY or INTUITY AUDIX system message appears:

   ```
   Login incorrect
   ```

   ADAP then prompts you for your login ID and password(s). Check your login ID and/or password(s), and re-enter each in response to the prompts. If valid login ID and password(s) are entered, the DEFINITY AUDIX or INTUITY Terminal Type or R1 AUDIX terminal code prompt appears on the screen.

7. Enter **pc**.

   The following message appears:

   ```
   Kermit communications server beginning...
   ```

   If you are connecting to an R1 AUDIX system, you also see:

   ```
   #N3
   ```

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8. If this message does not appear, press (Ctrl-d) to log out of an R1 AUDIX system; then go back to step 1 and log in again. On a DEFINITY AUDIX or INTUITY system, press (Ctrl-c) to exit the **login** command. Then re-enter the **login** command and go back to step 1 to log in again.

Otherwise, go on to the next step.

9. Press (ESC).

The MS-DOS prompt appears, indicating that you have successfully logged into the voice mail system from the PC.

You can now execute the ADAP commands to retrieve screens data or modify subscriber records.

Logging Out of the Voice Mail System

To log out of the voice mail system enter the **logout** command. This sends a (Ctrl-d) disconnect character to the system and causes the DTR (data terminal ready) signal to be dropped for half a second, disconnecting the modem.

The **logout** command also sends the Hayes modem string "+++ATH" in case your modem is Hayes-compatible. This command takes approximately 5 seconds to complete.

Interrupting a Command

To interrupt a command in progress, press (Ctrl-c). The MS-DOS prompt re-appears.

You may receive faster response to your termination requests if you set the DOS command BREAK to ON. See information in your MS-DOS user's guide about the BREAK command usage.

Command Line Commands

The following section describes how to use the command line commands to retrieve and modify data in the voice mail database. It describes the command format, how to use the record description tables, the input records, the output records, and the return codes.

The command line commands and their corresponding screens are listed in the tables at the end of this chapter.

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Command Format

Database retrieval and modification commands are associated with specific voice mail system administrative and maintenance screens that are supported by ADAP. Each command option begins with a dash, followed immediately by a one-letter option identifier. If the option requires an argument, the argument immediately follows the option letter. You *can* insert spaces between the option and the argument for readability — they will be ignored.

Optional arguments are enclosed by square brackets ([...]).

For example, you might enter the **gettraf** command as follows:

gettraf -f month -d 1294 -i

In the previous **gettraf** line command,

-f	Option flag for specifying either **month** or **day**
month	Argument specifying that the monthly traffic screen data should be accessed
-d	Option flag for specifying date
1294	Argument identifying the month of traffic to be accessed (Dec. 1994)
-i	Option allowing individual extensions to be entered interactively from the keyboard

The following options are common to both retrieval and modification commands:

-V	Version flag. When you use this option, the ADAP version number appears and the command exits.
-w	Exit status flag. This option writes a one-line summary of the exit status of this command into a file. Screen retrieval and nonsubscriber database modification commands write to form_req.rc; subscriber database modification commands write to main.rc; **alogin** writes to alogin.rc; and **get_cdr** writes to getcdr.rc.

-r	Release number flag. Must be followed by the release number, which identifies the version of the DEFINITY AUDIX system (D-r3.2, D-r3.1, D-r3.0, D-r2.0, or D-r1.0), the R1 AUDIX system (r1v8, r1v7, r1v6, r1v5, r1v4_5, r1v4, r1v3, r1v2), or the INTUITY AUDIX system (I-r5.0, I-r4.0, I-r3.3, I-r3.2, or I-r2.0) with which it is communicating. The default for DEFINITY AUDIX is D-r3.2. The default for INTUITY AUDIX is I-r5.0.

When accessing an R1 AUDIX System or a DEFINITY AUDIX System other than release 3.2, you may want to change the default release value to correspond to the release of that AUDIX system. This allows you to enter retrieval and modify commands for this AUDIX system without using the **-r release** option. Prior to executing retrieval and modify commands, set the AUDIX_RELEASE environment variable to the release value you want by entering one of the commands listed below:

When accessing a DEFINITY AUDIX System	**When accessing an R1 AUDIX System**
`set AUDIX_RELEASE=D-r1.0`	`set AUDIX_RELEASE=r1v2`
`set AUDIX_RELEASE=D-r2.0`	`set AUDIX_RELEASE=r1v3`
`set AUDIX_RELEASE=D-r3.0`	`set AUDIX_RELEASE=r1v4`
`set AUDIX_RELEASE=D-r3.1`	`set AUDIX_RELEASE=r1v4_5`
	`set AUDIX_RELEASE=r1v5`
	`set AUDIX_RELEASE=r1v6`
	`set AUDIX_RELEASE=r1v7`
	`set AUDIX_RELEASE=r1v8`

To clear this environment variable, enter the following command:

```
set AUDIX_RELEASE=
```

without a release value. This restores D-r3.2 as the default release value.

Similarly, when accessing an INTUITY AUDIX system other than release I-r5.0, you may want to change the default release value to correspond to the release of that AUDIX system. This allows you to enter retrieval and modify commands for this AUDIX system without the need to use the **-r release** option.

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You do this in a manner similar to the above. Prior to executing retrieval and modify commands, set the AUDIX_RELEASE environment variable to the release value you want by entering one of the commands listed below:

```
set AUDIX_RELEASE=I-r2.0

set AUDIX_RELEASE=I-r3.2

set AUDIX_RELEASE=I-r3.3

set AUDIX RELEASE=I-r4.0
```

To clear this environment variable, enter the following command:

```
set AUDIX_RELEASE=
```

without a release value. This restores I-r5.0 as the default release value.

-v   Verbose flag. This option displays information about the data transfer from the voice mail system to ADAP when the data transfer is complete.

The following options are available for both retrieval and modification commands

q   Press during transmission to *quit* the transfer gracefully. This may take some time.

v   Press during transmission to *view* the current transmission statistics on the screen.

NOTE:

For screens with very little data, and, therefore, a very rapid transfer rate, the transmission may complete before you are able to press **q** or **v**.

When using the **-v** option or pressing **v** in communicating the voice mail system, the following information appears in the following sequence:

DEFINITY and INTUITY AUDIX Systems	**R1 AUDIX Systems**
Elapsed time of the full data transmission	Number of packets sent
Number of files/forms transmitted	Number of packets received
Total characters in the files/forms	Number of packets retransmitted due to packet/protocol errors
Total number of bytes received	No. of characters of screen data received

DEFINITY and INTUITY AUDIX Systems	R1 AUDIX Systems
Total number of bytes sent	Number of screens received
Number of packets sent	Effective character reception rate in bits per second (b/s)
Number of packets received	Elapsed time of the full data transmission
Number of damaged packets received	
Number of time-outs waiting for packets	
Number of packets retransmitted due to packet/protocol errors	
Number of window slots used	
Number of compressed characters	
Effective character transmission rate in bits per second (b/s)	

Record Description Tables

The ADAP commands accept input and create output in record formats. This section describes the input and output record formats used by these commands. The tables in Chapter 12, "Command Line Database Retrieval Commands", and Chapter 13, "Command Line Database Modification Commands", tell you what the ADAP program accepts as input and what to expect from the output. The table below is an example output layout for the **getmlist** command.

Field					Voice Mail Versions		
Seq. No.	Field Name	Type	Max. Width		R1 AUDIX System	DEFINITY AUDIX System	INTUITY AUDIX System
1	machine name	C	10		r1v3+	D-r1.0+	I-r2.0+
2	voice id	C	3		r1v3+	D-r1.0+	I-r2.0+
3	machine type	C	12		r1v4+	D-r1.0+	I-r2.0+
4	callback number	K	10		r1v8+	D-r3.0+	

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All records consist of fields joined by field separators and terminated with a
$\boxed{\text{NEWLINE}}$ character. Each table row describes the following field characteristic:

Seq. No.	Sequence of the fields within the record.
Field Name	Identifies the field.
Type	Identifies field type: character, numeric, date, time, digit sequence, and logical.
Max. Width	Largest size of the field, in characters.
VOICE MAIL VERSIONS	Each column identifies which voice mail version(s) the fields pertain to (appear in the output or are allowed in the input).

The **getmlist** command depicted above might retrieve a record, for DEFINITY
AUDIX R1.0 (D-r1.0), that looks like this:

```
"Seattle","0","audix" NEWLINE
```

The machine name is Seattle, the voice id is a 0, and the machine type is an
audix. A callback number is not reported; the table indicates that a callback
number field is output for DEFINITY AUDIX only when ADAP is interacting with
releases D-r3.0 and beyond.

Notice that each field in the output is separated by a comma, the default output
field separator.

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Field Types

There are six field types used in the ADAP command line input and output records.

C (Character)	Set of characters enclosed by delimiters. The default delimiter is the double quote ("). Any character (alphabetic, numeric, special character, or blank) may be in the string. The maximum width column specifies the maximum number of characters that may be in the character string.
N (Numeric)	Contains a positive or negative integer or floating point number. A minus sign (-) precedes a negative number. The maximum width specifies the largest number of digits in the field.

If the maximum width for the field contains a decimal point, this indicates that the numeric field is a floating point value. For example 3.2 means that there can be up to three digits before the decimal point and up to two digits after the decimal.

NOTE:

If numeric data is unavailable from the voice mail system, the system may place a non-numeric warning string (such as "Traffic data unavailable") on a numeric field of the screen that ADAP is attempting to access. Under these conditions, ADAP is expecting to output a numeric value when the voice mail platform is providing a non-numeric string. The ADAP command places a -1 into the numeric output field instead of any warning string.

D (Date)	8-digit date field, in *yyyymmdd* format. *dd* defaults to 01, if the field provided by the voice mail system does not include a day-of-month.

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T (Time)	4-digit time of day presented in military format *hhmm*. A time field does not contain a colon (:) to separate the hours and minutes. Midnight is represented by 0000.
K (Digit Sequence)	Contains a string of digits, possible values 0 through 9, enclosed in delimiters. This field type is usually used for extensions and mailbox passwords, the numbers that voice mail subscribers enter to access their mailbox contents. Since these values are entered on a telephone *keypad*, they are identified as field type *K*. Unlike numeric fields, leading zeros are valid; unlike character fields, only digits are valid within the field.
L (Logical)	Contains y or n. Logical fields contain values that answer yes/no questions or indicate whether particular features are on or off.

Voice Mail Version Columns

Each table contains columns for the three voice mail systems that ADAP supports. These columns identify which fields are valid input or expected output for which system release(s). The information in the table below is an example only.

Field				**Voice Mail Versions**		
Seq. No.	Field Name	Type	Max. Width	R1 AUDIX System	DEFINITY AUDIX System	INTUITY AUDIX System
1	machine name	C	10	r1v2+	D-r1.0+	I-r2.0+
2	voice id	C	3	r1v2-r1v3	D-r1.0+	I-r2.0+
3	machine type	C	12	r1v4_5+	D-r1.0+	I-r2.0+
4	callback number	K	10	r1v8+	D-r3.0+	

There are four types of entries in the voice mail version column: a shaded box, a single release, a range of releases, or an open ended set of releases.

A *shaded box* indicates that the field does not apply to any release of the system. For example, the shaded box shown above means that the field does not exist for the **getmlist** command for the INTUITY AUDIX system.

A *single release* indicates that the field is valid input or output only for that particular release. The release placed in the table is the value given to the **-r** option of the ADAP command.

A *range of releases* for a particular field means that the field is valid input or output for any release included in that range. The range is inclusive. For example of the range that appears in the R1 AUDIX column for the voice id field means the field appears in the command's output only when using ADAP with AUDIX releases r1v2 through r1v3.

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The *open ended set*, is shown by a release number followed by a plus (+) sign. This means that the particular field is valid input or output for the designated release and any later, newer releases. An example of an open ended set is the r1v4_5+ designation appearing in the "machine type" field row of the record layout table above. This indicates that the machine type will appear in the output when ADAP is interacting with AUDIX releases r1v4_5 and newer.

Input Records

This section describes record formats and parameters for the input file.

Input File Format

You may process multiple voice mail subscribers by creating an input file containing information about the subscribers you wish to add, delete, update, or monitor. This file is then used as input by the data retrieval or modification command.

Certain commands require that you use valid extensions from the voice mail system as input. For example, the INTUITY or DEFINITY AUDIX Display Subscribers screen consists of a different record of data for each subscriber. To retrieve a record for each of several subscribers, you would enter the extension number for each subscriber on a separate line in the input file.

Some commands require that you supply only the subscriber extension for the data that you want to retrieve or modify. The following example shows a list of extensions, each on a separate line and containing from three to 10 digits. (On any one voice mail system, all the extensions must be the same length).

> "**1234567890**"
> "**2345678901**"
> "**9999999999**"
> "**0011100111**"

Because the ADAP software treats extensions as characters instead of numbers, the leading zeroes in 0011100111 are not lost.

Other commands require that you supply additional information to identify completely the data that you want to retrieve or modify. The following example requires extension and name for each subscriber, defined by delimiters ("") each on a separate line and containing from three to 10 digits.

> "**1234567890**","**Doe,Mary**"
> "**2345678901**","**Martinez,Bob**"
> "**9999999999**","**Green,Sarah**"
> "**0011100111**","**Jones,David**"

Notice that this is the data retrieved by the **getdir** command. For example, you could retrieve the subscriber extension and name using **getdir** then use this data as input for another command.

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> $\Rightarrow$ **NOTE:**
> When constructing input records for ADAP commands, all fields, regardless
> of type, must be enclosed in double quotation marks and separated by
> commas. The records must be terminated with a NEWLINE. These rules
> hold true whether the input is redirected from a file or entered interactively
> from the keyboard though the use of the **-i** option.

Optional Input Fields

A field name enclosed in square brackets, that is [....], indicates an optional input
field. You do not have to provide a value for this input field when using that
particular ADAP command. If you wish not to provide a value for this input field but
want to give a value for a field later in the input field sequence, you must insert a
placeholder set of double quotes ("") denotes a null string) and a field separator (a
comma) into the input record in the place of this input field.

The null string and comma serve as a placeholder so you can tell ADAP you want
to skip the field and go to a field later in the input sequence. The ADAP command
may then determine the purpose of the value later in the input record. If you wish
to provide a value for the nth input field, you must have provided values or
placeholders for all previous (n-1) fields in the input record. If you wish to omit all
optional fields, you need only provide the required fields; placeholders are not
necessary.

When you omit optional fields, ADAP does not place a value into the
corresponding field on the voice mail form. It allows the voice mail machine to
provide a default value in the case of adding local or remote subscribers. When
changing existing subscribers, omitting optional fields causes the corresponding
information on the voice mail machine to be skipped, leaving intact any value that
may already be there.

Input of Name or Extension
(DEFINITY/INTUITY AUDIX)

Some input records format tables indicate that a name and an extension should
be provided. There is some flexibility when an ADAP is communicating with a
DEFINITY AUDIX or INTUITY AUDIX system. When an ADAP command for a
DEFINITY AUDIX or INTUITY AUDIX system accepts both a name and extension
in an input record, an empty set of double quotes may be placed for either the
name or the extension. Both data items need not be provided.

If only the name is provided, the command uses the name; if only the extension is
provided in the input record, the command uses the extension. If both the name
and extension are specified in an input record, the name is ignored and the
extension is employed in the transaction. For operations which change the name
or extension, these easements apply only to the old name and old extension.

These guidelines do not apply to interactions with R1 AUDIX systems.

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Redirecting Input from Files

Once you have constructed an input file, you can use it to retrieve data. For example, if you wanted to retrieve records for all subscribers on the voice mail system, using an input file called dir.dat, you could enter the following command.

getsub < dir.dat > sub.dat

Subscriber extension input is supplied to the **getsub** command from the dir.dat file. This file contains the extensions of all subscribers on the voice mail system and has been formatted correctly by the **getdir** command. The **getsub** command (and all other commands requiring a subscriber extension number) retrieves data for a subscriber when the subscriber's extension number is entered. ADAP writes each returned subscriber record to the sub.dat file.

Entering Data from the Keyboard

You may enter data directly from the keyboard by including the **-i** option on the command line. To indicate that you have finished entering data while in interactive mode, press (Ctrl-z), followed by (RETURN). (Ctrl-z) is the MS-DOS end-of-file (EOF) character.

For example:

delsub -i (RETURN)

"**Doe, John**","**0123456789**"(Ctrl-z) (RETURN)

Output Records

The following section describes the output record format.

Output Record Format

All data items in output records are separated by an output field separator (OFS). The default OFS is a comma. All character (C), digit sequence (K), and logical (L) fields are enclosed in delimiting characters when appearing in output records.

➡ NOTE:
Fields that do not exist for a given release of the voice mail system may be included in output for compatibility with other releases. Those fields contain a 0 or "".

Delimiters

You can change the output character string delimiter from double quotes (") to a delimiter of your choice. To change the delimiter, set an environment variable named DLIM to the character you want to use as the delimiter. For example, enter the following command at the DOS prompt or in the autoexec.bat file.

```
set DLIM=&
```

If DLIM is not initialized in this way, the PC system software uses double quotes (") as the default. For instructions on how to initialize DLIM, see the description of the autoexec.bat file in your MS-DOS manual.

Output Field Separator

You can use the environment variable OFS, for Output Field Separator, when communicating with R1 AUDIX systems to specify a single character for separating the output from the ADAP command line utilities. For example, enter the following command at the DOS prompt or in the autoexec.bat file.

```
set OFS=*
```

Subsequently, an execution of **getmlist** with an R1V7 may produce output formatted as follows:

```
"PERFS1"*"0"*"audix"
"PERFS2"*"29"*"audix"
"PERFT1"*"26"*"audix"
"STL01"*"31"*"audix"
"STS01"*"32"*"audix"
"STT01"*"14"*"audix"
"STT02"*"15"*"audix"
"pluto"*"30"*"audix"
```

If the OFS is not set, commas are used as output field separators by default. If the environment variable OFS is set to a character string of length greater than one, ADAP ignores OFS; and the ADAP commands use commas as separators.

For instructions on how to initialize OFS, see the description of the autoexec.bat file in your MS-DOS manual. Only commas can be used as the OFS when communicating with a DEFINITY AUDIX or INTUITY AUDIX system.

Backward Compatibility

In adding features to each release of the voice mail system software, fields have been added and deleted from the screens with which ADAP interacts. As the voice mail releases evolves, new fields were added to the end of the ADAP record formats. If fields have been deleted from any screens in the development of a new release from a previous one, the ADAP command puts into the output a placeholding value.

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The placeholding value is a zero for numeric fields that have been deleted. For deleted character, digit sequence or logical fields, the placeholding value is an empty string enclosed in a set of delimiters (which by default is "").

Redirecting Output to Files

If you don't specify an output file to receive the data, ADAP displays all retrieved screens data on the PC screen. Most applications can use the MS-DOS redirect capability to write the data to a file. To do this, specify an output filename preceded by a redirect symbol such as > *ofile*.

For example, if you are retrieving data for the DEFINITY AUDIX or INTUITY List Extensions screen and you want the data written to a file named dir.dat, enter the following:

getdir > dir.dat

ADAP retrieves the data from the List Extensions screen for all subscribers on the DEFINITY AUDIX or INTUITY system and writes it to a file named dir.dat instead of displaying it on your PC screen.

Using Output with dBASE III PLUS

You can use the output of the ADAP retrieval commands with dBASE III PLUS. The ADAP retrieval commands have output that places a single record per line. The data items that make up a record are called fields. For example, the **getdir** command outputs a line (a record) for each of the subscribers and that record consists of fields containing the extension and the name of the particular subscriber.

The data on these lines is printed in what is called a delimited format; character field data is enclosed by delimiters (default delimiter is ") and the data items are separated by commas. This output format is always the same regardless of whether the command is entered from the MS-DOS prompt, from an MS-DOS batch file, or from a dBASE III PLUS program. The output always consists of data written in flat ASCII files or ASCII characters — no binary encoding or compressing is done.

dBASE III PLUS can use ADAP output and any other files encoded with the delimited format. If the ADAP retrieval output is redirected to a file, dBASE III PLUS can read that file.

For example, a file called subs consists of a list of subscriber extensions, one per line. Executing the following command from the DOS prompt retrieves data about these subscribers and saves that data in a file called subscr.dat.

getsub < subs > subscr.dat

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The file subscr.dat is in the delimited format. It can be read from within dBASE III PLUS at the dBASE dot prompt or from a dBASE III PLUS program. From the dBASE dot prompt, you would type the following:

use sub.dbf

This command causes dBASE III PLUS to use the database structure relevant for the **getsub** data. dBASE III PLUS then knows how many fields make up the records, the field names, whether those fields are to contain numbers, character strings, dates, etc.

The following dBASE III PLUS command reads the data retrieved from ADAP saved in subscr.dat, and loads it into the working database.

append from subscr.dat type delimited

The subscriber data for each subscriber initially listed in the input file subs now exists in a dBASE III PLUS database. The dBASE III PLUS user can sort, search, do reports, etc., on any of the data returned by the getsub command.

Return Codes

On successful completion, all of the screen retrieval commands exit with a return code of 0. If processing is not complete when a command terminates, the commands exits with a non-zero return code. The value of return codes may be tested from the MS-DOS prompt or using batch programs with the DOS ERRORLEVEL command.

RS-232 driver errors are shown in <u>Appendix B, "RS-232 Driver Errors"</u>.

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Data Retrieval Commands

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Data Retrieval Commands

Database retrieval commands obtain a copy of data from the voice mail system internal database. The following table lists the voice mail system screens that are supported and the corresponding retrieval command.

Table 11-1. Database Retrieval Commands — Screens Correlations

DEFINITY AUDIX/ INTUITY AUDIX Screen Name	R1 AUDIX Screen Name	ADAP Command
display activity-log	system activity log display	getlog
display administration-log (DEFINITY only)	system log display	getsys
display administrator's-log (INTUITY only)	system log display	getsys
display alarms	maintenance active alarm display	getaalar
display alarms	maintenance resolved alarm display	getralar
display cos	class of service	getcos
display errors (DEFINITY only)	maintenance error display	geterror
display events (INTUITY only)		getmaint
display events (DEFINITY only)		getevent
display fragment		getfrag
display remote-subscriber	subscriber remote	getrsub
display subscriber	subscriber local	getsub
display subscriber	system attendant	getsysat
display system-parameters activity-log		getalogp
display system-parameters features (D-r1.0) display system-parameters customer-options (D-r2.0+)	system translation switch connection	getswitc
display system-parameters features		getsysfe
display system-parameters limits	system limits	getlimit
list attendants	list attendant	getatt
list extensions	list extension local	getdir

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Table 11-1. **Database Retrieval Commands — Screens Correlations — *Continued***

DEFINITY AUDIX/ INTUITY AUDIX Screen Name	R1 AUDIX Screen Name	ADAP Command
list machines	list machine	getmlist
list measurements community day	traffic community day	getcomm
list measurements community hour	traffic community hour	getcomm
list measurements feature day	traffic feature day	getfeat
list measurements feature hour	traffic feature hour	getfeat
list measurements load day	traffic load day	getload
list measurements load hour	traffic load hour	getload
list measurements remote-messages day	traffic remote messages day	getrem
list measurements remote-messages month	traffic remote messages month	getrem
list measurements special-features day	traffic special features day	getspfea
list measurements special-features hour	traffic special features hour	getspfea
list measurements subscriber day	traffic subscriber day	gettraf
list measurements subscriber month	traffic subscriber month	gettraf
list remote-extensions	list extension remote	getrlist
list subscribers	list subscriber	getlist
	system announcement detail	gettannc
	system cdr	getsyscd
		get_cdr
	system translation machine adjunct	getadj
list measurements network load day	traffic network load day	getnet
list measurements network load hour	traffic network load hour	getnet
list trusted-servers (INTUITY AUDIX only)	none	getserve
list remote-text-addresses (INTUITY AUDIX only)	none	gettlist

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Database Modification Commands

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Database Modification Commands

You use database modification commands to modify certain data directly in the voice mail database. The following table provides you with the name of each modification command, its purpose, and the voice mail system software versions for which the commands can be used. All commands are described in Chapter 13, "Command Line Database Modification Commands", in alphabetical order.

Table 11-2.   Database Modification Commands

Purpose	Command	Voice Mail Version
Add remote subscriber	addrsub	All
Add subscriber	addsub	D-r1.0+, r1v3+, I-r2.0+
Change covering extension	changcex	All
Change community id	changcom	D-r1.0+, r1v5+, I-r2.0+
Change class of service	changcos	All
Change subscriber extension	changext	All
Change miscellaneous field	changmis	All
Change priority message	changmsg	D-r1.0+, r1v5+, I-r2.0+
Change subscriber attributes	changsub	D-r1.0+, r1v6+, I-r2.0+
Change subscriber name	changnam	All
Change password	changpwd	All
Change switch number	changsw	All
Change text-service machine user ID	changtex	r1v4+
Change remote subscriber community id	chgrcom	All
Change remote subscriber extension	chgrext	All
Change remote subscriber machines	chgrmach	All
Change remote subscriber names	chgrnam	All
Delete remote subscribers	delrsub	All
Set system translation machine adjunct	setadj	r1v5+
Set activity log values	setalogp	D-r2.0+, I-r2.0+
Set system cdr screen data	setscdr	r1v5+