AUDIX®
R1V8 Issue 8:1 to 8:2

Change Description

PRELIMINARY DRAFT

Notice

While reasonable efforts were made to ensure that the information in this document was complete and accurate at the time of printing, AT&T can assume no responsibility for any errors. Changes and corrections to the information contained in this document may be incorporated into future reissues.

Your Responsibility for Your System's Security

You are responsible for the security of your system. AT&T does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. AT&T will not be responsible for any charges that result from such unauthorized use. Product administration to prevent unauthorized use is your responsibility and your system administrator should read all documents provided with this product to fully understand the features available that may reduce your risk of incurring charges.

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Part 15: Class A Statement. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

Part 68: Network Registration Number. This equipment is registered with the FCC in accordance with Part 68 of the FCC Rules. It is identified by FCC registration number AS593M-14695-MA-E.

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AUDIX® is a registered trademark of AT&T.

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Refer to the *Trademarks and Service Marks* section near the front of this manual for additional trademarks.

Ordering Information

Comments

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Acknowledgment

Contents

About This Document

This document describes changes between AUDIX Release 1 Version 8 (R1V8) Issue 8:2 software and the earlier issue R1V8 Issue 8:1. All systems or upgrades shipped after March, 1994 will have 8:2 software.

These changes and enhancements are available on all new AUDIX systems and for all AUDIX updates and upgrades. This material references and updates the AUDIX R1V8 documentation set, so use this material in conjunction with that documentation set.

INTENDED AUDIENCES

The system administrator is one of the primary audiences for this document. Much of the material in this document directly affects the AUDIX system administrator or the subscribers that the system administrator supports.

The information in this document is also useful to AT&T sales and marketing personnel, AT&T remote services support staff, and other AT&T personnel who must understand and support AUDIX voice mail systems.

HOW THIS DOCUMENT IS ORGANIZED

Changes (either corrections or enhancements) to AUDIX features are divided into three categories, depending upon the audience the change is most likely to affect. The chapters are titled for each of the categories as follows:

- *Subscriber Changes (User Affecting)* — Covers changes or enhancements that AUDIX subscribers will experience as they use the system. System administrators should distribute this information as appropriate to their subscriber populations (for example, if they updated from R1V8 8:1 to R1V8 8:2 software).

- *Administration Changes (Administrator Affecting)* — Covers changes that directly affect the system administrator. Administrators can use this information to supplement their AUDIX library. R1V8 8:1 features and enhancements are covered in the regular AUDIX documentation set (see the *Related Resources* section).

- *Maintenance Changes (Services Affecting)* — Covers changes most likely to affect local or remote services personnel. However, system administrators may wish to review this section to be aware of all the changes and enhancements to their AUDIX R1V8 8:2 system.

HOW TO USE THIS DOCUMENT

This document supplements the documentation set received with a new AUDIX R1V8 8:1 system. However, it is most useful for summarizing differences between the current and previous software releases if an AUDIX R1V8 8:1 system is updated to R1V8 8:2.

CONVENTIONS USED IN THIS DOCUMENT

The following typographic conventions are used in this document:

- Terminal keys and telephone buttons that you press are shown in curved-edge boxes. For example, an instruction to press the return, carriage return, or equivalent key is shown in this document as:

    Press ⎰RETURN⎱.

- The word *enter* means to type a value and press ⎰RETURN⎱. For example, an instruction to type the letter *y* and press ⎰RETURN⎱ is shown in this document as:

    Enter **y** to continue.

- AUDIX screen forms and other information that appears on the terminal screen are shown in constant-width type. For example:

    The `Machine Name` field appears on the `change machine` form.

- Variables for which you or the system substitute a word specific to your own application are shown in italic type. For example, an error message that appears on the screen with the name of your own specific filename might appear generically in this document as:

    Your file <*filename*> is formatted incorrectly.

TRADEMARKS AND SERVICE MARKS

The following trademarked products are mentioned in this document:

- AUDIX® is a registered trademark of AT&T.

RELATED RESOURCES

Documents affected by the R1V8 8:2 changes include:

- *AUDIX Administration* (585-305-501)

- *AUDIX Feature Descriptions* (585-305-203)

- *AUDIX Release 1 Version 8 Forms Reference* (585-305-209)

- *AUDIX Upgrade Instructions* (585-302-108)

Refer to the *AUDIX Documentation Guide* (585-300-011) for a complete list of AUDIX documentation.

HOW TO MAKE COMMENTS ABOUT THIS DOCUMENT

While we have tried to make this document fit your needs, we are interested in your suggestions for improving it.

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1. Subscriber Changes (User Affecting)

The changes in this section are visible to subscribers (users) of the AUDIX system. The system administrator should distribute this information to subscribers as appropriate.

Password Aging feature introduced:

The Password Aging feature provides enhanced system security by requiring that AUDIX subscribers change their passwords within an interval specified by the system administrator. Password Aging includes the following features, which are described in more detail below:

- Subscriber prompt that password has expired and must be changed

- Subscriber prompt that the password will expire in a specified number of days (optional)

- Prevention of subscriber changing password again within a specified number of days (optional)

After a certain number of days specified by the system administrator, the subscriber is prompted to enter a new password by the following AUDIX message: *"Your password has expired. Please enter new password and pound sign."* The procedure for changing a password is unchanged.

If the optional "Expiration warning" feature is enabled, the AUDIX system prompts subscribers to change their passwords based upon an interval specified by the system administrator. The subscribers hear this warning message: *"Your password will expire in X days"* or *"Your password will expire within one day."* This prompt is repeated daily, until the subscriber changes the password or until the expiration date, when AUDIX forces the subscriber to change the password.

If the optional "Minimum days before changes" feature is enabled, the system requires that a minimum number of days elapse before the subscriber again changes the password. This prevents subscribers from changing their password and then immediately changing it back to the old password. If this option is enabled, when the subscriber tries to change the password prior to the minimum number of days, the subscriber hears this message: *"Password cannot be changed within X days of the last change."*

The Password Aging feature enhancement also requires that the subscribers immediately change the default password supplied by the system administrator. This default password is provided initially for new subscribers. It is also supplied by the administration if the system locks out a subscriber because of a security violation. In this case, the default password invalidates the subscriber's old password.
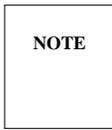
NOTE	Any time the administrator changes a password, it automatically becomes "expired."

Priority on Call Answer Message feature added:

The Priority on Call Answer Message feature allows callers to mark call answer messages as priority by selecting the priority option from the Delivery Options Menu. This feature is administered at the system level, in other words it is activated either for all subscribers or no subscribers. The priority feature was formerly available for Voice Mail Messages only; it is now available for Call Answer as well.

When a call is redirected to the AUDIX system through the Call Answer feature, the caller records a message and presses $\boxed{\#}$, (or $\boxed{*}$ $\boxed{\#}$, in the Traditional Announcement set) the caller then hears the following message in the Delivery Options Menu: *"To make private, press 1. To make priority, press 2. To send, press # (or *#)."* When the caller presses $\boxed{2}$, the message is marked as "priority." The caller then hears, *"To make private, press 1. To remove priority, press 2. To send press #."* If the caller presses $\boxed{\#}$ or simply hangs up, AUDIX delivers the message as a priority message.

When the subscriber with priority call answer messages successfully logs into the AUDIX system, the subscriber hears: *"X new voice mail messages including Y new priority messages".* When the subscriber enters the message retrieval menu by pressing $\boxed{2}$ or $\boxed{7}$ at the Activity Menu, the priority call answer messages are presented before nonpriority messages. Both Priority Mail messages and Priority Call Answer messages are grouped together.

Non-addressed messages retained:

This feature gives the subscriber a second chance to address a modified, new, or reply message. Prior to 8:2, unaddressed messages were immediately deleted. In 8:2 subscribers are prompted to enter an address if they neglected to provide an address when creating the message.

1. When the subscriber presses $\boxed{\#}$ or $\boxed{*}$ $\boxed{\#}$ to approve a message, he or she hears: *"Enter extension and # sign. When finished addressing press # (or *#)."*

2. When a subscriber presses $\boxed{\#}$ to indicate that he or she is finished entering the extension(s), the subscriber hears: *"To send message, press #. Or enter a delivery option. To hear a list of delivery options, press zero."*

3. Depending on whether or not the subscriber entered an extension(s), one of the following happens:

   a. If the subscriber entered at least one addressee and pressed $\boxed{\#}$, then pressed $\boxed{\#}$ or $\boxed{*}$ $\boxed{\#}$ to send the message, the subscriber hears *"Delivery scheduled"* and the message is delivered.

   b. If the subscriber did not enter an addressee but instead pressed only $\boxed{\#}$, the subscriber hears an error tone and the prompt: *"No addressees identified. Enter extension and # sign. When finished addressing press #."*

   If the subscriber again presses $\boxed{\#}$ without addressing the message, the AUDIX system deletes the message and the subscriber hears: *"No addressees identified. Deleted."*

NOTE   The Reply to Sender feature provides the required addressee.

Call error handling enhanced:

Previously, if a system error occurred during Call Answering, AUDIX played the message *"This call is experiencing difficulties."* and did not the save message.

Now, hardware error handling has been enhanced so that rather than delete the message, the system saves the recorded message. If the message was only partially recorded, the subscriber is able to listen to the partial message and re-record, if desired. This enhancement affects both Call Answer and Voice Mail.

2. Administration Changes (Administrator Affecting)

The changes in this section primarily affect the system administrator for the AUDIX system. The changes in this section apply to most AUDIX systems.

Password Aging:

The Password Aging feature described in Chapter 1 is administered on the `system : appearance` form shown below, using the following three fields:

- The `password expiration interval` field specifies the number of days that a subscriber's password is considered active. Valid values are 0 - 999. The default is `0`, which disables the password aging feature. This field must be greater than the the sum of the `minimum age` and `expiration` fields.

- The `minimum age` field allows system administrators to specify the minimum number of days which must pass before a subscriber can again change the password. Valid values are 0 - 99. The default is `0`, which disables the minimum age feature.

- The `warning` field indicates the number of days prior to password expiration that the system will notify subscribers of impending expiration. For example, if this field is set to 3, three days before their passwords expire the system warns subscribers that their passwords will expire in three days. The valid values are 0 to 99. The default is `0`, which disables the expiration warning feature.

The nightly system data audit checks the following conditions:

- `password expiration interval` must be between 0 and 999.

- `minimum age` must be between 0 and 99, and must be less than the `password aging interval`.

- The `warning` must be between 0 and 99, and must be greater than the `expiration interval`.

If the audit identifies that any of the above conditions is not met, an administrative log entry is made and the invalid field entry is set to `0`.

When implementing the Password Aging feature, keep the following in mind:

- Activating Password Aging automatically expires all subscriber passwords.

- The system administrator may expire all passwords by turning Password Aging off (setting `expiration interval` to 0) and back on.

- The administrator may expire an individual subscriber's password by entering `e` in the password field on the `subscriber : local` form. This changes the date-stamp for that password.

- To avoid system congestion, Password Aging should be activated during a low traffic period, and when audits and system data backups are not running.

```
  AUDIX STATUS:  alarms: none,  logins: 1,  thresholds: none
 ┌──────────────────────────────────────────────────────────────────────┐
 │ PATH:  system : appearance                                             │
 └──────────────────────────────────────────────────────────────────────┘
  login retries: 3            consecutive valid login attempts: 18
  system guest password: _____   minimum password length: 0
  input time limits (seconds), normal: 99    wait (*W): 180
  full mailbox timeout (seconds)  : 5       dial tone detect (seconds)   :
  name recorded by subscriber (y/n)? y      flash transfer delay (seconds): 2
  multiple personal greetings (y/n)? y      tone detect interval (l/s): l
  increment (l/s), rewind: s  advance: s    priority on call answer (y/n) : n
  traffic collection (y/n)? y  prime time (24 hour clock), start: 0800  end: 1700
  end of message warning, active (y/n)? y   time (seconds): 15
  password expiration inverval: ___  minimum age: __  warning : __
  call transfer out of AUDIX feature (y/n)? n   enhanced call transfer (y/n)? n
  covering extension: _____              '0' calls follow coverage (y/n)? n
  broadcast mailbox extension:              transfer access code: _____
  rescheduling increments
  incr1: 0__ days 0__ hrs 1__ min     incr2:  0__ days 0__ hrs 5__ min
  incr3: 0__ days 0__ hrs 5__ min     incr4:  0__ days 0__ hrs 5__ min
  incr5: 0__ days 0__ hrs 5__ min     incr6:  0__ days 0__ hrs 5__ min
  incr7: 0__ days 0__ hrs 5__ min     incr8:  0__ days 0__ hrs 5__ min
  incr9: 0__ days 0__ hrs 5__ min     incr10: 0__ days 0__ hrs 5__ min
 ┌──────────────────────────────────────────────────────────────────────┐
 └──────────────────────────────────────────────────────────────────────┘
  Error and confirmation messages appear here.

 ┌────────┬───────┬────────┐  ┌───────┬───────┐   ┌───────┬───────┬───────┐
 │ CHANGE │ ADD   │ DELETE │  │ HELP  │ FIELD │   │ CLEAR │ EXIT  │ ENTER │
 │ or RUN │       │        │  │       │ HELP  │   │ FORM  │       │       │
 └────────┴───────┴────────┘  └───────┴───────┘   └───────┴───────┴───────┘
```

Priority on Call Answer:

> The Priority on Call Answer feature is described in Chapter 1. It is administered system-wide from the `system : appearance` form shown above. The `Priority on Call Answer (y/n)?` field enables (`y`) or disables (`n`) the priority call feature. At installation and on upgrades, this field is set to `n`.

> For traffic purposes, a priority call answer message is counted as both a call answer message and a priority message. These counts appear on the `traffic : feature : day` and the `traffic : feature : hour` forms.

> Priority calls are now recorded in the system activity log, and may be displayed with the `system : activity log : display` form.

Enhanced Call Transfer:

> Enhanced Call Transfer limits a customer's risk of toll fraud (callers exiting AUDIX and placing toll calls from the customer's telephone system) by allowing callers to access only valid extensions in the customer's dial plan.

> The `call transfer out of AUDIX` and `enhanced call transfer` fields are both automatically set to (`n`) when the AUDIX system is installed, upgraded, or updated. When the system administrator turns on Call Transfer Out of AUDIX (`y`) this also automatically turns on Enhanced Call Transfer (`y`). These fields are administered from the `system : appearance` form shown above.

Because Enhanced Call Transfer reduces a customer's risk of toll fraud, only the remote service support center can set Enhanced Call Transfer to `n` when Call Transfer Out of AUDIX is set to `y`. In R1V8 8:2 software, customers attempting to set the `enhanced call transfer` field to `n` will be denied.

NOTE	Enhanced Call Transfer cannot be turned off under the `cust` or `craft` login, but only using a special login at the Technical Service Center (TSC).

Customers may request that Call Transfer Out of AUDIX be turned on (`y`) and Enhanced Call Transfer be turned off (`n`), by contacting their AT&T representative.

System Data Filesystem Backup:

System administrators may now backup the system data filesystem to a hard drive as well as a removable cartridge drive (RCD). This feature gives customers with extremely large databases more flexibility and lower operating costs.

Administrators may now alternate backing up between the RCD and the hard drive, so there will always be a filesystem backup copy available. (Formerly large customers with 20-megabyte RCDs had to delete the previous backup filesystem prior to backing up.)

Now administrators may specify two volume labels for the system data (SD) filesystem backup. Two new fields `volume 1` and `volume 2` on the `system : filesystems` form identify backup locations. The first field defaults to `back01` for the removable cartridge and the second field defaults to blank.

The volume names in the `system /sd data backup destination volume 1` (default `back01`) and `volume 2` (default blank) on the `system : filesystems` form should appear on the `list : volume names` form.

The following procedure tells you how to confirm that these fields contain the correct values and how adjust them, if they do not.

1. If the backup cartridge is not in the RCD, place the original backup cartridge (which was in the AUDIX system prior to the upgrade) back into the RCD.

2. If the cartridge is not already spun up (green LED on), spin up the cartridge:

   a. Access the `maintenance : dbp : equip` form by entering **ma db eq** on the PATH line.

   b. Tab to the `disk drive number` field, type **1** and press ⎡F1⎤ (CHANGE/RUN).

   c. When `operation confirmed` displays, press ⎡CTRL⎤ and ⎡z⎤ simultaneously to exit the form.

3. Record the volume labels from the `list : volume names` form.

    a. Access the `list : volume names` form by entering **li vo** on the PATH line.

    b. Write down all of the volume names, for comparison with the volume 1 and volume 2 fields in the `system : filesystems` form.

    c. Press (CTRL) and (z) simultaneously to exit the form.

4. Confirm that the volume fields on the `system : filesystems` form are either blank or contain values from the `list : volume names` form.

From the following table select the combinations for the two volume label fields:

Volume 1	Volume 2	Usage
back01	blank	These are the default values. This configuration backs up the filesystem to RCD back01. Recommended for most customers.
back01	back02	Alternates backup between RCD back01 and RCD back02, for customers who wish to have two, alternating backups.
back01	disk02	Alternates backup between RCD back01 and hard drive disk02.
disk02	blank	Backs up the filesystem to hard drive disk02.
disk02	disk03	Alternates backup between hard drives disk02 and disk03. This is necessary for customers whose SD is too large to fit on an RCD.
blank	blank	No backups performed. This is *not* recommended.

    a. Access the `system : filesystems` form by entering **sy fi** on the PATH line.

    b. If `system data backup volume 1` contains blanks or contains an entry from the `list : volume names` form, continue with the next step. Otherwise:

      — Tab to the `system data backup volume 1` field.

      — Into this field type blanks or type an RCD volume name from the `list : volume names` form.

      — Press (F1) (CHANGE/RUN).

    c. If `system data backup volume 2` contains blanks or contains an entry from the `list : volume names` form, continue with the next step. Otherwise:

      — Tab to the `system data backup volume 2` field.

      — Into this field type blanks or type an RCD volume name from the `list : volume names` form.

      — Press (F1) (CHANGE/RUN).

    d. Press (CTRL) and (z) simultaneously to exit the form.

```
╭─────────────────────────────────────────────────────────────────╮
│  AUDIX STATUS:  alarms: none,  logins: 1,  thresholds: none       │
│ ┌───────────────────────────────────────────────────────────────┐│
│ │  PATH:   system : filesystems                                  ││
│ └───────────────────────────────────────────────────────────────┘│
│  FILESYSTEMS IN ACTIVE USE:                                       │
│                                                                   │
│  system data /sd: _____    voice data /vd: _____ │
│                                                                   │
│  system status /ss: _____      boot /boot: _____ │
│                                                                   │
│  voice text (messages):                                           │
│                                                                   │
│  /vm0  _____         /vm1  _____        │
│                                                                   │
│  /vm2  _____         /vm3  _____        │
│                                                                   │
│  /vm4  _____         /vm5  _____        │
│                                                                   │
│  /vm6  _____         /vm7  _____        │
│                                                                   │
│  /vm8  _____         /vm9  _____        │
│                                                                   │
│  system data /sd backup destination volume 1: _____   volume 2: _____ │
│                                                                   │
│  ┌─────────────────────────────────────────────────────────────┐ │
│  └─────────────────────────────────────────────────────────────┘ │
│  Error and confirmation messages appear here.                     │
│  ┌───────┬─────┬────────┐   ┌──────┬───────┐   ┌───────┬──────┬───────┐ │
│  │CHANGE │ ADD │ DELETE │   │ HELP │ FIELD │   │ CLEAR │ EXIT │ ENTER │ │
│  │or RUN │     │        │   │      │ HELP  │   │ FORM  │      │       │ │
│  └───────┴─────┴────────┘   └──────┴───────┘   └───────┴──────┴───────┘ │
╰─────────────────────────────────────────────────────────────────╯
```

Turning off digital network updates:

The updates (y/n)? in _   out _ fields on the system : translation : machine : audix/amis/call delivery form (shown below) for the local machine now allow the administrator to *globally* control the updating of subscriber information across a network. By setting the updates in field on the local machine to n, the administrator can defer until later updates received by the local machine from remote machines. By setting the updates out to n the administrator may temporarily prevent subscriber updates from going out to all remote machines. Up to a maximum of 5,000 updates will be stored in the queue.

Name voice fragments or subscriber information updated in the subscriber, extension, or community id fields on the subscriber : local form is queued for transmission to the remote machines, unless the updates out field is set to n on the local machine profile. Because these remote updates take priority over voice message processing, administrators of larger AUDIX networks may opt to defer remote updating and temporarily block transmission of the remote subscriber information until setting the updates out field back to y.

The local machine will only receive subscriber updates from remote machines, when the updates in field is set to y.

```
AUDIX STATUS:  alarms: none,  logins: 1,  thresholds: none
 PATH:  system : translation : machine : audix/amis/call delivery
machine name: local_____   local/remote: l  password: _____    ext length: 5
voiced name (y/n)? n   voice id: 0      AMIS callback no.: _ (1, 2, 3, 4, or 5)
default community: 1   connection type: dcp     data rate: 9600    channel: _
 dial string _____
address ranges (prefix      start     / end extension)  warnings
  1: _____    00000____ / 99999_____     _____
  2: _____    _____ / _____      _____
  3: _____    _____ / _____      _____
  4: _____    _____ / _____      _____
  5: _____    _____ / _____      _____
  6: _____    _____ / _____      _____
  7: _____    _____ / _____      _____
  8: _____    _____ / _____      _____
  9: _____    _____ / _____      _____
 10: _____    _____ / _____      _____
message transmission schedule (hh:mm)
1. start: __:__   end: __:__    interval: __:__   updates (y/n)?  in _  out _
2. start: __:__   end: __:__    interval: __:__   network turnaround (y/n)? _
3. start: __:__   end: __:__    interval: __:__   log connect events (y/n)? _
new machine name: _____       send to non-administered recipients (y/n)? _

Error and confirmation messages appear here.

 CHANGE   ADD    DELETE       HELP    FIELD       CLEAR   EXIT   ENTER
 or RUN                               HELP        FORM
```

Node 100 allows voiced name:

Administrators may now identify the 100th machine with a voiced name. Although AUDIX allows
up to 100 additional machines in the network, administrators previously were unable to record a
voice name for the 100th machine.

3. Maintenance Changes (Services Affecting)

The changes in this section affect local (on-site) or remote services personnel. The changes in this section apply to most AUDIX systems.

Basic Call Transfer:

Customers may no longer turn off Enhanced Call Transfer, a feature which reduces the risk of toll fraud. If a customer wants to turn off Enhanced Call Transfer and leave Call Transfer Out of AUDIX on, the customer must contact the AT&T representative.

Enhanced Call Transfer is turned off using the `enhanced call transfer` field on the `system : appearance` form. To turn off Enhanced Call Transfer, perform the following steps:

1. Log into the customer's AUDIX system as using the `inads` login.

2. Enter **sy ap** to access the `system : appearance` form.

3. Enter **n** in the `enhanced call transfer (y/n)` field.

4. Press ⎡F1⎤ (CHANGE/RUN).

Link trace messages enhanced:

The link trace now displays an appropriate message when the switch sends back an Data/Digital Communication Interface Unit (DCIU) application header message with statement type 4 (header error) or statement type 5 (application error), rather than *Message type unknown*.

Factory configuration for traditional announcements corrected:

In R1V8 8:1, when the factory configured a customer's AUDIX system for a customer requesting traditional announcements, the configuration software installed the correct announcement filesystem (anc.adat), but recorded the name of the filesystem in the boot_f.boot/dbpa file incorrectly as "ana.adat." This caused the system to display `service not started` on bootup during installation.

In R1V8 8:2, the correct announcement filesystem name is recorded in the boot f.boot/dbpa file, and the system displays `start service` on boot up.

Switch numbers corrected:

The scheme for auditing switch numbers on a Distributed Communication System (DCS) has changed. Previously, when AUDIX found no switch for an extension (because the switch was down), the system assigned a zero to that extension. However, the value zero identifies records to be ignored during audit, so "-1" is now assigned to extensions when no switch found. This flags those extensions so that the system sets "-1" to the correct switch number when the switch is back up.