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DEFINITY® AUDIX® Release 1.0 to 2.0

Change Description

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Acknowledgment

This document was prepared by the AT&T Product Documentation Development Department, Denver, CO 80234-2703.

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About This Document

This document describes changes between DEFINITY® AUDIX® Release 2.0 (R2.0) software and the earlier Release 1.0 (R1.0).

These changes and enhancements will be available on all new DEFINITY AUDIX systems and for all DEFINITY AUDIX upgrades. Systems that are currently running R1.0 software and exhibit no problems will *not* be issued this change unless specifically requested by AT&T remote services personnel.

INTENDED AUDIENCES

The system administrator is one of the primary audiences for this document. Much of the material in this document directly affects the DEFINITY 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 DEFINITY AUDIX voice mail systems.

HOW THIS DOCUMENT IS ORGANIZED

Changes (either corrections or enhancements) to DEFINITY 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 DEFINITY 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 upgraded from R1.0 to R2.0 software).
- *Administration Changes (Administrator Affecting)* — Covers changes that directly affect the system administrator. Administrators can use this information to supplement their DEFINITY AUDIX library. R2.0 changes and enhancements should already be covered in the regular DEFINITY 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 DEFINITY AUDIX R2.0 system.

SUMMARY OF R1.0 TO R2.0 CHANGES

Release 1.0 of the DEFINITY AUDIX system supported up to 8 voice ports by having the DEFINITY AUDIX system emulate a switch digital port board. In Release 2.0, DEFINITY AUDIX customers have the option of using the R1.0 integration method, now called *digital-port* (DP) mode, or of having the DEFINITY AUDIX system emulate an analog port board and receiving call information over a control (data) link, similar to the R1 AUDIX system. This new integration supports up to 16 voice ports and is called *control-link* (CL) mode.

The following table summarizes the feature differences between R1.0 and R2.0 systems.

Table 1. DEFINITY AUDIX R1.0 to R2.0 Change Summary

Function or Feature	Digital Port Operation (R1.0 or R2.0 software)	Control Link Operation (R2.0 software only)
AMIS Analog Networking	Yes	Yes
Board Type/Vintage Number Recognized by Switch *Non-Native Support* *Native Support*	 TN754 Vintage 50+*n*† TN566 Vintage *n*†	 TN746B Vintage 50+*n*† TN566 Vintage *n*†
Call Screening on Call Answer	Yes	No
Call Transfer Into AUDIX	Indirect using Call Transfer Into Mailbox	Yes
Call Transfer Out of AUDIX	Basic only	Enhanced only
Control Link Trace	No	Yes
DCS Operability	No	Yes‡
Integrated Message Notification (IMN)	No	Yes
LWC stored on DEFINITY AUDIX	No	Yes
Message-Waiting Indication (MWI) Control	LWC message	Link message
**R* (Restart) Available for Call Answer	No	Yes
RS-232 Ports – Local Access	2	1
RS-232 Ports – Remote Access	1	1
Time Synchronization with Switch	Yes	Yes
Voice Port Capacity	8	16

† *n* equals actual vintage number.

‡ DCS with a G3r as the host switch is not currently supported.

For a DEFINITY AUDIX system to operate in CL mode, an additional cable is needed for the control link; the CL connection may also require DSUs, MPDMs, or an IDI, depending on the configuration (the physical and power requirements of the DEFINITY AUDIX unit itself remain unchanged in R2.0). In addition to the feature changes listed in the previous table, the control link allows:

- Immediate activation and deactivation of the MWI as appropriate
- PBX-based auditing of MWI status (the DEFINITY AUDIX system does not need to use voice ports to access the switch LWC feature in order to activate MWIs)
- Possible storage of LWC messages in DEFINITY AUDIX subscribers' mailboxes (recommended)

Refer to the *Related Resources* section for documents that detail R2.0 system configurations, features, and hardware.

HOW TO USE THIS DOCUMENT

This document supplements the documentation set received with a new DEFINITY AUDIX R2.0 system. However, it is most useful for summarizing differences between the current and previous software releases if an DEFINITY AUDIX R1.0 system is upgraded to R2.0. A cross-referenced index appears at the end of this document to help highlight specific items that have changed.

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.

- DEFINITY AUDIX screen forms and other information that appears on the terminal screen is 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® System is a registered trademark of AT&T.
- DEFINITY® is a registered trademark of AT&T.

RELATED RESOURCES

The following documents describe DEFINITY AUDIX R1.0 and R2.0 systems. Refer to the *DEFINITY AUDIX System — Documentation Guide*, 585-300-011, for a complete list of DEFINITY AUDIX documentation.

- *AMIS Analog Networking and Message Delivery for DEFINITY AUDIX System R1.0*, 585-300-512
- *AUDIX Administration and Data Acquisition Package*, 585-302-502
- *DEFINITY AUDIX System — Administration*, 585-300-507
- *DEFINITY AUDIX System — Feature Descriptions*, 585-300-206
- *DEFINITY AUDIX System — Forms Reference*, 585-300-207
- *DEFINITY AUDIX System — Installation*, 585-300-111
- *DEFINITY AUDIX System — Maintenance*, 585-300-110
- *DEFINITY AUDIX System — System Description*, 585-300-205
- *Planning for DEFINITY AUDIX System*, 585-300-904
- *Switch Administration for DEFINITY AUDIX System*, 585-300-509

1. Subscriber Changes (User Affecting)

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

COMMON FEATURES

The changes in this section apply to most DEFINITY AUDIX customers.

Control link enhancements:

DEFINITY AUDIX R2.0 systems that are installed or upgraded to use a control link (CL mode) offer the following new features. Refer to *DEFINITY AUDIX System — Feature Descriptions*, 585-300-206, for details on any of these features.

- *Call Answer Restart Available:* Subscribers who reach a DEFINITY AUDIX system in CL mode through Call Answer may press (*) (R) (Restart) to log into their mailboxes. (The Call Screening feature for Call Answer calls is *not* supported in CL mode; only DEFINITY AUDIX systems in DP mode can use this feature.)
- *DCS Networking:* DEFINITY AUDIX systems in CL mode support the Distributed Communications System (DCS) feature, allowing subscribers on remote switches to be addressed and identified by name (caller ID). Various levels of feature transparency are available depending on the type of switch(es) to which the DEFINITY AUDIX system is connected.
- *Leave Word Calling (LWC):* LWC messages may be left and accessed on a DEFINITY AUDIX system in CL mode. The standardized message informs subscribers of the time and sender, and offers them the option to respond automatically.
- *Integrated Message Notification (IMN):* Subscribers who log into a DEFINITY AUDIX system in CL mode receive a summary of other message services which may have caused the subscriber's message-waiting indicator (MWI) to light (for example, electronic-text messages or switch LWC messages).
- *Transfer Into AUDIX:* A covering agent can redirect callers to a subscriber's mailbox using a single access code, as long as the DEFINITY AUDIX system is in the call-coverage path for that subscriber. (The Transfer Into Mailbox feature accomplishes this in a two-step process for DP mode systems.)
- *Transfer Out of AUDIX — Enhanced:* Callers can transfer to any extension in the switch's dial plan using the enhanced call transfer capability in CL mode systems. Enhanced call transfer is faster and provides greater protection against toll fraud than the basic call transfer which must be used when a DEFINITY AUDIX system is in DP mode. In addition, enhanced call transfer returns callers to the activity menu if the transfer cannot be completed.

For a complete list of R1.0 to R2.0 feature changes, see Table 1, *DEFINITY AUDIX R1.0 to R2.0 Change Summary*, in the *About This Document* section.

Call Answer messages lost:

Prior to R2.0, certain types of trunks could cause Call Answer messages to be lost because of delayed disconnects on the incoming trunk. (For example, calls that were forwarded to a DEFINITY AUDIX mailbox from an attendant could time out, causing the Call Answer message to be lost.) Now, the DEFINITY AUDIX system saves these Call Answer messages.

Prompt during automatic message scan corrected:

Prior to R2.0, subscribers heard an outcalling help announcement when they listened to help for the automatic message scan feature. This inapplicable announcement has now been removed.

Prompt during address deletions corrected:

Prior to R2.0, if subscribers attempted to address a message to an invalid extension or nonexistent subscriber, then deleted this entry from the address list by pressing * D, they heard the message, ''*nonexistent subscriber*.'' Now they hear the message, ''*nothing to delete*.''

Undeliverable message editing corrected:

Previously, subscribers experienced problems trying to edit undeliverable messages and then resending them if the messages were addressed to a list. Now, message originators can edit and resend undeliverable messages addressed to a list.

SPECIAL FEATURES

The changes in this section apply only to those DEFINITY AUDIX customers who have activated the outcalling or AMIS analog networking features.

Outcalling Enhancements

Outcalling is a special feature offered on DEFINITY AUDIX systems. For details on the outcalling feature, refer to *DEFINITY AUDIX System — Feature Descriptions*, 585-300-206.

Hung ports now released:

Prior to R2.0, outcalling ports sometimes hung (for example, if the DEFINITY AUDIX system missed or failed to receive a disconnect signal). Now, the DEFINITY AUDIX system only informs subscribers once to make an entry soon or be disconnected; the port soon hangs up and is freed to handle other calls.

Login period extended:

Previously, subscribers who answered an outcall had only one second to press a button for their extension or password before the call was terminated. In R2.0, the timeout period has been increased to ten seconds.

Outcalls not delivered at first appropriate interval:

Prior to R2.0, it was possible for an outcall not to be placed until the start of a new interval period specified on the `system-parameters outcalling` form, even though outcalling was already active during the period when a new message was received. This problem seemed to especially affect those systems whose outcalling periods spanned midnight. In R2.0, outcalls will now occur as expected (following the initial delay, if any).

Softer outcalling tone:

The tone used as part of the AUDIX outcalling message has been modified to be softer. (Previously, subscribers heard a very loud tone when answering an outcall.)

AMIS Enhancements

The changes in this section apply only to customers who have implemented the Audio Messaging Interchange Specification (AMIS) analog networking feature. AMIS information is documented in *AMIS Analog Networking and Message Delivery for DEFINITY AUDIX System R1.0*, 585-300-512.

Message delivery to a list corrected:

AMIS analog networking did not always reschedule some AMIS messages to be retransmitted when there was a list of recipients, so not all the addressed members of a list received a copy of the message. This problem has been corrected in R2.0.

Message delivery rescheduling for queue corrected:

AMIS message delivery must be done in packets of 9 to satisfy the AMIS standard. Prior to R2.0, however, the system did not immediately reschedule any messages still left in the queue for immediate delivery, but waited until the next transmission interval as scheduled on the `system-parameters features` form. In R2.0, AMIS now reschedules for immediate delivery any messages left in the queue after the first 9 are transmitted.

Reply to Sender feature no longer offered for incorrectly administered AMIS machines:

Prior to R2.0, if the DEFINITY AUDIX system could not recognize a remote AMIS machine, subscribers were still given the option to reply to the sender automatically by pressing 1 1 or 1 7. Subscribers believed they had responded to the message, but the reply was never sent. Instead, it was eventually placed in the subscriber's outgoing mailbox in the *undeliverable* category. This problem could occur if the remote AMIS machine was administered incorrectly (for example, with a bad or incomplete callback code) or if it was administered for casual addressing which does not support the Reply to Sender feature. In R2.0, if subscribers attempt to automatically respond in situations that do not support the Reply to Sender feature, the system informs them that the option is invalid.

Retransmission attempts to unknown subscribers corrected:

Prior to R2.0, if a subscriber tried to send a message to an AMIS subscriber who didn't exist on a remote AMIS machine, the system still tried to retransmit the message to the unknown subscriber. Now, a retransmission is not attempted.

Transmission attempts exceeded limit:

Prior to R2.0, an AMIS message addressed to an unknown subscriber (one for whom no profile existed) sometimes resulted in an infinite number of transmission attempts to that remote machine. In R2.0, the system allows only three transmission attempts before assuming the message is addressed to a nonexistent subscriber (usually the sender has misdialed). The system then places the message in the *undeliverable* category of the sender's outgoing mailbox and modifies the header to report an appropriate reason (for example, ''*recipient not found*'').

Undeliverable message notifications reduced:

Prior to R2.0, an *undeliverable* message notification was placed in the incoming mailbox of the originator for every AMIS message that could not be delivered. In R2.0, only one *undeliverable* message notification is sent to the originator for each intended recipient of an undeliverable AMIS message.

2. Administration Changes (Administrator Affecting)

The changes in this section primarily affect the system administrator for the DEFINITY AUDIX system.

COMMON FEATURES

The changes in this section apply to most DEFINITY AUDIX systems. Refer to *DEFINITY AUDIX System — Administration*, 585-300-507, and *DEFINITY AUDIX System — Forms Reference*, 585-300-207, for details on most of these changes.

Activity log events now in order:

Prior to R2.0, events on the `display activity-log` form appeared out of order because the session time was incorrectly doubled. This caused the logout time to be later than it should have been, allowing other events to be positioned before it. This problem is now corrected.

`add/change machine` form corrections:

Prior to R2.0, when data was restored from tape, software incorrectly changed any alphabetic characters entered in the `Prefix` field of the `add/change machine` form to their touch-tone equivalent numbers. Now, the field preserves the alphabetic characters as entered.

Also prior to R2.0, the space character was handled incorrectly in the `Machine Name` field on the `add/change machine` form. If the administrator pressed Choices for field help on a name with a space in it, all characters after the first space in the name were deleted. Now the names remain intact.

`add/change subscriber` form corrections:

Several changes to the `add/change subscriber` form are covered below.

- *Field sizes automatically increased:* Prior to R2.0, the values in the Voice Mail and Call Answer `Maximum Length` and `Minimum Needed` fields and the `Mailbox Size, Maximum` field sometimes were increased to more time than was specified (such as one second). This occurs because the system must use entire blocks of voice storage, rather than partial blocks. Now, when one of these fields on the `add/change subscriber` form is changed, the new (correct) time length showing the complete block is displayed immediately. The form's field help has also been updated to explain the rounding process.

- *Guest password error message:* Prior to R2.0, when an administrator attempted to change a subscriber's password to the guest password using the `add/change subscriber` form, the nonspecific error message `System Error` was displayed. The error message has been clarified to state `Cannot assign Guest Password to subscriber`.
- *Space character problem in names:* Prior to R2.0, the space character was handled incorrectly for the `Name` field on the `add/change subscriber` form. If the administrator pressed Choices for field help on a name with a space in it, all characters after the first space in the name were deleted. Now, the names remain intact.
- *System limits error message:* Prior to R2.0, when an administrator attempted to add a local subscriber using the `add subscriber` form and the system limit of local or administered remote subscribers had been reached (as specified on the `system-parameters limits` form), the error message `No Space Available` was displayed. The error message has been clarified to state `Number of subscribers exceeds System Limits`.

Alarm board timeout function corrected:

The automatic timeout function on the alarm board did not work correctly prior to R2.0. When the message `TIMEOUT in 60 seconds – to continue, hit RETURN` was displayed, users who pressed Return were still logged off. Now, the automatic timeout function works correctly.

Announcement administration enhanced:

The following enhancements were made to announcement administration in R2.0.

- *Announcement set message:* Prior to R2.0, when administrators pressed 9 1 to listen to an announcement, they heard nothing if the announcement set was not administered. Now, the system plays a message indicating that the announcement set does not exist.
- *Day-of-the-week prompt:* When administrators logged into the administration menu and listened to announcements, all dates were preceded by the word ''*Sunday*.'' Now, the correct day-of-the-week is spoken.
- *Time prompts:* On the American announcement set, when announcement 818 (which deals with time) played, three prompts for input were voiced when only two were needed. Now, the system correctly prompts for only two inputs.

Automated attendant corrections:

Prior to R2.0, if an automated attendant allowed extension addressing (indicated by an `e` in the `Extension` field of the `SUBSCRIBER AUTOMATED ATTENDANT MENU`), the subscriber data audit interpreted the `e` as an invalid entry and pegged an error in the administration log (`aabe – Invalid attendant`). Now, the subscriber data audit interprets the `e` as a valid entry, and no error is pegged.

Also prior to R2.0, if an administrator creates an automated attendant using the `add/change subscriber` form and later tries to change the class of service (COS) to a different call type (for example, from `auto-attendant` to `call-answer`), the subscriber data was corrupted. This

prevented the `subscriber` form for that attendant from being changed or displayed. Now, the call type of the new COS must match the previous call type before the system accepts the change, preventing subscriber profile corruption.

`change switch-link` form enhanced:

The field help for the `change switch-link` form in R2.0 includes information for administering a DEFINITY AUDIX system in a DCS network.

`change switch-time-zone` form enhanced:

Prior to R2.0, the help information for the `Time Zone` field of the `change switch-time-zone` form did not include a list of common time zones and their corresponding numbers which must be entered in the field. The field help now includes this information.

`change system-parameters customer-options` form enhanced:

Prior to R2.0, the `change system-parameters customer-options` form did not compare the number of administered ports against the number of purchased ports. This made it possible for the incorrect number of voice ports to be administered. For example, if the number of purchased ports is decreased, you must first make sure the ports that are becoming unpurchased are no longer administered (any extra administered ports must be removed before the number of ports can be reduced). Now, the form checks for the correct number of ports first to prevent extra or incorrect port administration.

In addition, the form now displays the type of switch integration in the `Switch Connection Type` field: either `embedded` (for DP mode) or `dciu-sci` (for CL mode).

`change system-parameters features` form enhanced:

In R2.0, page 2 of the `change system-parameters features` includes new options for the `CALL TRANSFER OUT OF AUDIX` feature. The `Transfer Type` field may be set to `basic` (DP mode only), `enhanced` (CL mode only), or `none` (call transfer out of AUDIX is deactivated). If the switch integration mode is changed, this field is set to `none`.

`change system-parameters password` form enhanced:

Prior to R2.0, when the old system password was not entered or was entered incorrectly on the `change system-parameters password` form, the cursor moved to the `Customer Login Password` field and the error `Old Password must be Entered Correctly` was displayed. However, users have to re-enter both the old password and the customer login password in order to correct the error. Now, the error message `Customer Password or Old Password incorrect – re-enter all passwords` is displayed.

Filesystem threshold reporting improved:

Prior to R2.0, software ignored the floating amount of free space. For example, a `FILESYSTEM SPACE THRESHOLD EXCEEDED` warning might appear on the `display system-parameters thresholds` form indicating that 85 percent of the announcement filesystem has been used, when about 16 percent of the space is available. Now software includes the floating amount of free space in its threshold percentages.

`list machines` and `list subscribers` forms retitled:

Prior to R2.0, the form titles for the `list machines` and `list subscribers` forms were not plural. These headings have been changed to match the way they are listed on the Choices menu.

`list measurements` forms changes:

The following changes affect various `list measurements` forms.

- **`list measurements feature day/hour`**: Help messages for the `list measurements feature day` and `list measurements feature hour` forms included unanswered outcalls in the count for the `VOICE MAIL, Failed Logins, External` field (a failed login occurs if an outcall is made to a subscriber who does not answer or simply hangs up, and the DEFINITY AUDIX system is in the subscriber's call-coverage path).

  In order to help prevent administrators from interpreting noncompleted outcalls as possible break-in attempts, the online help has been clarified to indicate that failed logins for outcalls are included in the `VOICE MAIL, Failed Logins, External` count. The administrator is then directed to the `measurements special-features day/hour` forms for more information on outcalls.

- **`list measurements special-features day/hour`**: Prior to R2.0, the `list measurements special-features day/hour` forms did not peg calls that were answered without a connect message. This sometimes occurred if the switch link was down or the DEFINITY AUDIX ports were called directly. Now, these calls are pegged.

- **`list measurements load day/hour`**: The `list measurements load day` and `list measurements load hour` forms now display data for up to 16 ports.

  Also, if an administrator attempted to display traffic using the `list measurements load hour` form for the Sunday when daylight savings time changed, only data for hour 1 appeared (01:00 to 01:59). To display traffic data for hour 2 and beyond, a **`2`** had to be typed on the command line as the starting hour. In R2.0, this problem is corrected.

Mailbox audit collects message header errors:

Prior to R2.0, the nightly mailbox audit logged an error for each message header that didn't have a message body. Now, these errors are accumulated and logged as a single error in the event log for each subscriber's mailbox.

OA&M state menu fixed:

The Choices menu in the Operations, Administration, and Maintenance (OA&M) state did not display all valid options for the `test` entry. The menu has now been corrected to display all valid choices.

PC terminal type added to valid logins:

For console logins, `pc` has been added as a valid terminal type.

`restore backups` form use clarified:

Prior to R2.0, the `restore backups` form filled in the default backup number and didn't indicate to the administrator to press Enter to begin the restore process. Now the default backup number is not filled in. This forces administrators to enter a number, so they can infer that Enter needs to be pressed to begin execution.

`status tape` form improved:

The `Model` field on the `status tape` form has been increased to 16 characters to display the entire model number.

switch translations audit runs nightly:

The switch translations audit now runs nightly instead of weekly.

Tape backups enhanced:

Prior to R2.0, tape backups that had appeared to work occasionally contained bad data. The tape backup software has been enhanced in R2.0 to ensure that all backups listed on the `display/restore backups` form contain valid data. In addition, the `add tape` form has been enhanced in R2.0 to allow tapes with exactly 32 backups to be added.

Tape put back in service after multiple resets:

Prior to R2.0, multiple Sanity and Control Interface (SAKI) resets could cause the tape to go out of service (OOS). Now, the system can successfully re-add a tape following a reboot caused by multiple SAKI resets.

`voice-group` forms enhanced for 16 ports:

The `change/display voice-group` forms have been enhanced in R2.0 to allow administration for up to 16 voice ports. Up to 16 ports may be busied out or released using the `busyout/release voice-group` form, and the `status voice-group` form now displays status information for up to 16 ports.

SPECIAL FEATURES

The changes in this section apply only to customers who have implemented the AMIS analog networking feature. AMIS information is currently documented in *AMIS Analog Networking and Message Delivery for DEFINITY AUDIX System R1.0*, 585-300-512.

`add/change remote-subscriber` form corrections:

Prior to R2.0, when an administrator attempted to add a remote AMIS subscriber using the `add remote-subscriber` form and the system limit of local or administered remote subscribers had been reached (as specified on the `system-parameters limits` form), the error message `No Space Available` was displayed. The error message has been clarified to state `Number of subscribers exceeds System Limits`.

In addition, the space character was handled incorrectly for the `Name` field on the `add/change remote-subscriber` form. If the administrator pressed Choices for field help on a name with a space in it, all characters after the first space in the name were deleted. Now, the names remain intact.

`change system-parameters analog-network` form enhanced:

The `change system-parameters analog-network` form now accepts a **`0`** as a valid entry in the `Country Code` field. A zero code allows the DEFINITY AUDIX system to work using a private telecommunications facility. (Prior to R2.0, a `0` code was not permitted).

Handshake message now logged:

Prior to R2.0, the administration log kept no record of an AMIS communication unless one of the machines sent messages to the other. In order to help administrators locate a problem machine, the following messages now appear on the `display administration-log` form whenever two machines establish a connection (handshake), but no messages are exchanged:

- On the receiving machine: `amis – No msgs in AMIS call from` *<country> <trunk> <local number>*
- On the sending machine: `amis – No msgs sent by AMIS call to` *<number of called AMIS machine>*

AMIS messages from an unknown machine now log a message:

Prior to R2.0, the administration log did not make an entry if a message was received from an unknown remote AMIS machine. The activity log made an entry listing the subscriber who received this message, but the AMIS networking administrator was unlikely to see it. Therefore, the following messages have been added to the `display administration-log` form whenever an unknown remote machine (such as one administered without a callback number) delivers a message to a DEFINITY AUDIX system:

- If an unknown machine sends a message: `unod — Incoming AMIS message from unknown machine` *<country number> <trunk> <local number>*
- If too many nodes match the callback number: `mnod — Multiple nodes for AMIS address` *<machine extension>*

System restart for AMIS administration no longer needed:

Prior to R2.0, when AMIS was administered using the `system-parameters analog-network` form, a system restart had to be done before the administration took effect. In R2.0, the `audit network-data` form can be executed to have the changes take effect without needing a system restart.

3. Maintenance Changes (Services Affecting)

The changes in this section primarily affect local (on-site) or remote services personnel.

COMMON FEATURES

The changes in this section apply to most DEFINITY AUDIX systems. Refer to *DEFINITY AUDIX System — Forms Reference*, 585-300-207, *DEFINITY AUDIX System — Installation*, 585-300-111, and *DEFINITY AUDIX System — Maintenance*, 585-300-110, for details on most of these changes.

Alarm Origination feature enhanced:

Prior to R2.0, some alarms were not always reported by the Alarm Origination feature. Now, all alarms are reported.

Boot from disk with minor error allowed:

Prior to R2.0, a non-system-affecting hardware problem sometimes prevented the system from booting. Now, the system will boot from disk if a checksum error is detected. This procedure will raise a minor alarm and record an error in the error log. (The system will *not* boot from tape if a similar error occurs due to the risk of corrupting disk data.)

`busyout/release voice-group` form enhanced:

Prior to R2.0, help information for the `Reason` field on the `busyout/release voice-group` form did not list `F - Fault` as a valid reason for a resource being out of service (OOS). This reason code has been added to the online help.

In addition, if the `busyout voice-group` form was used during initialization, ports intermittently were left in service. Now, all ports are busied out. The form has also been enhanced to support up to 16 ports.

Control-link alarms added:

New alarms have been added in R2.0 for control-link integrations (CL mode). Alarms are now raised if needed for the switch link to the host switch or to a remote switch in a DCS network.

Control-link forms added:

Several forms were added or modified in R2.0 to support the new control-link integration mode. Forms for administering and maintaining the control-link connection include `busyout/release switch-link`, `change/display switch-link`, `status switch-link`, and `test switch-link long/looparound`.

In addition, the `change/display system-parameters link-log` and `display link-log` forms have been added under the *craft* login ID. These forms display major events and all link messages for switches that have been translated for CL mode.

DP mode forms:

The `audit switch-names` form is available only in DP mode in R2.0. Also, a separate version of the `change/display switch-link` form is available for administering DEFINITY AUDIX systems in digital port (DP) integration mode.

Event log enhancements:

Various R2.0 enhancements to the event log are listed below. Events are displayed using the `display events` form.

- *Bad alarm board message eliminated:* Occasionally the event log indicated the alarm board could not be located, even though the alarm board appeared on the `list configuration` form. This erroneous event message does not appear in R2.0.
- *Error code 1318 eliminated:* System data (SD) manager events logged with unique error code 1318 have been eliminated in R2.0.
- **`save nightly`** *retries recorded:* Any `save nightly` retry procedures are recorded in the event log in R2.0.

Multiple baud rates added for consoles:

Prior to R2.0, directly connected consoles (terminals) were permitted only a baud rate of 9600. Now, directly connected terminals may use baud rates of 1200, 2400, 4800, or 9600. If unrecognizable characters are seen upon login in R2.0, synchronize the baud rates by pressing the Break key slowly a few times (on a 715 terminal, use the Ctrl-F14 keys for the ''break'' function). The baud rates are synchronized when the screen displays a legible `login:` prompt.

In addition, console connections over a modem were limited to 1200 or 2400 bps prior to R2.0. Now, dial-up connections may select baud rates of 300, 1200, or 2400.

Passwords changed for new R2.0 installations:

The default password for the *init* login was changed for new R2.0 installations. However, existing passwords are retained for R1.0 to R2.0 upgrades. (Passwords are periodically changed by remote services for installed DEFINITY AUDIX systems.)

Reboot after FAC shutdown now allowed if console connected:

Prior to R2.0, the Faceplate and Alarm Controller (FAC) shutdown timeout procedure prevented the system from rebooting if a console (terminal) was connected. In R2.0, the system will automatically reboot whether or not a console is present.

Restarts on G3r switches reduced:

Prior to R2.0, the DEFINITY AUDIX system occasionally restarted if it was connected to a G3r switch that sent it a bad (unrecognized) message. In R2.0, bad G3r messages no longer cause the system to restart. Instead, the message is simply recorded in the event log.

`system-parameters maintenance` form fields added:

Help information for the `Automatic Alarm Reporting Telephone Number` field on page 1 of the `system-parameters maintenance` form included invalid characters for the dial string. In R2.0, the field help has been updated to specify only valid characters.

In addition, two new alarm fields have been added to page 2 of the `system-parameters maintenance` form in R2.0: `Switch Link` (for CL mode only) and `Networking` (for AMIS analog networking).

Tape error handling improved:

In R2.0, certain tape error conditions are handled better by the tape subsystem. Also, some error messages about tape operations in the administration and event logs were truncated due to the length of the message. These messages have been shortened by omitting the words `save` or `restore`, and the type information is now displayed first.

`test board` form enhanced:

The `test board` form has been enhanced in R2.0 to test up to 16 voice ports as well as each RS-232 port. The CL mode tests include a reset looparound on the switch and a query data transfer for each switch if the DEFINITY AUDIX is part of a DCS network (the form now supports up to 20 switches). In CL mode, the voice port tests also perform a dial-tone seizure test.

Time synchronization with switch alarm added:

Prior to R2.0, an alarm was not raised at initialization if the switch and the DEFINITY AUDIX system clocks were not in synchronization. Now, an alarm is raised if the time is not synchronized between the two systems.

Upgrade procedures enhanced:

Enhancements to the Release 1.0 to Release 2.0 upgrade procedure are summarized below.

- *Old logs removed:* When a DEFINITY AUDIX system is upgraded, system logs of the old format are removed at initialization and new (empty) logs are created. Logs that are replaced include the administration log, error log, event log, and resolved-alarms log. The active-alarm log is regenerated when the upgraded system is initialized.
- *Passwords retained:* The upgrade program retains the existing passwords for the *init* and *root* logins during an R1.0 to R2.0 upgrade.
- *Tape not added:* The upgrade process used to automatically re-add the tape after an upgrade. In R2.0, the tape is not automatically re-added so the nightly backups tape can be installed.
- *Timeout removed:* Prior to R2.0, the upgrade procedure timed out if the technician did not respond at the `installation` menu. Now, the upgrade procedure does not time out or shut down the system.

Voice port alarms reduced:

Prior to R2.0, alarms against the voice ports were occasionally raised due to software timeouts. These timeouts have been adjusted so the alarms no longer occur.

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