

Lucent Technologies
Bell Labs Innovations



DEFINITY[®]

Enterprise Communications Server

Release 8, Issue 2.0 (02.0.034.2)

Change Description

555-233-411
Comcode 108678731
Issue 1
April 2000

Notice

Every effort was made to ensure that the information in this book was complete and accurate at the time of printing. However, information is subject to change.

Your Responsibility for Your System's Security

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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-13283-MF-E.

Part 68: Answer-Supervision Signaling. Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:

- Answered by the called station
- Answered by the attendant
- Routed to a recorded announcement that can be administered by the CPE user

This equipment returns answer-supervision signals on all DID calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered
- A busy tone is received
- A reorder tone is received

Canadian Department of Communications (DOC)

Interference Information

This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

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The "CE" mark affixed to the DEFINITY equipment described in this document indicates that the equipment conforms to the following European Union (EU) Directives:

- Electromagnetic Compatibility (89/336/EEC)
- Low Voltage (73/23/EEC)
- Telecommunication Terminal Equipment (TTE)
i-CTR3 BRI and i-CTR4 PRI

For more information on standards compliance, contact your local distributor.

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Acknowledgment

This document was prepared by the Product Documentation Development group, Lucent Technologies, Denver, CO.

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Highlights

This change description document describes the changes incorporated in DEFINITY Enterprise Communications Server (ECS), Release 8, Issue 2.0 (02.0.034.2).

Highlights of features and enhancements

Internet Protocol (IP) Solutions

IP Solutions provides the user with the capability to:

- Use IP H.323 multimedia endpoints
- Access the DEFINITY as a "local" station user, or as an "outside" trunk user, from across a local area network or the internet
- Use the internet as a pathway for audio calls between switches (IP trunking).

New IP endpoints include a telecommuter and home-agent version that uses LAN access to provide multifunction call feature signaling, and a call-out circuit-switched audio connection for best voice quality; and a traveling version that uses packet network access for both multifunction signaling and audio connectivity.

The primary goals of the IP Solutions development are to extend DEFINITY multifunction station feature support to IP-connected endpoints, typically user PCs, and to provide IP-based audio transport for trunking between switches. Virtually every feature available through feature access codes (but not limited to feature access codes) for standard voice calling is available for IP voice calling. Audio interworking of circuit-switched and packet-switched endpoints and facilities is fully supported, including conferencing.

The three types of IP-based user endpoints or stations are:

- A simple H.323 IP equivalent of an analog phone supports a single active call without access to conference or transfer capabilities.
- The H.323 IP station may be associated with a virtual Digital Communications Protocol (DCP) multifunction telephone running on an IP-connected PC to form a "road warrior application" complex. The virtual phone, referred to as a VPhone or SoftPhone, provides standard multifunction feature signaling capabilities such as HOLD, transfer, conference, drop, along with multiple call appearances and displays. The audio path is provided through a "service link" call to the H.323 IP station application, such as Microsoft NetMeeting running on the same PC. This type of station, as the name implies, is intended for use from remote locations via internet access, but it can also be used on-premises if LAN connectivity is preferred over hard-wired DCP connectivity.
- The third type of station, called a "telecommuter application", is supported as an IP-connected Softphone, as used for the road warrior application complex, but the audio path is provided through a call-back call to a user-specified number. The telecommuter application may, with a proper Centre Vu Agent interface, be used to implement an agent-at-home station.

Access security for IP-based stations is enforced through an encryption-based authentication procedure based on the Applications Security Gateway algorithms.

IP trunking is supported through extensions to the H.323 IP standards for DEFINITY gatekeeper or switch, to DEFINITY gatekeeper signaling. DEFINITY-to-DEFINITY IP tie trunks can be configured to support QSIG and DCS+; other switches can be supported with less functionality. DID-like trunk groups can be supported to permit calls from the IP network. Trunk security is enforced through administration of IP addresses and standard DEFINITY mechanisms, such as COR using the incoming call handling table.

Display of IP-SoftPhone Ports

The "list multi-media ip-softphones" command displays each port of each station.

Disabling IP Interface

When disabling an IP-interface on the IP-interfaces form, the warning message "WARNING: Disabling an IP-interface will cause interruption in service" displays on the IP-interfaces form.

Phone Features

Circular Station Hunting

DEFINITY ECS now includes a new hunt group type: circ for circular. Calls to a circular station hunt group route in the order in which the extensions are administered.

Centralized Voice Mail via Interswitch Mode Code

This new feature provides an inexpensive solution for Shared Voice Mail using Mode Code in a DEFINITY BCS/Merlin Legend hybrid network. The systems are part of a private network connected via Primary Rate Interface (PRI) tandem trunks. In this configuration, the Shared Voice Mail system must be directly connected to a DEFINITY switch.

24 Port Analog Line with Caller ID: TN793B & TN2793B (5/00 targeted availability)

This feature allows the DEFINITY customer to view calling party information on an analog telephone with Caller ID display, for example, the telephone number and name of the calling party when this information is available from the originating switch or central office. Time and date of call are also transmitted to the Caller ID terminal. Calling party information, time, and date of call are transmitted to the analog terminal via Frequency Shift Keying (FSK) signaling following standard Bellcore or NTT protocols.

The feature requires the 24-Port Analog Line with Caller ID circuit pack TN793B or TN2793B. The circuit pack supports Message Waiting Indication via FSK signaling, neon lamp voltages, and the DEFINITY LED method.

The feature also requires an analog terminal with Caller ID that complies with Bellcore or Nippon Telephone and Telegraph (NTT) protocols.

External Calls and Message Waiting Indication Fields

Fields have been added for the Maximum Number of External Calls Logged Per Station and Message Waiting Indication for External Calls on the System Parameters form. The Leave Word Calling (LWC) Log External Calls field is on the station form.

Recall Rotary Digit field

A rotary station user can now simulate flash hook by dialing the digit that is specified in the new feature parameters field, if the extension from which the user is calling has enabled this functionality by setting the new station field to 'y'(es).

External Coverage Treatment

The system-parameters coverage-forwarding form displayed a field titled "External Coverage Treatment for Transferred Incoming Calls?" The field title has been changed to "External Cvg Treatment for G3 Transferred Calls to G2 Supporting AUDIX?".

Call Center

Polling Over BRI Trunk

In some networks, the Basic Rate Interface (BRI) layers are brought down when the last call on the interface clears. When Best-Service-Routing polls over a BRI network that is down, the Private Branch Exchange (PBX) now waits for the BRI to come up, then proceeds with the polling without dropping the caller from vector processing or losing the call.

LWC Log External Calls Field

The LWC Log External calls field has been added to the Agent Login-ID form.

Logging External Unanswered Calls

The new feature "Log External Calls" has been implemented to log external unanswered calls.

ACD Agents Logged Into IP SoftPhones

In order to determine how many Automatic Call Distribution (ACD) agents are logged into IP SoftPhones, there is a count on the "display capacities" form, and a method to administer a maximum value.

Guestworks (GWS)/BCS

Removal of DID Number

The "did-view" button allows a user to change an automatically assigned Direct-Inward-Dialing (DID) number, and to remove the DID number.

Coverage of Calls Redirected Off-Net

The feature "cvg of calls redirected off-net" on the customer options form is available to both offer A and B customers.

Display of Calling Number

Displaying the calling number for room-to-room caller id calls may now be enabled or disabled.

International

Reverse Handling of "Star" and "Pound" Digits

International customers (for example, SK Telecom in South Korea) had no ability to change the handling of the "star" and "pound" digits by the "collect" vector step, so that the use of these digits to indicate "clear all collected digits" and "end-of-dialing" could be reversed. Some international mobile phone systems require this reversal, since their phone user normally enters a "star" to indicate "end-of-dialing" to immediately dial an entered number.

Now, the addition of the “Collect Step Star/Pound Reversal?” y/n field on page 8 of the “Feature-Related System Parameters” form allows any DEFINITY customer (domestic or international) to reverse the handling of the “star” and “pound” digits by the “collect” vector step.

Networking — ISDN Private

Japan TTC Q.931.a Private Networking Protocol

DEFINITY’s implementation of ISDN PRI for Japan has been modified to support the private networking environment. The private protocol borrows heavily from the national specific public ISDN PRI specification. The differences are such that the Public Network protocol is insufficient to provide basic call support in their private networks.

The Japanese standards organization, TTC, has defined QSIG to be the same as the ISO standard which DEFINITY already supports. This private networking protocol will provide the basic level of networking in order to meet the immediate connectivity needs of our customers. A new administration option will be developed to distinguish this protocol from the Japanese public network.

- 2 MB Trunk - Ph2: Connect Ack (option)
- 2 MB Trunk - Ph2: Different Protocol Discriminator
- D Channel - Private ISDN Ntwks - Q.931.a, Q.952.a (Basic Call Setup)

Attendant Vectoring

Attendant Call Vectoring is a stand alone feature that is supported on a single switch environment with or without Centralized Attendant Services (CAS). The feature permits unique treatment for each attendant-seeking call, according to a number of factors as defined by the Vector Directory Numbers (VDN) for each functionality, providing a highly flexible approach for managing incoming calls to an attendant on a DEFINITY switch.

A new customer option for attendant vectoring has been added, but will not be available if RLT CAS is turned on. This feature is available in non-distributed attendant environments and distributed attendant environments for Inter-PBX Attendant Service (IAS) and QSIG CAS. When the new option is on, attendant vectoring allows DEFINITY customers to program how they want their attendant group calls processed. The feature is a category A & B offer, and uses existing call vectoring and attendant administration.

Networking - CAS

Centralized Attendant Services (CAS) using QSIG in the following subsections are specific to DEFINITY — DEFINITY connectivity.

CAS Display Enhancements

CAS Display Enhancements are available by replacing RLT with QSIG ISDN trunks. Display enhancements for calls coming into the attendant from a branch:

- For an incoming Listed Directory Number (LDN) call, LDN name or number is shown
- For a '0' out of Audix call, a reason code and called number are shown
- For return calls, the called name is shown.

CAS Attendant Display of Class of Restrictions (COR)

The attendant can press a "COR Display" button and obtain a display that tells the COR of the user. The attendant can then use this information to decide if it is acceptable to transfer this user to a desired destination.

CAS Attendant Return Call

For a call that originates at the main, the call first attempts to go to the same attendant who originally handled it. If that attendant is unavailable, then the call goes to the attendant group, where it is extended to the next available attendant. For a call that originally came into the attendant from a branch over RLT, the return call goes to the attendant group. CAS Attendant Return Call allows the attendant to function for calls that come into the attendant from a branch over ISDN trunks in the same manner as calls that come directly to or originate at the main.

CAS Priority Queue

On the console-parameters form, DEFINITY customers can now administer priorities of incoming attendant calls that must wait in the Attendant Priority Queue because no attendant is immediately available. Using QSIG ISDN trunks between the branch and main, more information can be passed to the main PBX using QSIG MSI messages. This extra information enables calls coming in from a QSIG CAS branch to be placed in their appropriate place in the queue, as if the call came directly into the main.

CAS Release Link Trunk (RLT) Emulation via Primary Rate Interface (PRI)

CAS RLT Emulation via PRI allows customers to set up a Centralized Attendant Service using solely ISDN QSIG trunks, and no RLTs are needed. Using QSIG Path Replacement, trunk optimization of QSIG trunks is possible.

DEFINITY / OCTEL Messaging Division (OMD) QSIG Integration: QSIG Transfer to QSIG Voicemail

The QSIG Transfer to QSIG Voicemail feature uses QSIG Manufacturer Specific Information(MSI) and the QSIG transfer feature to achieve the same functionality as Transfer to Voicemail for users with a QSIG network, but the signaling will be over QSIG ISDN links.

In Release 4.0 of the OMD Serenade Voicemail system, the connection between the Serenade and the PBX will be a QSIG ISDN link. The Serenade will be able to interpret the QSIG MSI message and subsequent QSIG transfer information sent to it by DEFINITY, thus enabling QSIG Transfer to QSIG Voicemail to function between Serenade and DEFINITY, connected via QSIG ISDN.

In order to enable QSIG Transfer to QSIG Voicemail, the following options must also be enabled:

- ISDN-PRI or ISDN-BRI
- QSIG Basic Supplementary Services
- Transfer into Lucent QSIG Voicemail

VALU: Call Coverage and CAS

On a trunk which has both CAS and VALU Call Coverage activated, coverage display information is provided on calls that cover from a branch to the main. Also, path replacement occurs after coverage.

Calls Covering Over QSIG VALU

QSIG VALU coverage calls time out based on the local coverage “doesn’t answer” interval and all coverage points after a QSIG diversion call can be reached.

Class of Restrictions (COR) Value of Customer or Attendant Console

The COR value associated with a traditional user or attendant console can be changed by a DEFINITY customer (who has console permissions) via a feature access code.

Networking

Administrable Loss Plan

DEFINITY customers can now administer the loss or gain applied on calls. DEFINITY ECS endpoints are classified into 17 endpoint types. The loss plan port type is administrable per trunk and Personal Central Office Line (PCOL) group, and per station. The 2-party loss plan and the digital tone plan are administrable per system, by assigning losses to be applied per endpoint types. Administered loss values are in the range from 15 dB of loss to 3 dB of gain. The 2-party and Digital Tone Plans are easily defaulted to fixed values specified by a country code. The 3 to 6 party loss plans are derived from the administered 2-party data and additional losses administered according to the number of parties in the conference.

This feature is available only if the new `Digital Loss Plan Modifications?` field on the customer options form is set to `y`.

Networking — ATM

Asynchronous Transfer Mode (ATM) PNC Reliability

A DEFINITY system without duplicated Switch Processing Elements (SPEs) equipped for ATM Port Network Connectivity (PNC) is supported with duplicated Expansion Port Network (EPN) connectivity to different points on an ATM network. These points may be on separate ATM switches, the same ATM switch, or may be directly connected to an ATM wide area network. Existing levels of reliability for DEFINITY are standard, high, and critical. ATM PNC Reliability (formerly called Hybrid Reliability) provides yet another level of reliability. ATM PNC reliability configurations are equipped with a simplex Switch Processing Element (SPE) complex in the Processor Port Network (PPN), duplicate connectivity over ATM to all Port Networks (PNs) and duplicate ATM interfaces in each PN. The EPN configuration for ATM PNC reliability is the same as that for an EPN equipped for ATM critical reliability.

The ATM PNC Reliability configuration may be the result of a new installation or an upgrade from a previously standard reliability system. ATM PNC Reliability is cost-effective for customers who require redundancy and the resulting level of reliability in their R8r ATM Wide Area Network () configuration to provide for potential network and ATM switch outages.

Interworking with Bandwidth Constricted ATM Networks

Administrators of DEFINITY R8r systems using ATM Port Network Connectivity can fine-tune the operation when bandwidth is at a premium. DEFINITY monitors performance in the network, and alarms out-of-specification conditions. During out-of-specification conditions, calls between the affected Port Networks may optionally be denied. The alarm details identify those pairs of Port Networks that are experiencing the congestion. The congestion alarm indicates if an unacceptable number of call set-ups have suffered excessive delay or have failed. The alarm clears if set-ups begin to succeed at a defined rate. The number of calls and delay thresholds are provisionable.

System Availability / Serviceability

Incomplete Command Timeout

An SAT user could enter a command through the SAT but then walk away without ever canceling or otherwise completing the command. Certain commands (e.g. add, change, remove, duplicate, set) if left in this incomplete state could actually prevent the periodic save translations from executing which could lead to alarms and possibly loss of newly translated data. If one of these commands is left in an incomplete state for the duration of the 2-hour (default) timer, then the command is canceled and the login session terminates.

Display of Hardware and Firmware Vintages

When executing the "list configuration" command, the hardware (HW) and firmware (FW) vintages display separately for applications of the TN802B.

Trouble Isolation: List Trace Command

Two new options for the **list trace** command allow customers and technicians to troubleshoot misdirected calls, trunking/routing problems, and call denials.

- **list trace station nnnnn** (where nnnnn is the number of the station you want to troubleshoot)
- **list trace tac xxxx** (where xxxx is the identifier of the trunk you want to troubleshoot)

Execute the **list trace** command with the relevant option word.

- To see all the **list trace** options, execute **list trace** at the command line.
- To redisplay the most-recently done trace, execute **list trace previous** at the command line.
- To cancel a trace in progress, press **F7**.

Change Descriptions

The following problems have been addressed and corrected in DEFINITY Enterprise Communications Server (ECS), Release 8, Issue 2.0 (02.0.034.2).

1. User defined data associated with the auto-selection of DIDs displayed as asterisks in the Property Management System (PMS).
2. If the Survivable Remote Processor was not in contact with the Survival Remote Expansion Port Network (EPN), MAJOR EXP-LINK alarm and MINOR EXP-INTF alarms were raised. Now, when the Survivable Remote Processor is not in contact with the Survival Remote EPN, EXP-LINK and EXP-INTF alarms are warnings. A MAJOR SPR-EPN alarm is raised only if the link between the SRP and SREPN is active.
3. The Class of Restrictions (COR) value associated with a traditional user or attendant console could only be changed by an administrator via the System Access Terminal (SAT). Now, the COR value associated with a traditional user or attendant console can be changed by a user (who has console permissions) via a feature access code.
4. Coverage following QSIG diversion did not properly alert all points in the coverage path when the first was remote and the second was local. Now, all available points in a principal's coverage path after a QSIG diversion will alert.
5. An H.323 native endpoint drops its existing call (from Caller1) when an incoming call from Caller 2 is received. Now, Caller2 receives a busy tone.
6. Users did not see the Maximum Number of External Calls Logged Per Station and Message Waiting Indication for External Calls field on the System Parameters form. They also did not see the Leave Word Calling (LWC) Log External Calls field on the station form, nor on the Agent Login-ID form. Now, users see these fields and are able to administer values in them.

7. Processor channels could remain down after reset system 2 in some cases. Now, processor channels come back up in these cases.
8. A rotary station user can now simulate flash hook by dialing the digit that's specified in the new feature parameters field, if this functionality has been enabled by setting the new Recall Rotary Digit field on the station form to yes.
9. When making an Internet Protocol (IP) trunk call, if the originator drops the call before the party answers, the call will still ring on the receiver side. Now, the call will be dropped on the receiver side as well.
10. Third party merge acknowledge did not contain trunk group information even if there were trunks on the call.
11. It was possible to administer a station with IP SoftPhone set to "y" and Multimedia Mode set to "basic". Now, if the user attempts to add such a station, they will receive the error: "Mode must be 'enhanced' when IP SoftPhone is 'y'"
12. It was possible to administer a station with IP SoftPhone set to "y" and no call appearance buttons. Now, if the user attempts to administer such a station, they will receive the error: "At least 1 call-appearance is required when IP SoftPhone is 'y'".
13. Incoming trunk calls routed to a QSIG-Centralized Attendant Service (CAS) branch switch that had an invalid destination number administered on the console-parameters form caused a system reset.
14. Nippon Telephone and Telegraph (NTT) Japan Integrated Services Digital Networking (ISDN) cellular handsets received two-way talk cut-off when conversing with a DEFINITY endpoint and the DEFINITY endpoint pressed "hold".
15. If no gateway IP address was specified (when not needed) for the TN802B board, the ping test would abort and the signaling groups would not be placed into service.
16. If traceroute command timed out when it encountered a page break.
17. For R8 software optioned as a V7 switch, the TN802B board would not boot. Now, it will boot in any release.
18. When many requests for VDN Origin of Announcements (VOA) and regular announcements were queued, it was possible for a request for a VOA announcement to be lost. This left the call in a hung state where it could not be answered.
19. TTC Japan calls could fail due to the presence of Sending Complete IEs in SETUP messages and the sending of NOTIFY messages. Now, neither will be sent by DEFINITY on TTC Japan peer interfaces.
20. DEFINITY did not support interoperability with the Ascend MAX box.
21. The "Logged-in Automatic Call Distribution (ACD) Agents" field on the "display capacities" form was missing.

22. Q.931 calls failed after a few dozen calls.
23. After entering "busyout pnc-standby", control was returned to the SAT before the process was complete. If the SAT entered another command, new inter-port calls could not be made for up to one minute. Now, the SAT forces the user to wait for the entire board test/release to complete before gaining control.
24. After a failed Microsoft® NetMeeting® registration, the status showed as authenticated-not registered. Now, about 30 seconds after a failed NetMeeting® registration, the station's status shows as unregistered.
25. Performing the Personal Station Administration (PSA) function on a registered IP Solutions endpoint from a DCP set failed to allow the endpoint to re-register.
26. When a Basic Rate Interface (BRI) trunk's administration of "send calling number" was set to 'n', intermittently the terminating user saw the calling party number.
27. SAT commands like change, add, duplicate, remove, and set, if left incomplete, interfered with periodic save translations. There is now an administrable timeout period that terminates these commands and avoids the interference.
28. The status station command for a logged-in agent-ID displayed '18xxxx' as its destination, where xxxx is the extension number of the physical terminal. Now, only xxxx is displayed.
29. Calls covering to a busy Distributed Communications System (DCS) or QSIG VALU coverage point with no other coverage points available, and for which the principal was SAC'd, returned busy treatment to the originator, but were not dropped.
30. When a room change was executed from the Property Management System (PMS) simulator, the Direct Inward Dialing (DID) did not change to the new room.
31. High traffic H.323 IP trunks were not being updated to the idle state for use.
32. The link to the Call Management System (CMS) could enter a state in which administration could not be performed from the CMS.
33. Pulling the TN802B board with no ethernet port defined did not take the signaling groups out of service. Now, if the TN802B board is pulled, the signalling groups go out of service. Also, if there is no ethernet port defined for the region of the TN802B, the signaling groups do not go into service.
34. Pushing the reset button on the faceplate of the TN802B board left the port in service.
35. Changes to the IP address after a busyout of the C-LAN board leave obsolete routes on the CLAN board.
36. There was no command to determine the status of the PSA. Now, there is a "status psa" command that maps to the "status tti" form, which informs the user that TTI must be enabled for the PSA to work.

37. The IP Solutions endpoint did not have the current button and lamp status upon registration.
38. Attempting to register an IP Solutions endpoint from an extension with a data module corrupted the extension's translation. Now, the registration is denied.
39. An extension with a large number of autodial buttons could not register as a DoLAN endpoint.
40. If more than 16 node names were added on page two of the "node-names" form, entries for the first field of the IP address in column two were also displayed on page three.
41. System reset occurred if DCS+ was administered over H.323 IP trunks.
42. If a station had coverage with "coverage all" and "hunt after coverage" enabled, with only one coverage point in the coverage path, calls would not follow the hunt to coverage.
43. When IP stations were registered and/or IP trunks were administered, executing the "list usage extension" command would lock up the SAT.
44. In Adjunct Switch Applications Interface (ASAI) messages, trunk group number and member number were not provided for DCS calls. Now, they are provided for the following:
 - Alerting Event Report
 - Connected Event Report
 - Call Offered Event Report
 - Conference Event Report
 - Transfer Event Report
 - Adjunct Route Request
 - 3rd Party Merge Acknowledge
45. In a QSIG CAS scenario when user A calls user B, both on the branch switch, covers to the attendant on the main, the display on the console shows "<User A name> to OPERATOR s", which is wrong. Now, the display correctly shows "<User A name> to <User B name> s".
46. Coverage calls to attendant on QSIG CAS branch were not working with Trunk Access Codes (TAC) administered on the console.
47. If the TN802B board was busied out, a DCP call to the Road Warrior application received ring back. Now, a DCP receives busy.
48. DCS coverage calls that were answered did not invoke DCS re-routing.
49. An incoming H.323 IP trunk call to a vector with a collect digit step did not collect any digits. Now, the digits are collected and the vector is processed correctly.
50. Account codes did not show on CDR report if the account code button was used.

51. The wakeup display mode did not timeout. Now, the wakeup mode undergoes timeout after 1 minute.
52. Abandoned calls to telecommuter application endpoints left the associated endpoint ringing.
53. If the system is optioned as V7, and the CLAN board is pulled, the trunk groups remained in service. Now, the trunk groups are taken out-of-service when the CLAN is pulled, if the trunk groups are part of an H.323 IP signaling group.
54. Procedure errors were generated when submitting the "data-module" form of a PDM type with a blank Port field.
55. The Access Security Gateway (ASG) could be turned on for a login, even if the login was VOID.
56. Translation corruption occurred on some Release 6 and earlier G3 si systems, when the TN790 processor board was replaced with a new board that contained Release 7.1 or later software. Now, when replacing a TN790 processor board on a pre R7.1 si system, a Major alarm is raised, and translations are blocked from being saved. A warning message is printed on the copyright screen indicating an incompatibility between software and hardware.
57. The sum of the hardware (HW) and firmware (FW) vintages are now displayed separately.
58. In a telecommuter application, if the voice path is through a CO loop start trunk, when the associated telephone drops the call, no disconnect supervision is sent to DEFINITY, thus the service link is not dropped. If another call is made within 10 seconds, the call is dropped. Now, when the service link is up, the user can dial the Feature Access Codes (FAC) of the multi-media enhanced mode to drop the service link.
59. External unanswered calls were not logged. Now, the new feature "Log External Calls" has been implemented to log external unanswered calls.
60. When a call covered to a Uniform Dial Plan (UDP) number over a non-DCS trunk with Coverage of Calls Redirected Off-Net (CCRON) not enabled, the call would at some point stop ringing at the coverage point.
61. There were resource limits enforced for Station Busy Indicators (SBIs) of 100 on gaz and 500 on mips. Now, these resource limits for SBIs have been eliminated.
62. Traffic measurements in the "list measurements load-balance" reports were often incorrect.
63. When an endpoint attempts to register while an IP TTI port for the extension already exists, the endpoint can not register. Now, the endpoint successfully registers.

64. When a telecommuter application attempted to use Trunk Access Code (TAC) dialing to establish the service link audio call, the attempt failed if more than 8 digits were needed after the TAC. Now, all digits after the TAC are sent correctly.
65. During the PMS database swap routine, the switch was performing resets.
66. The Leave Word Calling (LWC) Log External Calls field appeared on the station form for every software version. It also appeared on the MASI terminal form. Now, the field appears on the station form only when the version is R8 or higher. It does not appear on the MASI terminal form at all.
67. When a member was added to an in-service H.323 IP trunk group the new member always stayed out-of-service. Now, if the trunk group is out-of-service, the new member is out-of-service; if the trunk group is in-service, the new member is in-service.
68. A called failure occurred if a station had a higher Facility Restriction Level (FRL) than the authorization code FRL.
69. IP trunk calls sometimes did not clear properly.
70. TN465 ports in CO, FX or WATS trunk groups did not receive the Incoming Disconnect and Outgoing Disconnect timers. A new field has been added to those trunk group types, on the Administrable Timer page; it is called "Send Incoming/Outgoing Disconnect Timers to TN465 Ports?". If set to y(es), the timers are sent to TN465B and later ports.
71. If a # is used to dial an FP DID remote user, it was routed to the attendant at the remote PBX. Now, it is terminated at the dialed extension.
72. Calls redirected to a display set had too many spaces before the "to" on the display, causing Audix failure.
73. A telecommuter or road warrior application could have their service link connected to an in-bound call that had not been answered by the IP softphone.
74. A system could restart if a periodic or scheduled maintenance test did not receive time to execute due to a system running under high load.
75. When TTI was enabled on the 'system parameters features' form, the 'COR for PSA Dissociated Sets' and 'CPN, ANI for PSA Dissociated Sets' did not display properly.
76. When Test #1382 passed, the TN802B port remained alarmed.
77. Non-guest rooms showed as occupied when the attendant checked for occupied rooms via Direct Extension Selection (DXS).
78. The second channel on a world class BRI endpoint occasionally failed to come up.

79. A TN767 could not be hot-swapped with a cost-reduced TN2313 circuit pack when trunks were administered. "Conflict" would appear on the "list circuit-pack" display. Now, A TN767 with trunks can be hot-swapped with a TN2313, and vice versa. The correct TN code displays on the "list circuit-pack" screen.
80. If more than 65,535 ACD calls were answered in any interval or day for a single VDN, the Basic Call Management System (BCMS) data was incorrect (i.e., off by 65,536). Now, the only limit is 99,999 imposed by the 5-digit field size.
81. The system could reset if attendant directed calls on the branch switch route to the backup extension and are not answered for several minutes.
82. If a user attempted to originate a call using an autodial button and the system was in an overload condition causing the call to be blocked, the digits translated for that button were cleared. Now, for this scenario, the digits translated for the autodial button are preserved.
83. After an endpoint re-registered from another PC and was on a call, the call dropped if the user clicked 'OK' on the first PC after the call was established on the second PC.
84. With more than 256 announcements administered and a block of un-administered announcements within this range, a command of "display announcements" or "change announcements" resulted in the error message "Entry is bad".
85. When DEFINITY was connected to a public network via Signaling System 7 (through a converter board), calls dropped four seconds after being answered if the SS7 network was heavily loaded.
86. If the customer had more than 255 best-service-routing application-location pairs administered, then vector processing would try to access the wrong data and calls could be routed to random locations. Now, it is safe for the customer to administer all 1000 application-location pairs.
87. Display Capacity did NOT show the correct accounting for Used, Available, and System Limit values for Recorded Announcement Analog Queue Slots.
88. The reply-best information carried by DISCONNECT message for Best Service Routing (BSR) polling calls overwrote the entire shared User-to-user information (UUI), including ASAI UUI, stored with the original call.
89. When merging or un-merging an IP Softphone, if an ACD or EAS agent was logged-in, the agent would become corrupted and not be able to do subsequent log-ins or log-outs. Now, when merging or un-merging a IP Softphone, any logged-in agent associated with the operation, is successfully logged-out.
90. The Status Station command did not consistently format group number and work mode pairs by separating them with a "slash" character.

91. If the name of the TN802B node was changed, the board did not reboot to take the new name.
92. The "did-view" button (hospitality only) allowed changing an automatically assigned DID number but it did not allow removal of the DID number.
93. Two-line display terminals did not display 27 characters names with extensions. Now, the display shows calling and called party names and extensions on both lines of the display.
94. Using the speakerphone to do a PSA associate of an extension to a digital station required the user to press the speakerphone button three times before getting connected to dialtone to make a call.
95. Unplugging the CLAN cable did not drop active IP trunk calls.
96. The system-parameters coverage-forwarding form displayed a field titled "External Coverage Treatment for Transferred Incoming Calls?" The field title has been changed to "External Cvg Treatment for G3 Transferred Calls to G2 Supporting AUDIX?".
97. When trying to remove an ethernet data-module, the error messages "Remove all IP routes that use the old node name as a gateway on its C-LAN" displayed. Now, the error message reads "Remove this ethernet's dependent gateway on the ip-route form first".
98. It was possible to remove an H.323 IP station even if it was administered as a Media Complex Ext of another Station. Now, the attempt is blocked with the error message "Cannot remove; extension assigned as Media Complex Ext of another station"
99. Stations of type 515 had an "IP SoftPhone?" field. Now, "IP SoftPhone?" field does not appear for station type 515.
100. After the system performed a system level 2 reset the night console could no longer receive night service calls.
101. 8411D set could be administered as an IP Softphone even if it had a data option.
102. An R2-Multi-Frequency Code (MFC) call did not cover to the Vector Directory Number (VDN) extension correctly if an announcement extension was in the vector step.
103. In-band Dual-Tone Multi-Frequency (DTMF) Automatic Number Identification (ANI) was lost after a converse step on the vector processing.
104. In a telecommuter application call, if the IP Softphone voice path was through a trunk, when another party called the IP Softphone, the caller's display showed the name of the trunk. Now, the caller's display shows the name of the IP Softphone.
105. When an incoming call was made to an IP solutions telecommuter application endpoint, both the softphone GUI and the associated telephone alerted. Both devices had to be answered to achieve a talk path.

106. IP softphones in telecommuter or road warrior mode did not hear VOA announcements.
107. If an R6 or R7 system had TN2238 ATM boards translated, upgrading to a later release resulted in possible translation corruption. Now, only the TN2238 translation records are lost.
108. A problem in the Australian ISDN protocol caused incoming ISDN calls that redirected to a remote forwarding destination over an ISDN-Primary Rate Interface (PRI) facility to fail, apparently because of a PROGRESS message being automatically sent to cancel the T310 timer on the upstream switch. Now, PROGRESS message are no longer sent automatically for remote forwarding/coverage calls.
109. Downloading of button information to the endpoint was inefficient. A more robust algorithm has been implemented, requiring the IP Softphone to be upgraded to version 0.97 or greater.
110. During duplication of a multimedia station, on the second page of the form, the title of the media complex was "MM data". Now, the title is "Media Complex".
111. The commands "status-station" and "status-trunk" failed with the error message "Port not assigned", if one of the connected ports belonged to a 9600 series wireless station.
112. When a telecommuter application with a permanent service link unregistered, the service link remained connected.
113. Auto callback only worked with an IP softphone if auto-call back was activated more than 10 seconds after the destination started to ring.
114. Endpoints unregistered for some time were then no longer be able to re-register. A popup box stated that the IP address may be incorrect or the network may be congested.
115. Erroneous MAPD alarms appeared in the alarms log.
116. External unanswered calls to a night station were logged via the Log External Calls feature (External LWC). Now, external unanswered calls to a night station are NOT logged.
117. External calls that covered to a Remote AUDIX were not logged via the Log External Calls feature (External LWC). Now, external calls that cover to a Remote AUDIX ARE logged.
118. If duplicate IP routes were administered, when the "extra" route was removed, the sessions that were dependent on that route might not come into service or might be dropped.
119. An IP Softphone or IP agent never heard a ZIP tone when receiving an incoming call.
120. If a user answered a call by pressing a busy indicator button, and then originated a new call from another line appearance without going on hook, the user did not get a dial tone but instead placed a call to the station of the busy indicator.

121. If an endpoint and DEFINITY did not have matching codecs, a road warrior application call would hang for 15 seconds without a talk path, and then drop. Now, the call drops immediately.
122. When all circular hunt group members were busy, the next hunt group call caused a system reset.
123. It was previously possible to administer a TN802 as TN802B, even if the board suffix was not B or later for TN802. Now, it is no longer possible.
124. TN802/TN802B reserved slots were not being blanked out when the TN802/TN802B board slot was administered.
125. Bellcore Facility messages containing calling name were not tandemed correctly, if the incoming trunk group had the "delayed display update" field set to "n(o)". Now, Bellcore Facility messages containing calling name are tandemed regardless of the delayed display update field on the incoming trunk group.
126. In France, running "test board" on a TN2185 resulted in the BRI trunks going out of service/near end.
127. In France, performing a busy/release of a TN2185 BRI trunk did not bring the trunk back into service (non-stable layer 1).
128. When a call covered to a final CCRON point, and the "Activate Answer Detection on Final CCRON Cvg Point" field on the System Coverage/Forwarding form was set to 'n', and the call was redirected over an ISDN facility that became interworked, then when the call was answered there might not be a talk path.
129. It was possible to administer a TN802/TN802B board in a slot even if the two slots before it were not empty. Now, this is no longer possible, and the attempt generates an error message.
130. When Best-Service-Routing attempted to poll over a BRI network that was down, the DEFINITY switch tried to bring up the network, but the Best-Service-Routing software became confused. Instead of waiting for the BRI to come up, it erroneously attempted to interflow the call (rather than just polling). The end result was that the caller was dropped from vector processing, heard a busy tone, and the call was lost. This is a common problem in some networks where the BRI layers are brought down when the last call on the interface clears.
131. The title "Enabled" on the IP-interfaces form was confusing, because it did not apply to all the links on the board, only to Ethernet links. Now, the title has been changed to "Enabled Ethrnt"
132. When connectivity was lost to the packet bus from the NETPKT (TN794), no error was raised.
133. A bridged station's display truncated the last digit or two from the calling party number of an incoming call.

134. International customers had no ability to change the handling of the “star” and “pound” digits by the “collect” vector step, so that the use of these digits to indicate “clear all collected digits” and “end-of-dialing” could be reversed. Some international mobile phone systems require this reversal, since their phone user normally enters a “star” to indicate “end-of-dialing” to immediately dial an entered number.

Now, the addition of the “Collect Step Star/Pound Reversal?” y/n field on page 8 of the “SystemParameters - Features” form allows any DEFINITY customer (domestic or international) to reverse the handling of the “star” and “pound” digits by the “collect” vector step for DEFINITY R8.2 (and later) releases.
135. If calls to an attendant in night service were directed to a remote Voice Mail hunt group with QSIG-NWI signaling, and all the QSIG trunks were either busy or out-of-service, then the system would reset. Now, the caller will hear a busy tone and the system does not reset.
136. ATM-NTWK alarms could persist indefinitely after all problems were resolved. Now, ATM-NTWK alarms are cleared when all problems causing them are resolved.
137. On certain transferred calls that went to a CCRON destination, the call failed to redirect to a subsequent coverage point. Now, those transferred calls sequence through all coverage points.
138. CMS pump-up aborted if it encountered a corrupted VDN translation.
139. There was no way to know how many ACD agents were logged into IP Softphones. Now, there is a count on the “display capacities” form.
140. Executing a system-reset-1 command with multiple active Automatic Call Back (ACB) buttons could cause another system reset under rare circumstances, which could escalate to a cold1. Now, executing a system-reset-1 will not cause another system reset.
141. H.323 IP signalling groups could get into a “hung” state, if a warmstart occurred at the same time that a Transmission Control Protocol (TCP) connection for Q.931 signaling was failing (timing out). In such a “hung” state, the signalling group was unusable for incoming or outgoing calls. Now, if such a race condition occurs, it is cleaned up.
142. The customer was infrequently unable to break dial tone when using whisper page in an ATM PNC multiport network environment.
143. The user received an error message when attempting to remove a Computer Telephony Interface (CTI) station after turning off TTI. This no longer occurs.
144. External unanswered calls to local coverage points were not logged via the Log External Calls feature.
145. If monitor BCMS split X for 7 pages of agents was followed by monitor BCMS split Y for 6 pages of agents, via the Operations Support Systems Interface (OSSI), some of the agent data would be lost. Now, all agent data is relayed to OSSI in this case.

146. Under certain circumstances, incoming DS1 trunk calls provided priority ringing, instead of following the coverage path.
147. Sometimes the TN802B board would not come up in the correct state without several reboots. Now, the TN802B application is run after as little as 2 reboots of the board.
148. When an incoming DID call into switch A tandemed over a Distributed Communications System (DCS) tie trunk to a station on switch B that forwarded to a local station that did not answer, the call was subsequently blocked from covering offnet.
149. When changing a hunt group from non-AAS to AAS (Auto-Available station), an incorrect error message, "Cannot add because maximum number of agents already logged-in", displayed.
150. If an internal measured trunk was conferenced with an external measured trunk and then the external measured trunk dropped out of the call, CMS aborted tracking the call.
151. If a member of a Personal Central Office Line (PCOL) group originated a PCOL call coincident with an incoming call on the PCOL trunk, occasionally the PCOL button on the station would lockup.
152. H.323 IP resources occasionally took 15 minutes to come into service. Now, they come into service when the board has been initialized successfully.
153. An extension on a DCP set could not receive calls after PSA from a registered endpoint until a call was originated from the DCP set.
154. When running "save trans rem" without the removable media in the removable media drive, the error message "MSS device is out of service" displayed. Now, the following error message displays:

"No removable media in removable media drive"
155. For attendant extended trunk calls, caller id terminals received the attendant name and number. Now, they receive the trunk calling party information if available or the TAC and the trunk name.
156. When the switch transmitted VDN translations to CMS, the BSR plan number was incorrect or missing.
157. Using the "release" button to exit Abbreviated Dial programming may cause subsequent calls not to send Touch Tone digits. Now, using a "release" button to exit Abbreviated Dial programming is not allowed.
158. It was possible to disable and change an IP-interface in one step. Now, you have to disable an IP-interface, submit the form, bring up the form again, and make any changes needed.
159. For DWBS stations, the field "mobility trunk group" in the station form defaults to 1 and blanks are allowed. Now, the field defaults to a blank and is a required non-blank field. This is necessary to guarantee correct administration of the "mobility trunk group" for use in registration. The former default of 1 was usually incorrect and needed to be changed.

160. Calls routed over an ISDN trunk using Extended Trunk Access (ETA) was not considered when checking the numbering format field of the route pattern.
161. The command "list usage button crss-ahrt" showed only stations that had a crisis alert button administered. Now, the command shows all administered crisis alert buttons in the system, both stations and attendants.
162. If a processor channel was disabled, the "last failure" field of the "status processor-channel" form printed "none". Now, the field shows "Processor channel disabled".
163. When attempting to administer a Caller ID set type as an analog bridge, the user received the error message, "extension must bridge onto an analog station". Now, the error message does not display, and this administration is allowed.
164. It is now possible to use two terminals with customized format; maximum number of digits has been increased 23; condition code "T" added for calls that tandem thru DEFINITY with no billing.
165. An H.323 IP extension registered as a Native H.323 that was also the media complex extension for a DCP extension was not allowed to make calls. Now, the H.323 IP extension is denied registration.
166. Certain ASAI adjunct applications became non-functional when the reset shift call feature was used.
167. If a user whisper-paged on another call and then disconnected, the paged user's display failed to update to the original display.
168. When an IP Softphone logged into the switch, the command "status station" failed to show the right far end port of the IP Softphone.
169. No warning message displayed when disabling an IP-interface on the IP-interfaces form. Now, the message "WARNING: Disabling an IP-interface will cause interruption in service" displays.
170. Adding and removing busy indicators using either the feature access codes or feature buttons could cause a system reset.
171. Best Service Routing over H.323 IP trunks was not working.
172. After an upgrade, the TN802B port remained in an out-of-service state. Now, the TN802B port is in service if no alarms are present.
173. A node name used on the IP-interface form could also be defined on the data module form ppp. Now, cross validation is performed between the IP-interface and the data module form. If there are duplicate node names on these forms, the following error message displays:

"Node Name currently assigned to another interface or link"
174. For certain types of calls, Incoming Call Line IDentification (ICLID) did not display on caller id terminals. Now, for all calls, ICLID displays on BELLCORE compliant caller id terminals.

175. If one of two or more TN802B boards in a system is disabled, it would remain out-of-service when re-enabled due to an incorrect alarm state.
176. The 'list trace ewt' command did not properly display data for columns Agents Working (AgtWk) and Agents Available (AgtAv).
177. When using the 'list trace vdn' command to trace a VDN/vector, which does a 'reply-best' step, the value for skill-level was decremented by 1.
178. A station with any of the following buttons could not be duplicated:
 - cpn-blk
 - cpn-unblk
 - mm-basic
 - mm-call
 - mm-datacnf
 - mm-multnbr
 - mm-pcaudio
179. A call routed to the attendant via a vectoring route-to step would not queue if the attendant was busy. Now, the call is queued and remains in queue until the attendant is idle.
180. If the attendant selected a hundreds group button with a four digit value, the system would reset.
181. DWBS Global did not support music on hold if the DWBS station flashed to place a call on soft hold. Now, DWBS Global supports music on hold for soft held calls due to a flash.
182. Under certain circumstances, moving agents from one split to another using the move agent feature caused a system reset.
183. The BCMS interval was corrupted if a system reset 3 was executed in the second half hour of an hour.
184. Unanswered transferred calls redirected to the attendant failed to provide audible alerting at the attendant console.
185. A service observed call with an invisible single-step-conference station did not drop, even when there was only one regular station left in the call.
186. Calls to trunk groups controlled by the attendant were not redirected to attendant vectoring.
187. The message waiting icon did not display when a DWBS WT or a DWBS station reentered the system, after having received a message via LWC or AUDIX, while the set was out of the system. Now, the message waiting icon displays and clears correctly if LWC activity occurs while the set moves out of the system.
188. The feature "cvg of calls redirected off-net" on the customer options form was not available to offer B customers. Now, it is now available to both offer A and B customers.

189. The "Port Not Fnd" message is returned when doing a traceroute command to a CLAN board and a port was specified, but a bad location was used.
190. Attempting to add duplicate IP routes on a C-LAN board is now blocked.
191. The "Route Type" field on the 'add ip-route' form was administrable. Now, that field is not administrable. The route type is determined automatically by the subnet mask and the class of the destination's IP address.
192. The "list mct-history" command truncated the last character that specified the recorder port used.
193. An administrator was blocked from changing or removing a station or attendant console with an active timer button. Now, after a warning message is displayed, on first entry, the second entry is successful.
194. If the field "roundtrip Propagation Delay (ms) low:" was set to "10" on the system parameter maintenance form, the PBX never came out of the "by-pass" mode.
195. The "list multi-media ip-softphones" command did not display ports. Now, each port of each station displays.
196. On the "list measurements ip-sig-grp" form, the average latency was sometimes calculated incorrectly.
197. Unplugging a DCP set usable as an IP Softphone, and then registering an IP Softphone using the same extension of the DCP set caused the IP Softphone to disconnect.
198. Busying an active H.323 IP trunk placed the trunks in an incorrect state, and the command "status trunk tkgrp/#" received the error message "Entry is bad".
199. If the last member of a circular hunt group is busy on a call and there are free members in the group, a new call received a busy tone. Now, a new call is routed to the first free member of the group. When all members are busy, then the call receives busy treatment, if no redirection is activated for the hunt group.
200. The display for incoming redirected calls in international format (i.e., no dashes in the number) had no blank spaces between the number and the word "to". There is now at least one space between the number and the word "to".
201. The number 1719 formerly could not be entered in the field signaling group near-end listen port. Now, the field allows 1719,1720, and 5000-9999.
202. The SYSAM Test #913 was changed from a MAJOR to a MINOR alarm.
203. Using TTI to associate an extension, already assigned a port to a second port, locked up the second port. Now, the user is blocked from associating extensions with hardware using TTI.
204. After a switch upgrade, the TN802B ports were taking 15 minutes or longer to go into service.

205. PASTE data has been changed to include some missing Feature Access Codes (FACs) and button types for the Centre Vu (CV) Agent PC phone application.
206. Authorization codes of length 7 or less were not output in the Call Detail Recording & Reporting (CDR) report.
207. The default settings in the system-parameters maintenance form, page 3, were incompatible with the settings required for the US Robotics Sportster external modem that was being shipped with csi systems.
208. A "list multimedia ip-softphone" command could result in an "Error Encountered, Cannot Complete Request" (EECCR) message.
209. When a large number of VDN notifications were aborted at one time, switch performance was degraded.
210. Calls over BRI trunks often failed in countries outside the USA.
211. Attempting to execute an add/change/display/remove test-schedule command with an invalid test-schedule number could result in an "Error encountered, cannot complete request" message. Now, invalid numbers result in an "Identifier invalid" error.
212. If a voice mail system did DCP port emulation (i.e. Octel), digits signaled out of band, such as AD buttons, or hybrid sets, would not be deleted by the voice mail system.
213. Digital Signal Level 1C (DS1C) remote EPNs could reuse a fiber slot before all elements of the center stage had released the fiber slot, resulting in incorrect connections.
214. You will get an error message if you try to administer an H.323 IP signaling group on port 1719/1720, and there is already a signaling group on 1720/1719, respectively.
215. A non-vector, non-ISDN, call to a hunt group with a forced first announcement could cause the switch to reset.
216. It was possible to have enabled both "LRQ Required?" and "Calls share IP Signaling connection?" fields on the Signaling group form for H.323 IP signaling groups. Now, an error message is displayed.
217. With LookAhead Interflow (LAI) administered, calls routed to Audix via the audit, resulting in the loss of DCS transparency.
218. The feature "Extended Cvg/Fwd Admin" on the customer options form was not available to offer B customers. It is now available to both offer A and B customers.
219. IP-interfaces that had a data module associated with them could not be changed without first removing the data module.
220. Executing a "download translation" on G3r ONLY did not ensure that a subsequent "reset sys 3" or higher on the G3r would boot from the translations just downloaded.

221. For non-stable layer 1 using a TN2185 BRI trunk board, the layer 1 inquiry test was not executed for periodic or scheduled maintenance testing. Now, the layer 1 inquiry test is executed for both stable and non-stable layer 1 for periodic and scheduled maintenance testing. (France)
222. When a call was made to a hunt group in night service, where the night service station is a DWBS, with a coverage path that redirects to a UDP number that routes via an ARS/AAR pattern, and there were no available trunks to redirect the call, the switch reset. Now, for the scenario described, instead of the switch resetting, the calling party is provided busy treatment.
223. Some calls that failed to forward off the network and were redirected to a coverage path could cause a system reset. For the call scenario described, the system does not reset and the call follows the coverage path.
224. The command "status trunk tkgrp/#" of an H.323 IP trunk did not show the actual port and address of the connection.
225. Users were blocked from changing or using some assigned authorization codes.
226. QSIG VALU trunks would not allow calls to cover properly to QSIG/MWI or FP/MWI message center adjuncts.
227. It was not required to disable an IP-interface before changing its region.
228. Using the Personal Station Access feature, the Road Warrior or Telecommuter IP Softphone features, or making an X port of a station from the SAT, while the Terminal Translation Initialization (TTI) feature was enabled, caused the digital station involved in the transaction to go dead.
229. Previously, the customer had difficulty determining why a call was failing. Now, the customer will be able to trace station or trunk calls by using the "list trace station" or "list trace tac" commands.
230. If Stations A and B are on a call, on a switch with auto-exclusion available, and they do not have exclusion active; and Station C is a bridge which is added onto the call. If Station C goes on hold, and Station A turns on exclusion, Station C was previously able to go off hold. Now, Station C cannot go off hold in this situation.
231. Using Centralized Voice Mail via Interswitch Mode Code, if Extension A on a remote switch called Extension B on the host switch, and Extension B transferred the caller to Extension C on the host switch; then, if Extension C did not answer and the call covered to Audix (Mode Code Integration), the caller received the mailbox of Extension B, the original called party. Now, the caller correctly gets the mailbox of Extension C, the party to which the call is transferred.
232. If ISDN trunk groups with Supplementary Service set to A, the DS1 country protocol/version set to 1b, and the send name field on the trunk form set to yes, the outgoing calling name was sent in a codeset 0 facility IE, and incorrectly displayed if the Central Office was a 5E12 or earlier. Now, the field "USNI Calling Name for Outgoing Calls" on page 6 of the

system-parameters features form, when set to yes, controls sending the calling name for ISDN trunk groups with Supplementary Service set to A, the DS1 country protocol/version set to 1b, and the send name field on the trunk group form set to yes.

233. If an IP trunk had the near-end port specified as 1720, the far-end port unspecified, and the system had another IP trunk in service, any call to the first trunk was not answered. A call to the 1720/unspecified trunk will now go through.
234. Calls routed to BCMS measured VDNs and answered by agents in BCMS measured splits/skills that came in on BCMS measured trunks were considered abandoned. These calls are no longer considered abandoned.
235. If an IP Solutions application was registered, and a DCP set called the application's media extension (the NetMeeting[®] extension), the call was completed with the IP Solutions application having no visual indication that it was on a call. Now, if the DCP set calls the H.323 IP media extension, it receives a busy tone.
236. Changing from mu-law to A-law or a-law to mu-law on the system-parameters country form did not force the TN802B board to start using the new mode. The board had to be manually rebooted. Now, the TN802B reboots itself, and once back in service, uses the new companding mode.
237. An incorrect error message was displayed when adding a PPP data module and an IP-interface with the same local node name. The correct error message is now displayed.
238. If a station being service-observed dropped out of a conference that included a converse vector step that was routed to an agent, the call was ended, if the following additional conditions were met:
 - The converse agent flashed,
 - Dialed the converse data return Feature Access Code (FAC), and
 - Executed a forced transfer without dialing any additional digits.

Under these circumstances, the call now continues unaffected.

239. The ISDN link between the DEFINITY and the Digital European Cordless Telephone (DECT) adjunct sometimes reset. Resets at that frequency no longer occur.
240. Error type 0 with aux data of 52305 was observed in the TN802B board error log when inserted, which was incorrect.
241. A transfer call made from an IP Softphone failed if the service link was not up.
242. Customers using the Lookahead Interflow (LAI) feature in a DCS network could experience a system reset when a call was tandemed to another switch.

243. A DWBS station calling into a vector, using a collect step with an announcement, experienced termination of the announcement after 10 seconds. The station now hears the full vector collect step announcement.
244. If an IP Softphone user registered to a switch, and failed to make an IP Softphone connection between the IP Softphone and the switch, the system occasionally reset.
245. An H.323 IP signaling group and its trunks could be in-service even if the far-end switch had no TN802B boards in service.
246. If a user called into a switch, using remote access and authorization code, and terminated the call to a telecommuter application whose voice link was off-net (more than 5 digits), the call did not go through.
247. If an IP Softphone assumed control of a physical phone, and if the board was unseated, then when the IP Softphone unregistered and the board was then reseated, the phone would not come back into service.
248. When an H.323 IP signaling group was placed into the bypass state, incoming calls were rejected (trunks were out-of-service/near-end). Incoming calls are now accepted (trunks are out-of-service/far-end) when an H.323 IP signaling group is in bypass.

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