Lucent Technologies
Bell Labs Innovations

DEFINITY®
Enterprise Communications Server

Release 6, Issue 2.0 (R6.2) [02.0.120.5]
Change Description

555-230-476
Comcode 108135997
Issue 1
January 1998

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
Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party, for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf. Note that there may be a risk of toll fraud associated with your telecommunications system and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

You and your system manager are responsible for the security of your system, such as programming and configuring your equipment to prevent unauthorized use. The system manager is also responsible for reading all installation, instruction, and system administration documents provided with this product in order to fully understand the features that can introduce risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use.

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

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

Le Présent Appareil Nomérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A préscrites dans le reglement sur le brouillage radioélectrique édicté par le ministére des Communications du Canada.

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European Union Declaration of Conformity
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.

Highlights

This change description document describes the changes incorporated in DEFINITY Enterprise Communications Server (ECS), Release 6, Issue 2.0 (R6.2) [02.0.120.5].

Platform

Offer Category

A new system initialization parameter is introduced to specify the offer category for the system. A new form, System-Parameters Offer-Options, is used to administer the parameter. The offer category parameter specifies which customer options and hardware are allowed to be administered in the system.

For R6.2, two offer categories are supported. Category A is used for DEFINITY ECS R6 and DEFINITY ProLogix Solutions systems. Category B is used for DEFINITY BCS Issue 4.0 and GuestWorks server Issue 4.0 systems. See *DEFINITY ECS R6 Administration and Feature Description*, 555-230-522, Issue 3 for administration details. See *DEFINITY ECS R6 System Description Pocket Reference*, 555-230-211, Issue 2.0 or later for details about which features and hardware are allowed with each offer category.

ISDN BRI Enhancements

Enhancements to the Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) trunk feature are described next.

NT Interface Line Side

BRI Line TN556C

The ISDN Line (12-BRI-S-NT) TN556C circuit pack supports BRI links over the TDM bus, and therefore is required in Release 6 csi to provide BRI service. For details, see *DEFINITY ECS R6 System Description Pocket Reference*, 555-230-211, Issue 2.0 or later.

The following are not supported over the TDM bus:

— TN2198 ISDN Line (12-BRI-U-LT) circuit pack

— Call Visor ASAI over the DEFINITY LAN Gateway (neither R1 nor R2)

NT Interface Trunk Side

Support for the NT side of the T interface is added using the TN556B/C circuit pack, which DEFINITY ECS R6.1 and earlier releases use only for voice and data endpoints. This gives R6.2 full tie-trunk capability using BRI.

The TN556B circuit pack can be used by Release 6vs, si, and r.

The TN556C circuit pack is required by Release 6 csi.

Automatic TEI

The user side supports automatic Termination Endpoint Identifier (TEI) assignment by the network. Both fixed and automatic TEI assignment are supported on the network side.

Full Non-US/Canada Functionality

The full set of non-Canada/U.S. public-network and private-network ISDN features are supported. U.S./Canada support will be supported in a future release.

Layer 1 Deactivation

When acting as the Termination Endpoint (TE) side [TN2185], R6.2 supports the case in which the network deactivates Layer 1 when both B-channels of a BRI port are idle. When acting as the network (NT) side, R6.2 only deactivates Layer 1 if the BRI port is busied out.

QSIG Peer Protocol

The NT side of the QSIG Peer Protocol is added.

E911/CAMA Trunk Interface TN429C

The E911/CAMA trunk interface circuit pack, TN429C, allows DEFINITY ECS R6.2, and later versions of DEFINITY ECS, to interface with Centralized Automatic Message Accounting (CAMA) trunks and to provide Caller's Emergency Service Identification (CESID) information to the local community's Enhanced 911 system through the local CO.

Transmission of calling party identifying information in the form of CESID over CAMA trunks to the extension number of a Local Exchange Company (LEC) Direct Inward Dialing (DID) station is allowed. The calling party may be at or near a station on a remote port network, or may be at a remote location served by an off-premises station.

In addition to software modifications, the E911/CAMA Interface feature requires the following circuit packs with the specified minimum suffix: Global Call Classifier TN744D and/or Tone/Clock TN2182B, and TN429C.

CAMA trunks may not be available from some LECs.

Global Call Classifier TN744D, TN2182B

Changes are made to the firmware on the TN744D and TN2182B circuit packs to support E911 CAMA Trunk Interface and Russia Automatic Numbering Identification (ANI). That firmware also supports all features provided by the TN744C and TN2182 circuit packs with earlier software releases, for example, Global Call Classification as provided in Release 5, Issue 4.0.

Hospitality Features

The following Hospitality features are provided in this release.

Dual Wakeup

Dual Wakeup allows each extension to enter two wakeup call requests within one 24-hour time period from terminals or attendant consoles.

Property Management System (PMS) Insert/Delete Digit

The PMS Insert/Delete Digit feature allows users to delete the leading digit of the extension in messages from the PBX to PMS, and insert the digit back in messages from PMS to PBX. This feature is useful for a hotel that has multiple extensions sharing an extra leading digit in front of the room number.

Room Activated Wakeup with Tones

The Room Activated Wakeup with Tones enhancement allows for wakeup calls to be activated via tones of the telephone dial pad that prompt users for the time they wish to be wakened.

Networking

Enhancements to the Networking offers are described next.

AT&T Operator Services/Operator Express

Previously, customers that used AT&T for their toll calls had to pay for telephone lines to their LEC to receive operator access. With the offering of AT&T Operator Services/Operator Express, customers can get operator service directly over their connection to the AT&T No. 4 ESS office.

CPN Restriction

Current regulatory conditions require a user to have the ability to determine whether their Calling Line Identification is available for presentation at the far end of a call. This feature allows the user to designate whether their Calling Line Identification is marked as presentation restricted on either a call-by-call basis or by station administration.

QSIG Called Name ID

The QSIG Called Name feature presents the called party's name on the calling party's display while the call is ringing. It then reverts to "connected name" when answered.

QSIG Call Offer

QSIG Call Offer provides the ability to offer, to a busy station, an incoming call that arrives over a QSIG interface. This feature is similar to Call Waiting except that a voice connection can be established between the called and calling users once the call is offered at the terminating location. The DEFINITY ECS implementation is based on the ISO standard for Call Offer.

QSIG Manufacturers Specific Information (MSI)

The QSIG Platform for Supplementary Services is enhanced to allow for origination and termination of Lucent Technologies Manufacturers Specific

Information (MSI). This MSI envelope allows DEFINITY ECS to pass proprietary information across a QSIG network (Lucent or non-Lucent transit switches). The DEFINITY ECS implementation is based on the ISO standard for MSI.

QSIG Path Retention

Path Retention is a generic mechanism to retain the signaling connection so the originating party can decide whether or not to invoke the supplementary service. The network connection can be retained for more than one of the supplementary services for which Path Retention has been invoked. DEFINITY ECS does not originate a Path Retention request, but retains the connection if the service is available.

Multimedia Business Communications Package (MMCH)

Enhancements to the MMCH features are described next.

Data Conferencing (T.120) via ESM Server

Multimedia data collaboration is supported for H.320 multimedia endpoints by means of the MAP40-based Expansion Services Module (ESM) server developed for the Multipoint Control Unit (MCU) product. Users are able to share data among those members of each multimedia call which support the T.120 protocols. A data conference (actually, a data stream within an existing conference) can be requested by any multifunction party on the call at any time during the life of the call. Users are not allowed to merge data conferences across multiple ESM servers.

Multimedia (MM) Call Early Answer

The early answer capability is extended to individual stations and call vectors to ensure that the caller has audio connectivity before connection of the answering party or an announcement.

Multiple Port Networks for MMCH

The Multimedia Interface (MMI) circuit pack, TN787, and corresponding switch software are upgraded to support placement of MMI and Voice Conditioner (VC) circuit packs, TN788s, in multiple port networks to provide increased MMCH conferencing capacity. For details, see *DEFINITY ECS R6 System Description Pocket Reference*, 555-230-211, Issue 2.0 or later.

MMCH had the following limitations on the number of conversion calls and endpoints:

	R6r	R6 csi, vs and si
Conversion Calls	48	48
Endpoint records	126	126
Channel records	128	128

Now, MMCH supports the following limits:

	R6r	R6 csi, vs and si
Conversion Calls	74	50
Endpoint records	148	100
Channel records	240	160

Country Specific Features

The following country specific developments are included in this release.

China on TN2147C

Currently, the TN465C CO trunk is the only CO trunk circuit pack specified for use in China. TN2147C v2 is now introduced to allow use of the TN2147C circuit pack in China when Periodic Pulse Metering (PPM) is not required.

Croatia and South Africa PPM

The Periodic Pulse Metering (PPM) detection in the DS1 Digital Trunk circuit pack, TN464F now supports Croatia and South Africa PPM frequencies.

International Operator Access

International Operator Access allows DEFINITY ECS users in Mexico to make international calls to a central office (CO) operator or a directory assistance operator using administrable feature buttons on any digital communications system (DCP) telephone and attendant console using R2 multifrequency-compelled (MFC) signaling. This capability is also available in Hong Kong using dual-tone multifrequency (DTMF) signaling. It is possible for users in other countries to use this feature if their DEFINITY ECS is using R2 MFC or DTMF signaling.

Thailand DIOD on TN464F

The TN464F circuit pack now supports the modified standard in Thailand.

Additional Highlights

Administration

DEFINITY ECS can administer:

- a timer to drop an unanswered call
- whether or not to send a blocking signal over an outgoing CO trunk that is maintenance busied
- Malicious Call Trace (MCT) as a group B multifrequency-compelled (MFC) signal

Auto Exclusion

The Auto Exclusion class of service feature can be administered.

BRI Trunk Board Form

The Name field on the bri-trunk-board form allows for leading and embedded blanks.

Call Detail Recording (CDR)

The CDR Account Code Length field on the system-parameters CDR form help message indicates that a blank can be entered.

Call Park

The attendant can retrieve a parked call by selecting the SBI button tracking the extension where the call was parked.

Conversion Calls

The maximum number of conversion calls for R6r and R6 vs/si customers is as engineered via the customer configuration.

Directory

The directory now allows for entering up to 27-character names.

DTMF ANI

The Incoming DTMF ANI feature can be started without a leading asterisk (*).

Fiber Administration Form

The Idle Code field on the fiber administration form shows “Facility Startup Idle Code.”

TN464F Circuit Boards

TN464F circuit boards, vintage 11 and later, allow access to the administrable PPM frequency fields.

Upgrades/DS1 Form

On upgrades, the PPM min and max fields on the DS1 form are displayed with their correct default values.

Installation

During the installation of an Release 6 csi, remote administration can be performed.

Index of Changes

The following lists the item numbers of the features and categories that are affected by the changes, modifications, and enhancements that are described in the next section.

Change Descriptions

The following problems are corrected and addressed in DEFINITY Enterprise Communications Server (ECS), Release 6.2.

1. If a multimedia endpoint placed a one-channel call to a voice-only station, another multimedia endpoint placed a one-channel call to the same station, the station conferenced the two endpoints together, and the two endpoints placed their second channel call to this station, the second channel calls failed and the endpoints did not receive two-way video.
2. When an MMCH conversion call was made, and the PC hung up first, all voice conditioner resources were not released and possibly some internetwork connections were not released.
3. Dual wakeups did not work consistently.
4. Status station second wakeup overwrote the title on the display. Now, second wakeup displays after first wakeup.
5. When adding a new announcement on the announcement form, a warning message was sometimes displayed stating that the announcement being changed would be deleted. Now, the warning message only appears if the board location field for integrated announcements is being changed from a value that is different from the previous value.
6. If an intercom call came in to a set and was answered, another call came in to that set and was answered at a bridged appearance at another set (that had three bridged appearances of the first set) and the other set tried to transfer the second call, the user heard busy tone and could not transfer the call.
7. Multiple extensions without hardware could not be mapped to a single physical station with an assigned port.

8. ESM status was obtained via the command **status system 1st-cabinet**. This was available only on the R6 csi, vs and si target. Now, a new command, **status esm** displays ESM status for both R6r and R6 csi, vs and si. Now, the **status system 1st-cabinet** command does not show any ESM status and does not have a page 2.
9. The MST could not trace msap process messages.
10. When TTI was turned on, a call from one of the phones on the wired ports went to the attendant. The display at the attendant showed the wrong slot of the of the calling party.
11. Modem connections were sometimes very noisy or failed to complete.
12. The adjunct supervision of vmi stations was not set correctly and did not allow for the adjunct supervision to be changed.
13. When a call was forwarded with Call Forwarding — Don't Answer over QSIG to a busy station, the caller did not see the name of the busy party.
14. When a QSIG call was forwarded unconditionally to a local ISDN set, the caller did not see the name of the called party (the ISDN set in this case).
15. The France-only trunks in-service feature incorrectly raised a major alarm when the number of administered trunks in service was greater than or equal to 75 percent. Now, an alarm is raised when the number of administered trunks in service is less than 75 percent.
16. If a held call had an appearance on a terminal that was being dissociated or associated, the held call was dropped. Similarly, a call ringing at a station being dissociated or associated through TTI was dropped.
17. Administering the ANI Available and ANI Not Available fields for India R2-MFC signaling could cause data corruption in other fields on the multifrequency-signaling form (specifically the Transmitted Signal Gain field).
18. If DEFINITY ECS was connected via QSIG to a non-Lucent system and initiated a QSIG rerouting request toward the non-Lucent system, DEFINITY ECS treated a successful response from the non-Lucent system as a failure, and the rerouting request failed unnecessarily.
19. A call classifier was attached to a call that forwarded offnet via ARS/AAR facilities even when the principal had no coverage to which the call could be returned.
20. When a terminal was running Vu-Stats, a PASTE download could be executed, and the paste display data collided with the Vu-Stats data. Now, a PASTE download causes the **vu-stats** command to stop and the station put in the normal mode before the start of the PASTE download.
21. If the country code was Russia and the interdigit timer was 10 seconds, multifrequency shuttle signaling did not commence until all digits were dialed. Now, the interdigit timer is 50 seconds, and shuttle signaling can start before all the digits are dialed.

22. On calls that redirected to an unanswered final offnet coverage point, the calling party heard busy tone, whether or not the coverage point was busy. Now, the calling party hears the appropriate progress tone, either ringback or busy.
23. The CDR output dialed number field contained extra digits if end-to-end signaling was used and the user dialed the digits using the abbreviated dialing or autodial buttons.
24. ISDN PRI calls into BRI data endpoints recreated the bearer capability information element (IE). Now, ISDN PRI calls into BRI data endpoints tandem the bearer capability IE.
25. A PASTE download terminated when the “Station tone forward disconnect” field on the system-parameters features form was set to tone or busy.
26. In the directory mode, if the call-display button was used to call the displayed station, the display did not return to the normal mode.
27. When an observed-controlling party was dropped from a conference call that involved ACD splits, the service observer could also be dropped if COR permissions for the hunt group did not allow service observing.
28. A call forwarded offnet and not answered, did not redirect to coverage.
29. The OSSI interface did not send the field information for page 3 of the analog station form.
30. DCS SSE ISDN calls that were forwarded remotely and then transferred, did not allow a path replacement to occur.
31. Calls that tandemmed from ISDN to ISDN facilities offered a different display to the end user than that of an analog to ISDN tandem. Now, through administration, the user can determine if the ISDN to ISDN tamdem call display is consistent with the analog to ISDN display (it shows the trunk group name instead of the calling party name).
32. When all of the slots in the BCMS agent table were filled, but the maximum number of agents was not logged in, a new agent could be logged in but some existing agent's data was lost. That agent was not selected using the most desirable method from a customer's perspective. Now, data for the least recently logged out agent is overwritten when a new agent logs in.
33. Outgoing trunk group names were not displayed when trunks were accessed.
34. A TTI merge of an analog set could lead to the value of the Test? field changing from y to n.
35. If two incoming trunk calls came into a station that used DCS call coverage, the second incoming trunk call did not cover to the DCS coverage point. The second call was prevented from going to DCS coverage during a 30-second window because there was a chance of ping-ponging the call back to the principal.

36. An ASAI type login could result in the use of an improper login ID that was too long for the agent.
37. Calling Party Numbers (CPNs) over DCS+ did not carry the correct CPN information.
38. ANI displays did not correctly show the 8434 terminals on calls that were redirected.
39. The **save translation** operation could run indefinitely because of TTI being unable to change states.
40. When coverage paths were exhausted on a measured ACD call, the queue-count was erroneously decremented although the call was still in queue.
41. Priority calls to a station that was forwarded to a VDN were blocked with the caller connected to intercept tone. Now, these calls forward to the VDN as nonpriority calls.
42. The duplicate station form allowed a remote AUDIX extension to be entered in the extension field, causing restarts when the number was used for voice mail.
43. CAS-extended AAR/ARS calls over trunks on the branch switch that required a higher FRL failed to prompt the caller for an authorization code.
44. A multimedia complex was symmetrical between its voice extension and data extension. When the data extension of a multimedia complex was dialed, the call rang at the PC, timeout, and drop, but did not ring at the associated voice phone.
45. Some remote coverage calls outpulsed a pound sign (#) [end-of-dialing signal] that was not required. Now, only remote coverage calls that have digit strings that fall into an analysis table in which the minimum digits do not equal the maximum dialed digits, outpulse the pound sign for the end-of-dialing signal.
46. If a user had a stable call of three or more parties with conference tone and they attempted to add a multimedia endpoint that was playing hourglass tone, the merging of the calls was denied.
47. On a call to a station that conferenced in another station that did not answer and covered to a VDN that routed to another station, and then dropped, ringback tone remained when reconnected to the original caller.
48. The directory did not work when entering more than 16-character names. Now, the directory works for up to 27-character names.
49. When a non-QSIG ISDN call was dialed, an alerting message from the called party was never generated, resulting in call failure.
50. A call that was left at an offnet coverage point because there was no subsequent coverage to which the call could be redirected could not be answered at the offnet coverage point.

51. The Coverage of Calls Redirected Off-Net feature failed when using the TN744D/TN2182B circuit packs.
52. A call redirected to a DCS coverage point with Send All Calls activated subsequent to redirecting to a CCRON coverage point and a local coverage point rang at the DCS coverage point. Now, the call correctly remains at the local coverage point.
53. The calling party on a call that redirected to an offnet CCRON coverage point, a local coverage point, and a DCS coverage point with Send All Calls activated, heard intercept tone. Now, the calling party continues to hear ringback.
54. The 7303 and 7303S terminal types could not be administered on the station form.
55. On a R6r system, only one notification association could be requested from the DEFINITY ECS. Any additional requests were rejected with “No Resources Available.”
56. A call parked via code-call parking to a phantom extension administered only on the paging code form, could not be unparked because of COR restrictions.
57. Tandemmed DCS PNT received silence (no mode code was sent to AUDIX).
58. Calls in queue to the attendant in a system with Tenant Partitioning active were dropped by a background audit.
59. On layer 1 activation, BRI links did not come up for six seconds. Now, BRI links come up in two seconds.
60. An analog adjunct that had the Hotline feature activated to the ARS feature access code (FAC) could not dial, resulting in the call not completing.
61. The **display port** command for a valid BRI trunk member on a TN556B circuit pack did not successfully complete.
62. ASAI charge advice could charge a call again for the amount already sent in a split charge. This could only happen if too many calls were waiting for the final charge from the ISDN trunk, or if a single call waited too long for the final charge from the ISDN trunk.
63. When a user placed a QSIG call that was forwarded on don't answer over QSIG to a busy station, the user did not receive a “forward” string on their display to indicate that the call was forwarded.
64. Conference calls that were involved with SSE DCS ISDN trunks that were transferred and had Path Replacement could cause procedure errors.
65. The access endpoint form did not appear because a processor trap was encountered when performing an **add access-endpoint next** instruction at the command line.

66. Confirming an existing wakeup request on an attendant console required two pound keys instead of one.
67. If a call covered to a DCS point and then covered to AUDIX and the caller was on a conference call and did a drop-last operation (pressed the drop button), AUDIX was not dropped.
68. An MMCX endpoint that covered to AAR/ARS through the DEFINITY CS could not make or receive calls after receiving a call that went to coverage.
69. DEFINITY ECS could not administer:
    - a timer to drop an unanswered call
    - whether or not to send a blocking signal over an outgoing CO trunk that was maintenance busied
    - MCT as a group B MFC signal.
70. An MMCX endpoint could not dial the DEFINITY ECS attendant.
71. Message Sequence Tracer (MST) rejected the specification of a BRI station for monitoring if that station was assigned to a circuit pack capable of supporting a BRI trunk. Now, both BRI stations and BRI trunks may be specified for MST monitoring.
72. Data could become corrupted when tying to remove a TAAS extension while it was a bridged appearance button on another station.
73. A redirected event report was not sent if there was a direct call pickup or a call pickup of an ACD call alerting an ACD/EAS agent.
74. The Remote Access Extension field on the remote-access form displayed “extension previously assigned; please select another” when a remote UDP extension was entered. The Telecommuting Access Extension field on the telecommuting-access form displayed the same error message in the same situation. Now, both forms display “Must use Local extension.”
75. The carrier frequencies administered on the system-parameters wireless and carrier-frequencies forms were listed in ascending order from 1920.625 to 1929.375 (increments of 1.75 MHz) and numbered 1 through 8. Now, the carrier frequencies are listed in descending order from 1929.375 to 1920.625 (increments of 1.75 MHz) and numbered 0 through 7.
76. An incoming trunk call to a principal that immediately followed a previous incoming trunk call to that principal that was answered at an offnet coverage point failed to redirect to subsequent coverage points if there were no trunks available to the offnet coverage point. Now, the second incoming trunk call redirects to subsequent coverage points if access is blocked from redirecting to an offnet coverage point because no trunks are available.

77. When an MMCX endpoint called a DENFINITY ECS station that had both Call Forwarding and Call Coverage active and the forwarded-to or covered-to station answered the call and hung up, the MMCX endpoint did not go idle. Now, the MMCX endpoint is automatically idled when the other party hangs up.
78. Error logs incorrectly displayed multimedia interface (MMI) and voice conditioner (VC) errors.
79. ISDN-PRI trunks that were stuck in the maintenance wait state resulted in service messages sent to the wrong D-channel. Now, the D-channel globals are properly initialized and backups due to excessive messages do not occur.
80. The attendant could not press the cancel or release buttons after dialing the remote access station and before entering the remote-access barrier code.
81. There was no way to generate multiple NSF IEs that would allow our customers to specify operator/sub-operator and lds/megacom/sdn.
82. System reset sometimes occurred when PMS links were down.
83. MMCH conferences using multimedia interfaces (MMIs) in multiple port networks on a center stage configuration lost their video connectivity.
84. A system with a port network connected through TN1654 circuit packs saw incorrect timeslot bandwidth on the measurements blockage port-network display.
85. The **status card-mem** SAT command displayed “G3V5” in the Card Format: field when it was run on a G3V5 or G3V6 system with a nonwritten flash card inserted.
86. Corruption could occur when bringing up an AWOH station with a DTDM.
87. Out of range values could be received on the wireless traffic reports.
88. AUDIX could send a digit sequence programmed for outcalling that caused the switch to restart.
89. A 56K or 64K H.320 video call over a DS1 trunk that was administered as a data trunk with BCC=1 or 4 did not convert when the call redirected to a voice device.
90. MMCH had the following limitations on the number of conversion calls and endpoints:

	R6r	**R6 csi, vs and si**
Conversion Calls	48	48
Endpoint records	126	126
Channel records	128	128

Now, MMCH supports the following limits:

	R6r	R6 csi, vs and si
Conversion Calls	74	50
Endpoint records	148	100
Channel records	240	160

91. WFB and CAU alarms could not be suppressed with the Suppress Alarm Origination feature.
92. A call answered by a hunt-to-station received intercept tone when it tried to activate the goto AUDIX feature.
93. A multimedia trunk call to a station that was not part of a multimedia complex did not alert at the destination voice station and failed.
94. MMCH conversion calls over DCS+ trunks to voice stations did not correctly display the originating MMCH complex one #; they only displayed the trunk group name.
95. Unusual characters like #, *, ~p, ~w, ~m, and ~s in the route-to number field of a vector step generated procedure errors.
96. When requesting an extension information query for a physical extension in an EAS environment, an extension class of “voice” was returned with a station type. Now, a second domain IE with an address is also included in the response containing the agent's logical extension.
97. The display on a failed LAI call showed the information of the failed LAI agent’s name and number. Now, the display shows the actual parties who are connected to the call.
98. Display coverage sender groups did not display extensions of stations that were using a coverage path for “Coverage Path 2:” on the station form.
99. VOA was not heard for converted data calls.
100. Auto-Available agents could skip from the Auto-In work mode to the After-Call-Work work mode.
101. If an MMCH conversion call was ringing at phone A and answered at phone B either by pickup, coverage, or bridging, the answering party did not hear hourglass tone.
102. When performing a one-button transfer of an outgoing CO trunk that was dialed using the trunk access code (TAC) to an analog adjunct within ten seconds of the last dialed digit, the call could not be terminated by going on-hook.
103. Executing a **status trunk-group display** command on a fully populated trunk group (99 on R6 csi - vs and si, 255 on R6r) occasionally resulted in one extra trunk from a different group being displayed.

104. The CDR Account Code Length field on the system-parameters CDR form help message indicated that a blank was allowed; however, a blank could not be entered.

105. If a user was trying to conference a call and hung up after pressing the conference button the second time without waiting for the other party to answer, and the VDN call was being service observed, the call was torn down.

106. If an EAS AAS agent originated and dialed the logout feature access code (FAC), the agent data could become corrupted even though the logout request was denied. The resulting corruption prevented subsequent removal of the agent data.

107. Call offer calls to BRI endpoints did not work correctly.

108. ISDN test calls on the G3V5i system failed to set up.

109. The attendant could not retrieve a parked call by selecting the SBI button tracking the extension where the call was parked.

110. An unanswered offnet forwarded call routed to coverage after waiting the time specified by the “subsequent coverage redirection interval.”

111. A VuStats display was updated even if there was no change in the display.

112. A call from a data module to another data endpoint failed.

113. When a do not disturb (DND) station covered to a VDN and the VDN went to a vector that contained only an announcement, the call covered and then was dropped within a few seconds. If the vector contained a collect-digits-after- announcement step and was followed by a route-to-digits step, the caller heard silence and nothing happened if the caller dialed digits.

114. MMCH calls that were offered to stations with Early Answer were not early answered.

115. Sometimes, a BRI port marked as bad caused TTI port activation to hang-up in some situations.

116. The Send All Calls Applies to, Auto Inspect on Send All Calls?, and Send ISDN Trunk Group Name on Tandem Calls fields contained **?** if they were displayed with no translations.

117. Switch-classified calls launched over ISDN PRI trunks stayed up if the network sent a progress message with cause value user busy. This was not necessary because the network followed up with a disconnect message after a few seconds.

118. VuStats displays could be terminated unexpectedly when a call was released.

119. A one-channel (64K) video call that was converted resulted in a one-way talk path instead of a two-way talk path.

120. Sending a print job to a system printer could result in a system reset if there was a problem with the hardware.

121. The wireless measurements reports always list the first CAU location at the beginning, even if the user previously aborts the listing.
122. The remote access extension could be assigned to the busy indicator button, but normal tracking was not possible. Now, the remote access extension cannot be administered as a valid extension to be tracked by the busy-indicator.
123. When running the **reset board** operation on a TN750C circuit pack, vintage 8 or later, Test 53 failed.
124. ISDN messages that contained other user data of a length greater than the maximum allowed had up to ten information elements (IEs) discarded. This sometimes caused lost DCS IEs and AUDIX problems.
125. After upgrading, the display capacities to show how many facility busy indicators only showed zero (0) assigned. Now, the correct number is displayed.
126. A procedure error was logged every time a noncall associated temporary signaling connection (NCATSC) was originated, sometimes filling the error log.
127. ISDN test calls on the R5 si system failed to set up.
128. Attendants using S-channel dialing only heard one second of a recorded announcement when connected through a vector with a digit collect step.
129. After several MMCH conversion calls, subsequent calls only had one-way talk paths.
130. Digital station users were allowed to transfer a caller to busy tone.
131. If a VDN was being service observed remotely over an AVD trunk, the caller or the service observer could not hear announcements in the vector if the call was over an AVD trunk.
132. When H320 video calls were made over a data tie trunk, the calls dropped if they went unanswered for the system tone detect timeout interval.
133. Calls that received SAC treatment over ISDN SSB trunks showed procedure errors.
134. A Whisper Page could be made to a station with an attendant intrusion.
135. The display of a BRI station was not being updated when an outgoing call was made over a BRI trunk.
136. Going onhook on bridged appearance calls dropped MMCH calls.
137. If a video call went to a number 1 complex that had a coverage criteria of “all,” the call rang at the PC and did not follow any coverage.
138. Multimedia conversion calls to an analog station with h.320=y and early answer=n gave analog station early answer treatment (immediate talk path and no hourglass tone).
139. The Incoming DTMF ANI feature required a leading asterisk (*) to start the feature. Now, the feature can be started without the leading asterisk (*).

140. Bridging could not be done on a call that went out on an ISDN line until the far end answered. Now, users can bridge onto a call in this state as long as the dial plan manager is not expecting any more digits. Calls that go over an ISDN trunk that are not end-to-end ISDN can be bridged-onto when the far end is ringing, but has not answered yet.

141. Calls to an AWOH station would silently alerted all bridged stations for the assigned Principal Don't Answer Interval, even when all bridged stations had activated SAC.

142. R6r customers could only have three concurrent conversion calls and R6 vs/si customers could only have six concurrent conversion calls. Now, the maximum number of conversion calls is as engineered via the customer configuration.

143. The Name field on the bri trunk board form could not contain any blanks. Now, leading and embedded blanks are allowed.

144. Displays for calls dialed out on non-ISDN trunks with the outgoing trunk display set to no did not automatically display incoming calls. If the user inspected the incoming call or went on hold and then went back to the outgoing call, the digits were not redisplayed.

145. Using an abbreviated dialing button for end-to-end signaling was possible only from the originating station or after a trunk flash when the call included a single trunk that was administered to support trunk flash.

146. Test boards on an MMI caused numerous procedure errors.

147. On an upgrade the PPM min and max fields on the DS1 form were displayed with blanks instead of their correct default values.

148. If Station A had a bridged appearance on Station B and if Station A was call forwarded offnet, any call placed to Station A when all the outgoing trunks were busy resulted in unstable calls.

149. BCMS sometimes reported inaccurate results due to conference calls, transfers, and parked calls.

150. When a call that was answered at a local coverage point following redirection to an offnet forwarded-to destination was parked, the call was dropped.

151. The data-extension member produced dial tone when the data-extension button was selected, even if the adjunct that the button is tracking was off-hook.

152. The Idle Code field on the fiber administration form implied that it was used for DS1-C links that were active. The data entered into the field is only used for facility startup. Now, the field shows "Facility Startup Idle Code."

153. The Percent in Service Level measurement on BCMS split/skill and VDN reports was sometimes incorrect due to cumulative round-off errors.

154. Administrable PPM frequency fields were presented for older TN464F circuit boards that did not support the administrable PPM feature. Now, only TN464F circuit boards, vintage 11 and later, allow access to the administrable PPM frequency fields.
155. Some international ISDNs lost CDR records if adjunct routing to validate an incoming call was used and then the call was routed to an international number.
156. If a multimedia endpoint dialed a multimedia vector with an collect digit with announcement step, the announcement was not heard by the endpoint.
157. Hybrid stations that accessed an announcement heard a loud tone after disconnecting.
158. Calls to a station that covered to a remote AUDIX could cause a system reset.
159. MMCH DCS calls would not go to coverage and they could not be conferenced with other MMCH calls.
160. A multimedia DCS call to another multimedia station that allowed coverage to an answering group rang the station in that answering group and did not drop when the caller went on hook.
161. Sometimes, physically moving a unmerged BRI station from one port to another port caused alarms and corruption.
162. If an agent had multiple skills, some of which were administered for MCH, and the agent had a call for an MCH skill on hold, when this agent dropped a call for a non-MCH skill, the agent was not added back to the MIA queue.
163. If an MMCH conversion call was put on hold while hourglass tone was playing, and remained on hold for more than several seconds, the call incorrectly continued on to coverage and caused the principal's call appearance to hang.
164. If a DCS data call was converted and ringing at a coverage point, the call did not drop if the PC disconnected prior to the call being answered.
165. The Auto Exclusion class of service feature could not be administered. Activating the feature appeared to work except that a subsequent display of the class of service form showed that the feature was deactivated.
166. Failing MMI boards could cause conversion calls to be blocked even if there were other good MMI boards available for use.
167. A WFB that became disconnected did not always recover when reconnected.
168. On ISDN BRI trunks administered as TE, multiple TEI ID request messages were sent. Now, only one TEI ID request message is sent.
169. The shift-R, shift-tab key sequence to enter modified BCMS summary report requests did not work correctly.

170. Service links with the MMI and voice conditioners (VCs) in different port networks could cause timeslots to not be deallocated correctly when the call was dropped.
171. The last member of an ISDN measured trunk group could not be removed.
172. The access endpoint test for DCS links used failed.
173. On 603A1 and 603D1 Callmaster terminals, the time display was deleted.
174. ISDN BRI trunks were put out of service when the network sent a layer 2 disconnect.
175. After a system reset, BRI stations did not come back into service.
176. Trunk access code (TAC) calls over ISDN trunks to the far end did not always complete. Continuous dial tone was received.
177. The data conference button did not always light after voice terminals were merged for data conferences.
178. When the multimedia data conference feature access code (FAC) was used with transfer, a conference was not started on an existing call.
179. If multi-integrated announcements were not administered, the user was required to push the pound key (#) twice after entering the wakeup time.
180. In a R5 si or later high-availability system with packet bus enabled, the absence of a TN771D circuit pack in any EPN caused a packet bus alarm to be set for that EPN. Now, these alarms occur only in critically-available packet-bus enabled systems. Both SPE duplication and expansion interface board duplication must be present for the missing TN771D alarms to occur.
181. Changing from one set type to another could result in a locked up SAT.
182. Call preserving upgrades caused 8411 DCP terminals data-module bearer capability codes to be set improperly, resulting in calls over some trunks to be blocked.
183. BRI trunks did not properly handle incoming calls in France and in Belgium, and outgoing calls could not be made over BRI trunks in Belgium.
184. A query from ASAI for the number of available agents returned an incorrect number.
185. Incoming ISDN calls that tandemmed to DCS+ calls had a wrong display on the terminating station.
186. Some VDN of Origin calls were left in the announcement queue, filling it. Now, the audit process cleans the calls from the queue.
187. Changing permissions or passwords corrupted logins.
188. The DCP/Analog Bearer Capability field on DS1 forms could be reset to the default values if upgrading from R5.4, R5.5, R6.1, and R6.2 loads.

189. If a reset system 1 (warm restart) caused a coredump to be taken on a CSI machine, BRI stations were left in an out-of-service state until they were manually placed back in service via the **busyout board xxxxx** operation followed by the **release board xxxxx** operation.

190. During the installation of an Release 6 csi, remote administration could not be performed until the external modem was administered on site.This meant that the person installing the machine had to be given the passwords for the init login so they could change the G3 Version to V5 or later in order to activate page 3 (modem administration) for the system--parameters maintenance form.