

Lucent Technologies
Bell Labs Innovations



DEFINITY[®]
Enterprise Communications Server
Release 6, Issue 2.1(02.1.125.0)
Change Description

555-233-402
Comcode 108248709
Issue 1
April 1998

Copyright © 1998, Lucent Technologies
All Rights Reserved
Printed in U.S.A.

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.

Lucent Technologies Fraud Intervention

If you *suspect that you are being victimized* by toll fraud and you need technical support or assistance, call Technical Service Center Toll Fraud Intervention Hotline at 1 800 643-2353.

Federal Communications Commission Statement

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 Numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Trademarks

DEFINITY is a registered trademark of Lucent Technologies in the United States and throughout the world.

Ordering Information

Call: Lucent Technologies BCS Publications Center
Voice 1 800 457-1235 International Voice 317 322-6791
Fax 1 800 457-1764 International Fax 317 322-6699

Write: Lucent Technologies BCS Publications Center
2855 N. Franklin Road
Indianapolis, IN 46219

Order: Document No. 555-233-402
Comcode 108248709
Issue 1, April 1998

You can be placed on a Standing Order list for this and other documents you may need. Standing Order will enable you to automatically receive updated versions of individual documents or document sets, billed to account information that you provide. For more information on Standing Orders, or to be put on a list to receive future issues of this document, please contact the Lucent Technologies Publications Center.

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.

Comments

To comment on this document, return the comment card at the front of the document.

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 2.1 (02.1.125.0).

Platform

Offer Category

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.

In R6, Issue 2.1, changes were made to allow execution of **mtce**, **list**, and **display** commands, as well as administration of an external modem prior to administration of the category.

Highlights of Features and Enhancements

Abbreviated Dialing (AD)

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. Now, a terminating station can use an abbreviated dialing button to do end-to-end signaling on any facilities that can generate the tones.

Announcement Boards

The **list configuration** command did not display translated but uninserted announcement boards properly.

AUDIX Transfer

AUDIX transfers did not complete when the number of outstanding calls was greater than 31. Now, AUDIX transfers complete when the number of outstanding calls is 32. Also, for Intel machines, the maximum number of AUDIX ports allowed is now 64.

Call Center

When trying to redirect a call on no answer to a VDN while processing a failed "converse on" vector step, the call went into limbo as call processing tried to route call to the RONA VDN. Now, attempts to RONA a call to a VDN are blocked if the call is in vector processing of a "converse on" vector step. A new vector event is generated, "RONA to VDN in converse."

Call Classification

There was no way to administer dB adjustment for the Call Classifier. Now, a new field, Global Classifier Adjustment (dB), on page 1 of the system-parameters ocm-call-classification form allows for administration of dB adjustment for the Call Classifier when using the OCM feature.

Call Coverage/Call Forwarding/Coverage of Calls Redirected Off-Net (CCRON)

When an off-net coverage or forwarded call cannot find an available trunk, the call is redirected back to the original principal.

When an off-net coverage or forwarded call could not find an available trunk, busy tone was played back to the calling party, effectively ending the call. Now, the call is redirected back to the original principal whenever possible.

If a user forwarded a station to a remote number for which the length of the number (including an ARS or AAR feature access code) was 16 digits, and the number required an interdigit timeout (typically, an international number, for example, 88+011-44-719710089), the number was accepted. But when a call was forwarded, the system waited indefinitely for the end-of-dialing timeout or a pound sign (#). (Note that a pound sign is stored with the number when the number of digits is less than 16.) Now, Call Forwarding works correctly for any number of digits up to, and including, 16. Call Forwarding cannot store more than 16 digits at present.

When a bridge of the originating party dropped out of a call that had routed off-net with call classification on a non-ISDN end-to-end trunk, the call was torn down. Now, the call is not torn down, but call classification is terminated, the call is left off-net, and it is not redirected to subsequent coverage.

If both CCRON and Answer Supervision by Call Classification features were active on an off-net call, the call did not further redirect to subsequent coverage points.

When an attendant extended a call to a principal with redirected off-net via the CCRON feature, the call did not return to the attendant when the Return Call timer expired.

Integrated Services Digital Network (ISDN)

To increase the T.305 timer for the Nortel DMS COs, a new protocol version for the US (country code 1) was created. This new protocol version option is labeled as "c." The new country code/protocol version is automatically assigned a 30-second value to the T.305 timer.

Terminal Translation Initialization (TTI)

Turning off TTI removes ports that are administered by TTI on cabinets that have been removed.

Upgrades

Upgrades from G3V4 07.0.077 or greater to R6.2 have correct defaults for new R6 PPM fields on the DS1 form.

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.

Feature or category	See item numbers	Feature or category	See item numbers
A		Call Classification	4, 9, 33
AAR Analysis Form	53	Call Coverage	1, 3, 4, 5, 8, 9, 13, 31, 32, 47, 49
Abbreviated Dialing (AD)	40	Call Detail Recording (CDR)	27
Active Ringing	14	Call Forwarding	1, 5, 6, 9, 13, 38, 48, 49
Adjunct Switch Application Interface (ASAI)	53	Call Management System (CMS)	10, 19
Adjuncts	39, 53	Call Vectoring	14, 18, 23
Administration	6, 15, 17, 20, 21, 26, 32, 33, 34, 39, 40, 46, 51, 52, 54	Calls Redirected Off-Net	4, 9
Administration Without Hardware (AWOH)	6, 26	Capacities	41, 45
Agents	11, 17, 18, 19, 32, 35, 45, 47, 51, 56	Cause Values	2, 22, 55
Analog Stations	39	Central Office (CO)	38, 59
Announcements	2, 14, 21	Circuit Packs	37, 52, 54
Answer Supervision	9	Class of Restriction (COR)	32
Attendants	13, 30	Conference	3
AUDIX	8, 25, 28, 57	Conversant	24
Authorization Codes	46	Corruption	7, 26, 34
Automatic Alternate Routing (AAR)	48, 53	Coverage of Calls Redirected Off-Net (CCRON)	1, 9, 13, 31
Automatic Call Distribution (ACD)	11, 12, 16, 18, 41, 45, 47, 51	D	
Automatic Circuit Assurance (ACA)	44	Day Service	30
Automatic Number Identification (ANI)	24	Direct Agent	32
Automatic Route Selection (ARS)	22, 31, 48	Direct Inward Dialing (DID)	38
AVD	29	Display Capacity Form	41
B		Displays	3, 17, 18, 25, 32, 35, 43, 45, 46, 47, 51, 52, 57
Basic Call Management System (BCMS)	10, 16, 19	Distributed Communications System (DCS)	3, 36, 47, 50
Basic Rate Interface (BRI)	2, 46, 55	DS1	15, 37
Bridging	4, 46	E	
C		Electronic Tandem Network (ETN)	50
Call Appearances	14	Error Messages	10, 43

Feature or category See item numbers

Expansion Port Networks (EPNs)7

Expert Agent Selection (EAS)19, 32, 47, 56

F

Feature Access Codes (FACs)48, 56

H

Hunt Groups 11, 58

I

Incoming Trunk Calls Splitting (ITCS)27

Initialization 6, 26

Integrated Services Digital Network (ISDN)4, 22, 47, 53, 58, 59

L

Logins 17, 32, 45, 47, 51

Lookahead Intraflow (LAI) 22

M

Maintenance 21, 54

Message Server 43

Multifrequency-Compelled (MFC) Calls23

Multifrequency-Compelled (MFC) Signaling23

N

Night Service 30

O

Outbound Call Management (OCM)33

P

Procedure Errors 31

Q

OSIG 25

Queues 11, 35, 41

R

R2-Multifrequency-Compelled (MFC) Signaling24

Redial 46

Redirect on No Answer (RONA)11, 12, 18

Redirection 1, 4, 9, 12, 13, 31

Remote Access 3, 5, 29, 48

Feature or category See item numbers

Return Call Timer 13

Routing 22, 31, 48, 49, 53

S

Send All Calls (SAC) 32

Service Observing 27, 29

Signaling 23, 24, 25, 40

Skills 16, 17, 51, 56

Splits 11, 16, 35

System Access Terminals (SATs)43, 54

System Capacity Forms 45

System Restarts/Resets 30, 44

System-Parameters OCM Call-Classification Form33

T

Terminal Translation Initialization (TTI)6, 7, 26, 34

Timers 13, 59

TN767 Circuit Packs 37

TN790 Circuit Packs 52

TN798 Circuit Packs 52

Tones 1, 2, 31, 37, 40, 49

Transfer 8, 24, 25, 27, 28, 38

Transfer Out of AUDIX 25, 57

Translations 7, 31, 32, 34

Trunk Answer Any Station (TAAS)42

Trunks 1, 4, 22, 24, 25, 29, 31, 37, 38, 40, 42, 44, 47, 49, 57

U

Upgrades 15

V

VDN of Origin Announcement (VOA)14

VDN Override 18

Vector Directory Numbers (VDNs)12, 18, 23

Vectors 8, 12, 14, 18, 20, 23

Voice Mail Integration (VMI) 39

VuStats 51

Change Descriptions

The following problems are corrected and addressed in DEFINITY Enterprise Communications Server (ECS), Release 6, Issue 2.1 (02.1.125.0).

1. When an off-net coverage or forwarded call could not find an available trunk, busy tone was played back to the calling party, effectively ending the call. Now, the call is redirected back to the original principal whenever possible.
2. A customer with a BRI terminal that is capable of seeing cause values saw "Normal Call Clearing" when listening to any announcement or tone when it timed out or completed. Now, if that user is listening to reorder, busy or Intercept tone and the tone times out, that user sees a cause value that represents the reason for the tone, that is "User Busy" or "Call Rejected."
3. Assume that station A called station B, station B conferenced station C, and station C covered through DCS to a remote station D. After B dropped, station C displayed its own name. Now, after station B drops, C displays station A's name and station A displays station C's name.
4. When a bridge of the originating party dropped out of a call that had routed off-net with call classification on a non-ISDN end-to-end trunk, the call was torn down. Now, the call is not torn down, but call classification is terminated, the call is left off-net, and it is not redirected to subsequent coverage.
5. Station A had a remote coverage point and the station was forwarded to station B. When a call was placed to station A when station B was active, the call did not go to the coverage point.
6. When TTI was turned on and a station was call forwarded, a user could remove the call forwarded station and add a new station with the new station being forwarded to the destination of the removed station.
7. Removing an EPN cabinet without first turning off TTI caused translation corruption.

8. Transferring into AUDIX when AUDIX was not explicitly in the coverage path or if a vector was active failed on Intel machines.
9. If both Coverage of Calls Redirected Off-Net and Answer Supervision by Call Classification features were active on an off-net call, the call did not further redirect to subsequent coverage points.
10. When BCMS was set to half-hourly reporting, and when the **list bcms <object>** command reported BCMS data, executing the **list bcms <object> time <start> <end>** command sometimes caused the report to show "no data in system to list."
11. When an ACD agent was logged into multiple splits, and a call redirected on no answer (an ACD call was ringing at the agent and the agent didn't answer so the call was requeued to the hunt group), sometimes not all of the agent's aux-work mode buttons lit up, and the agent was still available in some splits.
12. When trying to redirect a call on no answer to a VDN while processing a failed "converse on" vector step, the call went into limbo as call processing tried to route call to the RONA VDN. Now, attempts to RONA a call to a VDN are blocked if the call is in vector processing of a "converse on" vector step. A new vector event is generated, "RONA to VDN in converse.
13. When an attendant extended a call to a principal with redirected off-net via the CCRON feature, the call did not return to the attendant when the Return Call timer expired.
14. When a station had optioned Active Ringing to **silent-if-busy** or **continuous** and answered a call with VOA, the station continued to ring if the call was answered by pressing the call appearance button.
15. Upgrades from G3V4 07.0.077 to R6.2 could have incorrect defaults for new R6 PPM fields on the DS1 form.
16. If a split or skill received more than 65,535 ACD calls in one day, the number of ACD calls displayed on the list bcms skill report rolled over from 65,535 to 0, indicating that far fewer ACD calls had been received than was the actual case. Now, the list bcms skill report displays accurately the number of ACD calls received, up to 99,999 calls, after which point a string of "*****" indicates that the number of ACD calls received exceeds 99,999.
17. An EAS agent who logged in at a station that had a 2-line display with the "user_defined" option administered did not see the skill numbers and levels of the agent displayed correctly.
18. VDN Override rules regarding displays were not followed when a call redirected on no answer. The first agent to receive the call had a correct display showing the dominant VDN. However, subsequent agents who received the same call did not have a display showing the correct VDN.
19. "Extension in" calls to EAS agents were not reported by the **monitor bcms** command.

-
20. A goto time-of-day vector step allowed a combination of "all" with a specific day.
 21. The **list configuration** command did not display translated but uninserted announcement boards properly.
 22. LAI routing did not continue down the list of trunks in the route pattern when it received a release complete message immediately following the setup message, even if the correct cause value for LAI routing was present.
 23. Non-group II MFC calls did not terminate at VDN extensions correctly.
 24. When a Conversant port transferred an incoming R2-MFC call to an outgoing R2-MFC trunk blindly, the ANI that was received on the incoming side was not sent out to the outgoing side.
 25. Transferred calls Out of AUDIX over a QSIG trunk showed an incorrect display.
 26. TTI software corruption would cause problems with station administration, resulting in error conditions.
 27. A CDR record was generated with the service observer extension on a blind transfer when ITCS was enabled. Now, the transfer-to party is output in the CDR record if a transferred call is being observed.
 28. AUDIX transfers did not complete when the number of outstanding calls was greater than 31. Now, AUDIX transfers complete when the number of outstanding calls is 32. Also, for Intel machines, the maximum number of AUDIX ports allowed is now 64.
 29. A remote service observer using an AVD trunk could only observe in the listen-talk mode. Now, the observer can also use the listen-only mode.
 30. The **reset system 2** command caused the attendant service mode to toggle between **day** and **night**. Now, this command causes the attendant service mode to always be set to **night**.
 31. A call to a principal that redirected off-net on an ARS routing pattern for which no preferences (trunk groups) were assigned resulted in the calling party hearing intercept tone while a previous local coverage point could be ringing. The calling party was unable to pick up the call. Now, the calling party hears intercept tone, but all other parties are dropped from the call.
 32. A personal EAS (a call to an EAS login ID in which the calling and called parties did not both have their COR Direct Agent Calling? option set to **y**) that went to coverage due to the called agent's station having SAC active, showed **f** rather than **s** for the call's reason code at the covered-to station's display.
 33. There was no way to administer dB adjustment for the Call Classifier. Now, a new field, Global Classifier Adjustment (dB), on page 1 of the system-parameters ocm-call-classification form allows for administration of dB adjustment for the Call Classifier when using the OCM feature.

34. Turning off TTI did not remove ports that were administered by TTI on cabinets that had been removed, causing translation corruption.
35. Automatic caller information was not displayed if the agent was not in the first split that the call was queued to.
36. DCS transparency was lost because DCS calls saved all processed message buffers for the duration of the call, causing a shortage of DCS message buffers in the switch. Now, the number of messages saved per DCS calls is limited so that more messages are available for other calls, thereby reducing the chances of running out of message buffers resulting in a loss of DCS transparency.
37. Some voice calls on TN767 DS1 circuit packs were randomly considered as data calls, so data tone was connected on these calls and cut-through trunk operation was not allowed.
38. CO-to-CO calls (DID calls that forwarded off-net or that were transferred off-net) could have a transmission level that was too high. This caused instability on these calls at some customer sites.
39. The Adjunct Supervision field did not work correctly when it was set to a VMI set type.
40. 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. It did not work from a terminating station under other circumstances. Now, a terminating station can use an abbreviated dialing button to do end-to-end signaling on any facilities that can generate the tones.
41. Page 5 of the display capacity form showed an incorrect system limit for the queue-status buttons.
42. A trunk caller was blocked from picking up another trunk call using TAAS if both trunks were in the same trunk group.
43. The message "Entry is bad" was displayed on the SAT when executing a **clear-amw-all-extension** command. Now, the message "Command successfully completed" is displayed if the **clear-amw-all-extension** command is successful. Otherwise, the message "Error encountered, can't complete request" is displayed.
44. If there were about 200 or more long holding-time trunk calls in the system, ACA caused a system restart.
45. The logged-in agent count in the display-system-capacity form was sometimes higher than the number of agents actually logged in. Now, the count always reflects the actual number of agents logged in.
46. When the "Display Authorization Code?" field was set to **n**, using an authorization code from a bridged appearance caused other bridged BRI stations to lose these dial keypad functions: touch-tone feedback, local dialed digit display, and retention for redial. Now, these functions are only

disabled for the stations actually on a call requiring an authorization code, and are reenabled when the dialing of the authorization code is completed or abandoned.

47. When a call covered from an EAS agent login ID extension to a station on another DEFINITY ECS over an ISDN DCS+ trunk, the display at the covered-to station showed the physical station name (rather than the agent's login ID extension name) where the EAS agent was logged in. Now, the display correctly shows the agent's login ID extension name.
48. If a user forwarded a station to a remote number for which the length of the number (including an ARS or AAR feature access code) was 16 digits, and the number required an interdigit timeout (typically, an international number, for example, 88+011-44-719710089), the number was accepted. But when a call was forwarded, the system waited indefinitely for the end-of-dialing timeout or a pound sign (#). (Note that a pound sign is stored with the number when the number of digits is less than 16.) Now, Call Forwarding works correctly for any number of digits up to, and including, 16. Call Forwarding cannot store more than 16 digits at present.
49. The calling party on an incoming trunk call that was routed to coverage or a forwarded-to destination off-net did not always hear ringback tone.
50. Some DCS calls were not transparent (they had double burst ringing instead of single burst ringing), meaning that they were treated as external calls.
51. VuStats displays were not updated following an agent **login** or **add/remove** skills action until the data displayed changed (the VuStats lamp was on indicating that VuStats was active but the display showed the agent's skill set rather than the VuStats display).
52. The **list configuration** command incorrectly displayed circuit pack suffix higher than suffix A for the TN790 and TN798 circuit packs.
53. Calls that used adjunct routing that received AAR analysis in which the value in the Min field did not equal the value in the Max field on the AAR Analysis form, could fail to route out.
54. The **list mmi** command displayed the cabinet number of the board location to the SAT based on its port network number. On the G3r, these numbers are not always the same.
55. Users of BRI terminals had 127 as a cause value in cases in which a BRI terminal was disconnected. The value of 127 is cause unknown that is really not true because the switch is aware of the Layer 1 status of a data module. Users of a BRI terminal could see some feedback that was somewhat ambiguous. Now, users of BRI terminals have 18 as the cause value that maps to "No User Responding." On the tested terminals "No Answer" came up as the user feedback at a BRI data terminal. This value is more aligned with the actually physical cause.

56. Agents could not remove themselves from a skill (using the feature access code for remove agent skill) without going directly back to the auto-in mode. Attempts to go into the aux-work mode failed and went to the auto-in mode instead.
57. Only the calling trunk information was displayed at the called station for trunk calls transferred out of AUDIX. Now, the AUDIX port name, followed immediately by the calling trunk information, is displayed.
58. Two simultaneous ISDN data calls to a hunt group of data endpoints resulted in the second call not completing.
59. To increase the T.305 timer for the Nortel DMS COs, a new protocol version for the US (country code 1) was created. This new protocol version option is labeled as "c." The new country code/protocol version is automatically assigned a 30-second value to the T.305 timer.