



DEFINITY®

Enterprise Communications Server

Release 6, Issue 1.0 (G3V6[ir].01.0.018.2)

Change Description

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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)

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- 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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DEFINITY® Enterprise Communications Server (ECS), Release 6, Issue 1.0 Change Description Highlights

This change description document describes the changes incorporated in DEFINITY Enterprise Communications Server (ECS), Release 6, Issue 1.0 (G3V6 [ir].01.0.018.2).

DEFINITY ECS Release 6, Issue 1.0 is the next step in the evolution of the DEFINITY product line. A new model, Release 6 of the csi, is introduced for small to mid-size customers. The existing 2-memory configurations for the vs and si models are consolidated into a single-memory configuration (TN790 circuit pack with 16 MB of resident RAM). Global Networking is enhanced with the introduction of Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) trunks. Several new features are added that are common to key/hybrid/small PBX systems.

Support of Multiple Offers

DEFINITY ECS Release 6, Issue 1.0 supports the following telephony offers:

- DEFINITY ECS Telephony
- DEFINITY ProLogix™ Solutions

The same system software is used to support both of these offers. Therefore, the system capacities and feature availability are identical for both models.

In addition, all other offers that currently require DEFINITY ECS R5 as a prerequisite are supported by Release 6. This includes, but is not limited to, the following offers:

- Global Call Center (R3V5 CMS, Centre Vu Supervisor, etc.)
- Centre Vu Agent™
- Enterprise Multimedia Messaging

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- Multimedia Call Handling (MMCH) feature
 - Multimedia Application Server Interface (MASI) to Multimedia Call Exchange (MMCX) R2 feature
 - DEFINITY Wireless Business System (DWBS) R1-PWT
 - DWBS — Adjunct CT2 Wireless

The Compact Call Center Offer is not specifically defined at this time with Release 6. However, all functionality that is part of Compact Call Center (for example, Basic Call Management System [BCMS] Vu) is supported by Release 6.

R6vs and R6si Memory Configurations

DEFINITY ECS Release 6, Issue 1.0 only supports a single 16 MB DRAM memory configuration for the vs and si models. Therefore, the system software capabilities are that of the larger of the two memory configurations (8 MB and 12 MB) that are supported in Release 5. This memory configuration is implemented with a single 16 MB SIMM on the TN790 Processor circuit pack. All new systems will be shipped with this configuration. Existing 8 MB and 12 MB configurations will be upgraded as necessary in the following manner:

- Standard reliability systems
The 4 MB SIMM(s) on the TN790 circuit pack will be replaced with a single 16 MB SIMM.
- High/Critical reliability systems
Two new TN790 circuit packs equipped with 16 MB SIMM will be provided. The old TN790 circuit packs will be returned to Lucent Technologies.

Release 6, Issue 1.0 of the csi Model

A new model of DEFINITY is being introduced for small to mid-size customers. Release 6 of the csi model includes the same system software as the vs and si models. It uses the J58890T compact modular cabinet (CMC) and the TN798 Processor.

This model has most of the features supported by Release 6 of the si model with the following exceptions:

- Critical and high reliability options (processor duplication)
- DC power
- Expansion port networks (EPNs)
- BX.25 system links, for example, Call Management System (CMS), INTUITY and DEFINITY AUDIX DCIU integration, and Distributed Communications System (DCS) via BX.25 signaling
- BRI lines
- Adjunct-switch application interface (ASAI)

-
- Multimedia Call Handling (MMCH) [BRI data portion of the multimedia complex]

This model is used as the communications system element in the DEFINITY ProLogix Solutions offer.

J58890T CMC

This cabinet includes a plastic frame and housing, and a universal port backplane. The cabinet and backplane support DEFINITY port and service circuit packs. Each cabinet contains ten universal port slots. Up to three cabinets can be connected together in a single port network. The first two slots in the first cabinet are used for the processor complex, described in following text.

The cabinet is optimized for wall mounting, but also has options for floor or rack mounting. It was designed for easy installation and ongoing maintenance. External panels are provided to ensure adequate spacing between the system and other equipment, as well as to provide an interface to building wiring and access to maintenance and system administration ports.

The cabinet uses the 650A Global AC Power Supply. This unit is similar to the power units used in multicarrier cabinets (MCCs). It provides support for AC inputs from 85 to 264 volts and 47 to 63 Hz. It includes an integrated ring generator that can be optioned to support 20-, 25-, or 50-Hz ringing. A 5--msec holdover is provided. A backup UPS is recommended because an external battery and charger are not included. The unit includes power factor correction to reduce power consumption and meets the strict standards for the European market (environmental regulations).

TN798 Processor

Release 6 of the csi model uses a new processor complex that includes the TN798 Processor. This is a RISC CPU similar to the TN790 circuit pack used by Release 6 vs and Release 6 si. This circuit pack also contains 16 MB DRAM and the maintenance and network control functions. The TN2182 Tone-Clock (and Call Classifier-Tone Detector) circuit pack is used to support this processor. The TN798 circuit pack does not have an internal modem for the remote access port, instead, an external modem is used.

6400-Series Terminals

The 6400-series terminals are a product line of digital telephones. They are similar to the 8400-series telephones but do not replace them. The 6400-series terminals have a style selected to be globally acceptable. These terminals are intended to support the 6400 offer and operate only on the 2-wire DCP line interface. They require native support and are not supportable using an alias on earlier DEFINITY ECS systems. All DEFINITY ECS Release 6 models support this family of terminals.

This family consists of four basic telephone types and an expansion module. These are:

- 6402 — Single-line digital set (like the 7401)
- 6408 — 8 call appearance/flexible feature button set
- 6416 — 16 call appearance/flexible feature button set
- 6424 — 24 call appearance/flexible feature button set
- 24 call appearance/flexible feature button expansion module that plugs into the 16- and 24-button sets.

6400-Series Terminals Native Support

The 6400-series terminals provide the following specific support from the DEFINITY ECS switch as part of “native support:”

- New administration screens for the new set types as specified above.
- The fixed feature Drop is replaced by the Last Number Dialed feature. Drop is administrable on any flexible feature button.
- Support for a new “family” of system level downloadable transmission coefficients and parameters for 6400-series terminals.
- Use of only one display buffer.
- Provision of appropriate messages to allow the accurate display of time and date as a default display when the display is idle.
- Support of a single (non-daisy-chained) 24-button expansion module for the 16-button and 24-button sets.
- Downloading of a new parameter to control the operation of the receive level after a call.
- The additional downloading of a parameter that enables terminals with a full speakerphone to also support a group listen mode of operation.

Key Systems/Hybrid/Small PBX Features

DEFINITY ECS Release 6 provides features, functionality, and applications typically associated with key systems/hybrid/small PBXs. The following features are added.

Whisper Page

Whisper Page allows station users to make and receive barge-in announcements to and from other station users without anyone else on the call hearing the announcements. These station users must have an administered class of restriction (COR) that provides for intraswitch calling. This feature is compatible with 6400-, 7400-, 8400-, and 9400-series terminals, but not BRI terminals.

This feature may be blocked at the set level by a new feature button, or paging between groups of users can be disallowed altogether through appropriate administration of existing station to station calling COR values.

The privacy of the Whisper Page announcement cannot be guaranteed when terminals (8400- or 6400-series) have headset adapters other than the M10L-8400 adapter plugged into the handset jack. The M10L-8400 adapter is the only headset adapter for the handset jack that should be used for these terminals. The M10L-8400 adapter is identified by PEC 3122-022. If other headset adapters are used to plug into the handset jack of 8400- or 6400-series terminals, and the headset is turned off (because the handset is in use), the Whisper Page announcement may be overheard at the other end of the conversation. The Whisper Page Off feature can be activated to prevent receiving announcements under these conditions.

Whisper Page should work with most headset adapters when they are plugged into the 8400-series terminal adjunct jack.

Terminal Self Administration

Terminal Self Administration (TSA) allows users to administer some of their own feature buttons from their own terminal. Users are prompted, via the terminal's display, to choose features to assign to buttons on their voice terminals. TSA can only be administered on 6400-series display voice terminals.

The station set display shows the name of the command associated with the button during programming. Users of 6400-series terminals have an additional feature called Button View that allows them to see what is administered on their programmable buttons at any time.

Group Listen

Group Listen allows a user of the 6400-series terminals to talk and listen to a distant party on the station handset while at the same time having the two-way speakerphone in a listen-only mode. This allows other people in the room with the user to hear the distant party speaking, but they cannot talk to the distant party.

The Group Listen feature only becomes active when the user is active (talk/listen) on their handset and then pushes the speakerphone button.

Group Paging

Group Paging allows users, including the attendant, to page people through the speaker built into the telephones. Users are put into page groups, and the page goes to all idle station users in that page group — active/busy stations do not receive Group Paging notifications. Group Paging is activated by a user dialing the assigned extension for the page group or through a preprogrammed button.

The Group Paging feature includes the following functionality:

- Group Paging can be allowed or restricted based on the administered class of restriction (COR) of the page initiator and the COR of the intended page group.
- Support for 32 page groups
- Each paging group can support up to 32 stations.
- Stations can be members of more than one page group (a single station can be included in all 32 page groups).

Bridged Appearances Increased Capacity

To support key-like functionality, the number of Bridged appearances are increased. Simultaneous offhook of bridged appearances has not changed.

Capacity for Bridged Appearances is:

- 26 stations including the extension "owner"
- 16 or less if ASAI is used

Personal Central Office Lines (PCOLs) Increased Capacity

To support key-like functionality, the maximum number of members belonging to a single PCOL group is increased from 4 to 16. The number of members in a PCOL group that can be on a PCOL call simultaneously has not changed.

DTMF MODE CODE Signaling for Connection to External Voice Messaging

The Mode Code interface provides the DEFINITY ECS with an analog Tip/Ring interface to INTUITY AUDIX, Release 4.3. (Other vendors may choose to adopt this interface.) The interface uses DTMF tone for signaling from DEFINITY ECS to the voice mail system. Signals from the voice mail system to the DEFINITY ECS are sent using existing line signals and feature access codes. This interface defines a new station type using existing analog station line circuit packs, and also includes a new Customer-Options form and new feature access codes (FACs).

TN2185 ISDN BRI Trunk

The TN2185 circuit pack provides an integrated ISDN BRI trunk solution. Release 6, Issue 1.0 supports the following functionality associated with this circuit pack.

TE Interface

TN2185 supports the TE side of the S/T interface as defined by the ISDN standard ITU-T recommendation I.411. The circuit pack supports eight ports (S/T-TE 2B+D interfaces). This provides an interface between DEFINITY and public-switched network ISDN BRI services. The S/T interface is the 4-wire ISDN interface.

Both B channels in each port may be circuit switched or one may be packet switched over the DEFINITY ECS LAN bus. The circuit-switched connections support either A-law or u-law companding for voice operation. When in the data mode, they can operate as 64 kb/sec clear channels. The packet-switched operation supports LAPD and compiles with the ITU-T-Q.920 recommendation for D-channel signaling. In this initial release, the Release 6, Issue 1.0 software does not support B-channel packet-switched data and user data on the D channel.

ETSI Standard and Country-Specific Requirements

The initial release of this functionality supports the ETSI-based country protocols except for the United States Bellcore National ISDN. The QSIG Peer protocol is supported on the TE side. For France, the national VN4 protocol is supported as ETSI with the deltas outlined in France Telecom specification P10-21. However, layer 1 disconnect required for operation in France is not supported in this initial release. Similarly, under country protocol 10 (United Kingdom) and 13 (Germany), only ETSI is supported. The German Deutsch Telecom national ITR6 protocol is not supported.

ISDN Feature Support

All essential ISDN network features are supported. In this initial release, QSIG supplementary services are not supported. DEFINITY ECS Release 6, Issue 1.0 responds to both broadcast and point-to-point setup messages. However, only configurations that support a fixed TEI of 0 are supported. This configuration is not offered in a number of countries, including France and Spain.

Networking

DCS With Reroute

To allow for trunk optimization during operation of certain DCS features, the Path Replacement technology used for QSIG Call Transfer with Rerouting is used for features running over trunk groups employing the DCS With Reroute functionality. Therefore, when a user performs the following operations: Call Forwarding, Dial 0 out of AUDIX, Transfer (*T) out of AUDIX, or a station-to-station transfer over a

DCS+ trunk, DEFINITY ECS may set up a new path for the current call. In most cases, this optimizes trunk usage.

⇒ NOTE:

This feature works with DCS using ISDN trunks.

Multimedia Applications Server Interface (MASI)

The following features are provided in this release.

MASI Coverage/Redirection

The MASI provision for MMCX autonomous coverage supports a single coverage point per MMCX terminal. Redirection coverage may include DEFINITY AUDIX or INTUITY AUDIX, an MMCX terminal, a DEFINITY ECS station, or a dial access code (DAC).

AUDIX/INTUITY

MASI provides MMCX terminal information to a DEFINITY AUDIX or INTUITY AUDIX connected to the DEFINITY ECS for purposes of message storage, message retrieval, and message indication status by the MMCX terminal. MASI provides an interface to MMCX terminals that is consistent with the interface available to stations resident on the DEFINITY ECS.

Call Detail Recording (CDR)

DEFINITY ECS MASI provides CDR tracking for incoming and outgoing MMCX calls and intranode MMCX calls, if administered. All CDR formats are supported. MASI records CDR call data including the dialed number, and duration, and, in applicable formats, the resource flag identifying a MASI call.

World Class Routing (WCR)

DEFINITY ECS AAR/ARS is accessible to MMCX R2 terminals via the administered AAR/ARS feature access code (FAC). The DEFINITY ECS AAR/ARS FAC is administered in the MMCX dial plan.

MASI Trunks/ MMCX Interfaces

MMCX interfaces used to interconnect MMCX servers (via ISDN PRI trunks or LAN interfaces) or to provide PSTN access for MMCX (either directly or through RI). These trunks and interfaces are controlled by the MMCX server and are administered on DEFINITY ECS as a MASI trunk Group. The DEFINITY ECS switch with the MASI feature enabled will track the usage of these MMCX trunks

and interfaces and provide some DEFINITY ECS trunk features such as CDR and Class of Restriction (COR).

Country Specific Features

India MFC

This feature conforms with R2 MFC standards as interpreted by India authorities. Three additional R2-MFC functions are supported:

- Separation of Call Category and Automatic Number Identification (ANI) Information
The call category signal and the ANI digits can be requested or sent separately
- ANI Available and Not Available Signal
ANI request is determined based on the ANI available/not available signal
- Maximum Number of ANI Digits Without End of ANI Signal
ANI digits are padded with zero (0) up to the maximum length of ANI without using the End of ANI signal

Incoming DTMF ANI for the US Market

This feature supports dual tone multifrequency (DTMF) in-band ANI and dialed number identification service (DNIS) information delivery via DTMF signaling over incoming digital trunks. The single field "Incoming Tone (DTMF) ANI? - Yes/No" is provided on the Trunk Group administration form to enable this feature. Received digit information is forwarded to station message detail recording (SMDR) and voice terminal displays as appropriate.

Errata

The following table was not provided in *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, 555-230-894, Issue 3. The table shows the pinouts for the TN2185 ISDN BRI, 4-wire S interface.

Port	Signal	Cross-Connect Pin	Color	Amphenol Pin	Backplane Pin
1	TXR.1	1	W-BL	26	102
	TXT.1	2	BL-W	01	002
	PXT.1	3	W-O	27	103
	PXR.1	4	O-W	02	003
2	TXR.2	5	W-G	28	104
	TXT.2	6	G-W	03	004
	PXT.2	7	W-BR	29	105
	PXR.2	8	BR-W	04	005
3	TXR.3	9	W-SL	30	106
	TXT.3	10	SL-W	05	006
	PXT.3	11	R-BL	31	107
	PXR.3	12	BL-R	06	007
4	TXR.4	13	R-O	32	108
	TXT.4	14	O-R	07	008
	PXT.4	15	R-G	33	109
	PXR.4	16	G-R	08	009
5	TXR.5	17	R-BR	34	110
	TXT.5	18	BR-R	09	010
	PXT.5	19	R-SL	35	111
	PXR.5	20	SL-R	10	011
6	TXR.6	21	BK-BL	36	112
	TXT.6	22	BL-BK	11	012
	PXT.6	23	BK-O	37	113
	PXR.6	24	O-BK	12	013
7	TXR.7	25	BK-G	38	302
	TXT.7	26	G-BK	13	202
	PXT.7	27	BK-BR	39	303
	PXR.7	28	BR-BK	14	203
8	TXR.8	29	BK-SL	40	304

Port	Signal	Cross-Connect Pin	Color	Amphenol Pin	Backplane Pin
	TXT.8	30	SL-BK	15	204
	PXT.8	31	Y-BL	41	305
	PXR.8	32	BL-Y	16	205

The following table was not provided in *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, 555-230-894, Issue 3. The table shows the pinouts for the TN2198 ISDN BRI, 2-wire U interface.

Port	Signal	Cross-Connect Pin	Color	Amphenol Pin	Backplane Pin
1	T.1	1	W-BL	26	102
	R.1	2	BL-W	01	002
2	T.2	3	W-O	27	103
	R.2	4	O-W	02	003
3	T.3	5	W-G	28	104
	R.3	6	G-W	03	004
4	T.4	7	W-BR	29	105
	R.4	8	BR-W	04	005
5	T.5	9	W-SL	30	106
	R.5	10	SL-W	05	006
6	T.6	11	R-BL	31	107
	R.6	12	BL-R	06	007
7	T.7	13	R-O	32	108
	R.7	14	O-R	07	008
8	T.8	15	R-G	33	109
	R.8	16	G-R	08	009
9	T.9	17	R-BR	34	110
	R.9	18	BR-R	09	010
10	T.10	19	R-SL	35	111
	R.10	20	SL-R	10	011
11	T.11	21	BK-BL	36	112
	R.11	22	BL-BK	11	012
12	T.12	23	BK-O	37	113
	R.12	24	O-BK	12	013

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Change Descriptions

The following problems are corrected and addressed in DEFINITY Enterprise Communications Server (ECS), Release 6.1 (G3V6 [ir].01.0.018.2).

1. Data calls to the single number of an MMCH complex that had a forwarded data endpoint did not forward. Now, calls go to the complex data endpoint or calls that originally went to the single number forward if the data endpoint is forwarded.
2. When a multimedia call existed on one call appearance, a second multimedia call existed on the second appearance, the second call was playing hourglass tone, and the two call appearances were conferenced together, the resulting conference call could play hourglass tone indefinitely. Now, the resulting conference call terminates in hourglass tone.
3. When the recipient of a whisper page with a bridged appearance attempted an answerback, the current call was held but the bridged appearances were forced offhook. Now, the answerback holds the current call and establishes a talking connection to the paging party. The bridged appearances correctly indicate a held call.
4. When a user was in the TSA mode on a 6400-series terminal and used a asterisk (*) to clear the digits in the security code being entered, the code was incorrectly validated and put into the form for entering the digits for an autodial button. Now, the digits entered are cleared and the display shows "SECURITY CODE:."
5. If several people were using TSA on 6400-series terminals, a warmstart could occur.
6. When changing the terminal type of an older Callmaster terminal to the new 606A1 terminal type, the third call appearance button that was administered on the older terminal disappeared. Also, if a button was

- administered on the twelfth button entry of an older Callmaster terminal, the administration was overwritten when the new 606 terminal was changed to a login button.
7. CAS attendant extended calls to the branch that timed out as unanswered calls to the CAS attendant could not be extended again using the DXS buttons to dial the extension number for a station on the branch.
 8. Transferring a call by a station in one EPN to a station in another EPN did not free up all the internetwork fiber timeslots until the call was dropped.
 9. If a board on the compact modular cabinet (CMC) requiring reserved slots was administered in the top shelf (slots 6 to 10), slot 5 may have been inadvertently reserved even though slot 5 was physically on the bottom shelf. This rendered slot 5 unusable for no reason.
 10. DEFINITY ECS did not pass the "notify" message over ISDN trunk groups that were administered for Country Protocol 1a. This included connections between DEFINITY ECS and INTUITY Conversant. (Conversant relies on this message for certain features.)
 11. After a call was directed to music on hold, the call could become connected to a different call than the one originally called.
 12. With a call not split at the attendant, if the attendant pushed the station busy indicator button, the lamp lit steady but the call did not complete. The lamp remained lit even though the station was not offhook. Now, the button push is denied. The lamp flutters a few times and goes dark.
 13. When per-button-ring control was active, a page call did not terminate correctly on a station.
 14. Most 7400-series terminals with built-in 2-way speakerphones could not be added into a speakerphone page group. Now, the following terminal types can be added to a speakerphone page group: 7406D, 7406+, 7407D, 7407+, and 7410+.
 15. A busy indication button pointing to a speakerphone page group did not turn on. Now, the busy indication button lights when a page group is busy.
 16. It was possible to dissociate a station using PSA and a bridged appearance (TTI could not do this), but the bridged appearance was left in a busy state so it could not be used until an audit cleaned it up. Now, after using PSA and a bridged appearance to dissociate a station, the bridged appearance is dropped correctly so it becomes available for use. Also, using that call appearance does not cause lights to light on the now-dissociated station where the bridged appearance used to be.
 17. When a user added a group paging button on a station via the SAT, they were incorrectly allowed to put data other than numbers in the auxiliary data field. Now, they can only put the numbers 0 through 9, which is consistent with adding a group paging button via TSA.
 18. TSA allowed a user to delete or replace an active call forwarding button.

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19. When an attempt was made to transfer a party to a telecommuting access port to use the telecommuting features, the attempt failed with intercept tone played to the transferring party.
 20. The "list usage extension" output for PCOL buttons was sometimes incorrect.
 21. Calls appeared stuck in queue with agents available because not enough resources were available to establish a connection.
 22. When someone called into the Remote Access extension from an ISDN trunk group and then dialed an ARS or AAR number that routed over an ISDN trunk group using Overlap Sending, the outgoing call did not complete and the caller heard an "invalid number" network announcement.
 23. When an incoming ISDN-PRI call to a station was redirected to a busy offnet coverage point via an ISDN-PRI trunk and there were no other coverage points, the calling party was listening to busy tone generated on the switch of the called station, in violation of the ISDN protocol. This requires that the ISDN-PRI disconnect message with cause value user busy be tandemed back to the original switch. Now, the calling party listens to busy tone generated on the originating local switch.
 24. If a station was AWOH and there was a call forwarding button for that station on another station, Call Forwarding did not work.
 25. When an EAS agent logged out with a ringing ACD call, a switch audit could subsequently tear down the call.
 26. TSA could not administer buttons on the expansion module attached to a 6416D+ or 6424D+ terminal.
 27. After an autodial button was added via the TSA feature, the digits did not display correctly via btn-view or via the SAT **display station** command if the number of digits was less than the number of digits entered in the TSA security code.
 28. If a page group had only one eligible member, the page call did not terminate. Now, any size of page group works correctly.
 29. When using the **add/remove skills** command via the Feature Access Code (FAC) feature for Auto-Available Split (AAS) agents, the operation failed.
 30. When a call redirected to an offnet coverage point or forwarded-to number over an ISDN-PRI end-to-end trunk, an attempt by the calling party to transfer or conference the call or for another party to bridge onto the call was rejected.
 31. The voice receive level using the speaker on an 8403 terminal was loud.
 32. Agents could not log in because of internal software errors.

33. When using TSA, a user received indication of a successful add of a button which did not always exist on the SAT if the terminal being used did not match the set type administered. Now, the user receives an error beep and does not receive an indication of successfully programming a button when the switch translations do not match the set type used.
34. When an incoming ISDN call terminated at a station that had Call Forwarding — Busy Don't Answer, the wrong display was shown at the call forwarded-to station.
35. When a station was in the TSA mode, the bridged appearance button lamp came on if the principal went offhook.
36. To fully erase the "pause" in the TELNUM field on a 6400-series display terminal while programming an autodial button using TSA, the user had to select the "bksp" key twice. Now, the user selects the "bksp" key only once.
37. The **list mmi command** displayed a bad board address for the board residing in carrier A of cabinets 4 and above.
38. When the user entered an incorrect personal station access (PSA) code while in TSA, the user was not notified of the error.
39. The buttons on the 603E1 were not preserved when the set type was changed to 606A1.
40. When no coverage points were available and the principal activated the Send All Calls (SAC) feature, the calling party received ringback tone. Now, the calling party receives busy tone and the principal's temporary bridged appearance is dropped.
41. Trunk calls that were transferred to a VDN occasionally caused a system trap resulting in a failed transfer.
42. If a maintenance test ran against a station that was in the TSA mode, the terminal stopped responding to dialpad button presses. The user had to exit the TSA mode and start over.
43. A park timeout call from a DCS trunk originated by a DID trunk displayed the DCS trunk name rather than the originator trunk name. Now, on a call park timeout recall, the display shows the originator trunk name and the terminator station name and the reason as "rt."
44. The 606A1 Callmaster VI terminal has a reserved next button, and if another one was added, the error message "button does not meet min/max requirements" was displayed and a procedure error was generated, but the cursor did not point to the offending button. Now, there is no procedure error and the cursor points to the extra (non-fixed) "next" button and displays the error message "Next button not allowed on this set type; use fixed Next button."
45. When the user attempted to enter the TSA mode when the station was offhook, the display blanked out. Now, the user hears a denial beep.

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46. The Maximum Ports field on the system-parameters customer-options form was defaulted to 300 when no translations were present. Now, the field is defaulted to 100.
 47. When an incoming ISDN-PRI call redirected to an offnet coverage point via an ISDN-PRI trunk and the offnet coverage point was a powered down cellular phone, the calling party received no audible response. Now, the calling party hears busy tone from the originating switch.
 48. Calls terminating to a night service station that had Call Forwarding — Busy Don't Answer active, did not ring at that station.
 49. In the directory mode, entering message retrieval button locked up the display.
 50. When making outgoing trunk calls, the music source was that of the TN belonging to the trunk. Now, the music source is that of the TN belonging to the station making the call.
 51. When the WFB was in the process of initializing and the RC board was pulled, the WFB failed initialization with error code 2100 (allocation resources fail).
 52. The q-call/q-time display did not overwrite the time on a station with a 2-line display.
 53. When a call to a principal was redirected to an offnet coverage point and then to a remote AUDIX hunt group, when the call reached AUDIX, there was a simulated bridged appearance (SBA) still on the principal and the originating party had to press the drop button twice to disconnect the call. Now, there is no SBA on the principal and the originating party only needs to press the drop button once to disconnect the call.
 54. The **display capacity** SAT command showed the switch limit for agent/split pairs for the CMS Measured ACD Members item "System Limit." This conflicted with the value reported to the switch by CMS. Now, the switch shows the CMS imposed limit for this item in "System Limit."
 55. Data for some BCMS measured splits/skills was not always displayed using the **monitor bcms** system command.
 56. If a caller was listening to music in a vector while the VDN was being service-observed, and the observer hung up, the caller no longer heard music, causing the caller to perhaps think they were disconnected.
 57. The **list usage extension** command did not always list all bridged appearances.
 58. When ISDN trunks were busied out, a service message followed by a restart message was sent. Now, a restart message followed by a service message is sent.
 59. When a queue was used for voice messaging hunt groups, the queue was sometimes locked up.

60. The DIGM1 emulation mode could be assigned to the TN800 circuit pack on the circuit-packs form. The DIGM1 mode is for the TN801 circuit pack; the DIGM emulation mode should be assigned to the TM800 circuit pack. Now, the DIGM emulation mode is assigned to the TN800 circuit pack.
61. The PASTE download for housekeeping FACS was too long. The PASTE output for vu-display buttons occasionally had garbage characters in the ID field. Now, the housekeeping FACs are shorter and the correct string is downloaded.
62. When a station was in the TSA mode, the station's lamp on the DXS/BLF was not lit.
63. Spanish, French, and Italian languages were not supported using TSA and Button View on the 6400-series terminals.
64. Administration and use of the BRI MST function was blocked for ISDN BRI trunks.
65. An incoming trunk call that routed to the first coverage point of the second coverage path in a coverage path chain routed to the second coverage point of the first coverage path if the offnet coverage point did not answer. Now, an incoming trunk call follows the original coverage path until it exhausts all the coverage points and the call does not switch coverage paths in mid-course.
66. WCBRI terminals could not be assigned to a single port such that the terminals would have the flexibility of placing or receiving either two data calls, two voice calls, or one call each (voice and data).
67. When changing a CO trunk to an ISDN PRI trunk, the incoming destination field was not blanked out.
68. The **status card-mem** SAT command displayed G3V5 in the Card Format field when it ran on a G3V5 or G3V6 system with a nonwritten flash card inserted. Now, the Card Format: field displays `post-G3V4`.
69. Calls to the attendant that required a page and were parked could not be released if music on hold was active.
70. If the maximum number of agent/split pairs were in use, the **monitor bcms split** command sometimes displayed fewer than the actual number of agents active in the split.
71. After exiting TSA, the display sometimes went blank and the softkeys were unusable. Now, after exiting TSA, the display returns to normal operation.
72. If an R2 MFC incoming call to a VDN was abandoned within two seconds, the call did not show up as an abandoned call on the BCMS report.
73. If a customer on a G3V4 load 05.0.065.0 or earlier had the ASAI Internally Measured Data feature activated via the system-parameters customer-options form, and then upgraded to R6.1 load 01.0.017.0 or earlier, the feature did not work correctly.
74. International MFC calls to a CO or to Directory Assistance did not queue in an all-trunks-busy situation; Automatic Callback did not work.

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75. The transmission volume on a tandem call involving two CO trunks was low.
 76. When TSA was used on a 6400-series display terminal, the cancel softkey and the menu and exit navigation keys could be ignored.
 77. An analog station for which ASAI third-party call requests were being made could become stuck in one of two incorrect states. In the first state, a third-party made call placed for that station before the station went offhook failed. Also in the first state, the station could not use a switchhook flash to hold or transfer a call. In the second state, a third-party made call could complete, but the third-party hold on that call failed.
 78. Calls at wireless terminals dropped if NPE audits found any inconsistencies.
 79. Ringing calls at wireless terminals were dropped in some call scenarios (when calls were offered through the late allocation feature) and the user could not move between RCs even with ringing late-allocated calls.
 80. If station status was altered to indicate that a BRI station had no line selected, the station indicated that voice calls were blocked as the user went offhook, until the user or an incoming call corrected the line selection status. This occurred with periodic maintenance.
 81. Displays for Button View and TSA were in English only. Now, There are translations for English, Italian, Spanish, and French.

