AVAYA communication

DEFINITY®
Enterprise Communications Server

Release 9, Issue 1.0 (01.0.031.4)

Change Description

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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.

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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

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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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Highlights

This section presents highlights of features and enhancements incorporated into DEFINITY Enterprise Communications Server (ECS), Release 9, Issue 1.0 (01.0.031.4). the full content of the Release 9.1 is documented in *What's New for Release 9, Document Number 555-233-766, Issue 1, November, 2000* (http://prodpubs.lucent.com).

H.323 IP Trunking Between R8 and R9 Systems

Release 8 Issue 4 Load 04.0.046.5 or later is required for H.323 IP trunking between R8 and R9 systems. The QPPCN numbers for Release 8 Issue 4 are 1256B for the G3r and 1257B for the G3si/csi.

DEFINITY One

DEFINITY One - Release 3.0 . The DEFINITY One Communications System is a Microsoft Windows NT based platform that hosts multiple communications applications in one processor complex. It employs a single Compact Modular Cabinet (CMC) for up to 168 ports (20-40 lines nominally). DEFINITY One Release 3.0 supports the DEFINITY Release 9 feature set, including Internet Protocol (IP) Solutions Phase 2.

IP600. The IP600 is a new rack mounted solution designed to bring the traditional DEFINITY telephony feature set and reliability to the converged data/IP telephony market.

Platform enhancements

si/csi Memory growth. This development provides memory growth on the processor circuit pack used in si and csi systems, and changes to the NetPkt circuit pack to accommodate the new flash cards.

In Release 9, csi systems use a TN2402 processor circuit pack, and si systems use a TN2404 processor circuit pack, with 32 Mbytes of flash and 32 Mbytes of DRAM resident on their respective processor circuit packs. In both systems, translations are stored in nonvolatile memory on a 5 volt ATA PC-card memory card. On the csi, the processor board reads from and writes to the PC-card, while on the si, the NetPkt, TN2401 reads from and writes to the PC-card.

Asynchronous Links - Telnet Service. This feature provides a telnet server to interconnect CLAN Ethernet clients to System Management type applications on DEFINITY. The telnet server satisfies all current terminal emulation modes (51x, 4410, 4425, vt220, hp262x, pctt, etc.). Current application screen interactions are supported and current simultaneous session limits on DEFINITY are honored. Aggregate throughput provided by the telnet server is expected to be around 80 kbps. Supported applications include: SAT, DNA, DSA, DNM (OneVision), Proxy Agent, INADS-SAT, Directory Gateway. This feature also provides a telnet client to interconnect with remote telnet servers in support of the following applications: CDR adjuncts, PMS adjuncts, and Printers. Adjuncts that support the TCP/IP interface have an end-to-end LAN solution using TCP/IP. Others can connect to the switch via a Terminal Server. Existing functionality is maintained through Data Channel EIA ports.

Servicability Enhancements

Firmware download Phase 1. Firmware download is the process of downloading an image from a remote or local source into DEFINITY (C-LAN) and then using that image to reprogram the application code of a port circuit pack. The scope of this project is firmware download only. Software download is a logical extension of firmware download but is not being proposed at this time. The boards downloadable in the Release 9 timeframe are the cost reduced UDS1 family (TN464GP, TN2464BP, TN2313BP) and the Maintenance / Test board (TN771DP). It will be easier to add the download capability to other port boards without adding additional CCMS messages once the platform is established and the C-LAN and switch software changes to support firmware download are implemented. While the circuit packs that support the Firmware Download feature are backward compatible with earlier DEFINITY releases, earlier versions of the circuit packs do not support the Firmware Download feature.

Networking

ATM WAN Spare Processors (WSP). The ATM WSP purpose is to act as a PPN in the event of a catastrophic failure in the network. DEFINITY Release 9r systems with multiple port networks connected via ATM are able to support one to seven WAN Spare Processors. Each has the ability to function as the Release 9r SPE if the standard PPN is not functional or is not connected to one or more of the other port networks. Equipment required for a WSP is housed in an MCC cabinet.

DEFINITY Internet Protocol (IP) Solutions Phase 2

Quality of Service (QOS). With this feature the user can administer (by region) and download (to the IP Media Processor) the DiffServ Type-of-Service (TOS) value to prioritize the audio stream at the IP level to promote voice quality. Latency is reduced by implementation of dynamic jitter buffers in the IP Media Processor audio-processing board. No switch work is required for the latency reduction. Internet Protocol (IP) Solutions in Release 8 provides the proprietary solution of administering IP port ranges for audio connections to assist some routers in prioritizing audio traffic.

There are certain limitations to the use of QOS on endpoints such as the IP SoftPhone and IP Telephone.

TN2302AP Media Processor Circuit Pack. The TN2302 IP Media Processor circuit pack is the H.323 platform designed to terminate a variety of packet audio protocols. The circuit pack includes a 10/100 BaseT Ethernet interface to support H.323 endpoints for DEFINITY Internet Protocol trunks and H.323 endpoints. The TN2302 can perform echo cancellation, silence suppression, DTMF detection, and conferencing. It supports the following codecs, fax detection for them, and conversion between them:

- G.711 (mu-law or a-law, 64 Kbps)
- G.723.1 (6.3 Kbps or 5.3 Kbps audio)
- G.729A (8 Kbps audio)

The TN2302 firmware also supports the G.729B (8 Kbps audio) codec, and in Release 9 support will be added to the DEFINITY software for the G.729B. FAX will be supported shortly after Release 9 Issue 1.0 availability.

Hairpinning and Shuffling. Hairpinning means rerouting the voice channel connecting two IP endpoints so that the voice goes through the TN2302 IP Media Processor board in IP format, without having to go through the DEFINITY TDM bus. Shuffling means rerouting the voice channel connecting two IP endpoints. After shuffling, the voice that was previously carried in a mixed connection of IP signaling and TDM bus signaling now goes directly through the LAN or WAN between the two IP endpoints. Shuffling also can mean reversing this process if an endpoint requests a feature such as conferencing that requires the TDM bus.

Hairpinning and Shuffling reduce costs per port because of savings with DSPs and timeslots. They also reduce IP bandwidth usage.

DEFINITY Remote Solutions

R300 (Formerly Remote Max). The DEFINITY R300 is a cost-effective method for providing the full range of DEFINITY functionality at a remote site. The remoted telephony has all of the capabilities of that which is “directly connected”. The R300 also provides voice and data convergence as voice and data can share the same WAN link between the DEFINITY and the Remote Office.

The R300 unit is a rack-mounted box (1.75 in x 17.5 in. x 17 in.) that features two expansion slots. One houses a DSP blade (VoIP option), and the other houses the new combo blade which supports the DCP as well as the analog line and trunk connections. The R300 allows for remoting of up to 24 DCP sets and two analog lines from a host DEFINITY. A single DEFINITY switch supports multiple R300 units as follows:

DEFINITY model	Maximum # of R300 units supported
r	250
si	80
csi	80
DEFINITY ONE	16

The R300 is designed to natively support local PSTN connections via either:

- 2 T1 + 1 T1 drop-and-insert or
- 2 E1 or
- 6 BRI U/ST V.35 serial connections, and/or
- 2 analog trunks (via the combo blade)

DEFINITY Release 9 software will ultimately support all of the above options. The initial release of the R300, however, is intended to support only the T1 connection option, and is expected to be available shortly after the Release 9 Issue 1 availability date.

The R300 also supports a local LAN and supports either 12/BRI, 24/T1 or 30/E1 data modems for remote access to either the local LAN or the host LAN. Initial availability may be for LAN connectivity only.

Advocate Related Enhancements

Percentage Allocation Distribution (PAD). This feature adds an agent selection algorithm based on the existing Percent Allocation skill selection algorithm that will be assigned on a per skill basis. In situations where there are more agents than calls, PAD allows selection of an agent based on their time in skill percentages (versus preferences or skill level, for example). This helps with adherence and with ensuring that certain skills are serviced as planned.

Auto Reserve Agents. This enhancement adds a system optional capability to leave agents idle (“auto-reserve”) with calls in queue, if an agent’s actual work time in a specific skill exceeds the target allocation administered for that skill. This ensures that the agent’s actual work time in the skill never exceeds the administered allocation.

Dynamic Percentage Adjustment . This enhancement is a method for periodically adjusting an agent’s target percent allocations. This adjustment is based on a comparison of the level of service being achieved for the agent’s assigned skills with a pre-defined target service level. The goal is to exceed the target service level for each skill in a pre-defined group of skills as measured on a daily basis.

Separate Least Occupied Agent (LOA) Customer Option. This feature provides a separate customer option for Least Occupied Agent to allow use without requiring full Advocate Agent activation. This is particularly desireable to allow use of the LOA idle agent strategy with Best Service Routing.

Service Level Supervisor (SLS) Dynamic Threshold Adjustment. This enhancement allows the DEFINITY to adjust dynamically the Service Level Supervisor thresholds up or down based on a measure of the level of service currently being achieved relative to a pre-defined target. This adjustment achieves results that more closely match the assigned service level targets.

Call Center Enhancements

Holiday Vectoring. Holiday Vectoring provides the ability to administer up to 10 tables, each with up to 15 from-to dates (month, day and time) to be treated as holidays or special days. The goto step/vector vector commands are modified to check for holidays (*holiday in-table* or *not-in-table*). Administration of the vector commands and Holiday Tables is provided by switch administration vehicles. CMS and CVVV supports the vector command changes in G3V9.

Customer Tools

Directory Gateway. The Directory Gateway is a component of the DEFINITY Directory Solutions product. It is a server product that provides real-time integrated LDAP (Lightweight Directory Access Protocol) read/write access to DEFINITY administration data. It uses the Administration Change Notification feature to receive notifications of changes to DEFINITY administration data.

In addition to DEFINITY administration data, the Directory Gateway interfaces with INTUITY AUDIX as well as any other LDAP-based enterprise data the customer may have. Each of these separate data sources is referred to as a "datastore", and the Directory Gateway provides a "Datastore Manager" for each. The Synchronization Engine, also a component of the Directory Gateway, controls propagation and routing of all changes to data in the overall system.

The Directory Gateway provides an Administration GUI (Graphical User Interface) for its overall administration (including administration of synchronization rules and datastore administration). It also provides graphical interfaces for viewing transaction logs and error/exception logs.

The Directory Gateway provides an LDAP-based Gateway Client for basic read/write access to DEFINITY administration data. Using the Gateway client, a customer can make changes to DEFINITY administration data, and the changes propagate to DEFINITY where they are actually updated within the administration system. The hardware platform for the Directory Gateway is a customer-provided PC running Windows NT

Additional Enhancements

Hospitality Displays. Hospitality display messages, in addition to English, are now available in Italian, French, and Spanish.

Call Vectoring Network Call Redirection (NCR) / Network Call Transfer (NCT). Call Vectoring NCR/NCT now allows an incoming 800-number to be redirected on the Nortel DMS250 Public Switched Telephone Network (PSTN) switch. In addition, the NCT feature is now invoked by the DEFINITY when an ISDN “PROGRESS” message is received before a “CONNECT” message for the second call-leg of the NCT call.

Tenant Partitioning. Tenant Partitioning is now available in Offer B.

Change Descriptions

The following problems have been addressed and corrected in DEFINITY Enterprise Communications Server (ECS), Release 9, Issue 1.0 (01.0.031.4).

1. It was possible to administer a processor channel, an IP-service, and a signaling group all on the same IP address and port.
2. Changes have been made to page 1 of the **system-parameters customer-options** form to reflect Administered IP Trunks and Remote Office Trunks and Concurrently Registered IP Stations and Remote Office Stations. A new page was added for `MAXIMUM IP REGISTRATIONS BY PRODUCT ID`. Changes have also been made to the **system capacities** form to reflect Remote Office Trunks, Remote Office Stations, and Administered IP Product IDs.

   The IP Stations field on the **system-parameters customer-options** form specifies the maximum number of IP Stations that may be simultaneously registered, not the maximum that may be simultaneously administered.

   The IP Stations fields on the **system capacities** form shows the current number of IP Stations that are simultaneously registered, not the maximum that may be simultaneously administered.

Now, page 1 contains the following fields:

```
change system-parameters customer-options                Page  1 of  8
                        OPTIONAL FEATURES

          G3 Version: V9                 Maximum Ports: 100
          Location: 1            Maximum XMOBILE Stations: 0


IP PORT CAPACITIES
                      Maximum Administered IP Trunks: 0
          Maximum Concurrently Registered IP Stations: 1
            Maximum Administered Remote Office Trunks: 0
Maximum Concurrently Registered Remote Office Stations: 0
```

3. The acronym ATM appeared twice in the **status** command help message, and a few of the listed entries were not in alphabetical order.
4. Incorrect IP address and location information was displayed with the **status login** command.
5. The Reserve Direct Inward Dial (DID) for the VIP Guest feature was not supported.
6. The any and `default` keywords were allowed in the `service type` and `remote node name` field on the **ip-services** form. If the customer enters the any or `default` keyword, the following error message displays:

   `This node name cannot be used as a valid remote node`
7. Multiple any and `default` keyword selections could appear in the help message of the nodes on the **ip-services** form.
8. On the **firmware download** form, if the `Start/Stop Date/Time` fields were toggled off and then on, the entries did not clear. When the form was submitted, the customer received an error indicating that the fields could not be blank, although it appeared to the customer as if there were valid entries in the fields.
9. When entering the command enable filesystem board “board location” login “login-id” “password”, the password was displayed twice.
10. On the **station form** for station type XMOBILE the `Length of Display` field was hidden when the **change station** command was used, even if the `Display Module` field was set to y.

11. If a queue-to vector step was preceded by a “~r” route-to number or a queue-to best vector step, an ISDN FACILITY “Reject” message received after the invocation of Network Call Deflection would not be recognized by the Network Call Redirection (NCR) call processing, causing the call to hang.

12. The `Expected Call Handling Time` field was displayed correctly only if the `Vectoring` (G3V4 Advanced Routing) customer option was set. The field is now displayed correctly when the `CentreVu Advocate` customer option is set.

13. The `Far-end Network Region` field on the **signaling-group** form was increased from 44 to 80 in the G3si and to 240 on the G3r.

14. The radio part number was assigned when a radio controller was added to the switch, and could not be changed easily using system management commands. The radio part number is now changed from page 2 of the **system wireless** form by entering the **change system-parameters wireless** command and sequencing to page 2.

15. The **list node-names** command was being shown as **change node-names** in **list history**.

16. It was possible to administer an IP service on the **system-parameters cdr, features, hospitality,** and **maintenance** forms without that service first being administered on the **ip-services** form. This attempt now results in the error message:

    ```
    Must administer ip-service first
    ```

17. There were no node names associated with the IP addresses on the **status station** form. Also, when the station was a remote IP endpoint and had registered, there was no product identification displayed on this form.

18. On a G3r machine, the **status logins** command SAT session over an IP interface showed “?????” for the port ID of the IP interface and incorrect data module locations for serial connections.

19. **List occupancy** incorectly showed very high static occupancy after layer 2 went down on a TN2185 BRI trunk port.

20. It was possible to administer Duplicate IP Product IDs if the release field was not blank on the **system-parameters customer-options** form. The error message:

    ```
    Duplicate product ID/release entry
    ```

    is now displayed.

21. Requiring reassigned cluster IDs to be unique within 32 board groupings of Radio Controller boards was too restrictive. Now, all 32 boards within a grouping can be assigned an ID value in the range 1 to 32, and IDs can be used multiple times within any 32 board grouping. The G3si supports 2 groups and the G3r supports 5 groups. This solves the problem of interference generated when neighboring segments are assigned the same RPN.

22. After an upgrade, signaling-group fields might have contained incorrect data.
23. Release 9.1 PASTE data were missing some Feature Access Codes (FACs) and button types for the Centre Vu Agent PC phone application.
24. It was possible for ASAI to run out of system timers, possibly leading to system resets.
25. The **list configuration** command did not show the presence of the TN2400 NetPkt Bus Connector board when it was used in the system.

    NOTE: the TN2400 NetPkt Bus Connector board is only applicable to the G3si system configuration.
26. Sending a large amount of data over the CLAN Operations Support Systems Interface (OSSI) could result in a switch reset.
27. If a call arrived for a virtual extension while another call was active on the physical station, it could not be answered using the flash and hold/unhold Feature Access Code.
28. The numbers 97, 98, and 99 were centered over tens and hundreds columns on the **change system-parameters wireless** form and the **display system-parameters wireless** form, instead of being centered over the ones and tens columns on these forms.
29. The **reset switch-control** command was not available on duplicated G3si systems.
30. Dropping or a busyout of the primary Call Detail Recording (CDR) link caused the secondary link to drop.
31. After more than 60 attempts to establish IP SAT, the switch could occasionally undergo a reset.
32. Page 4 of the **change/display system wireless** form presented information for Radio Controller (RC) boards 129 to 144 on a G3r switch. Page 4 now presents information for boards 129 to 150.
33. The cluster ID of the 32nd RC added to DWBS was assigned the value of 0 when the system was upgraded to Release 9.1 using Release 8 translations. Now, the cluster ID is set to 32.
34. If an IP SoftPhone were called with a group page, subsequent calls resulted in the IP SoftPhone being in a listen-only mode. The IP SoftPhone is now listen-only for the group page call; subsequent calls have the expected 2-way talk path.
35. The Service Level Supervisor (SLS) threshold state was not reset when a **reset system 2** occurred.

36. The SLS threshold could be adjusted to the administration limits of 1 second and 9,999 seconds. In addition, the adjustments were linear. The SLS threshold is now restricted to a range of 25% to 400% of the administered value, and the adjustments are exponential (i.e., the threshold is adjusted more rapidly if the current value is at the “wrong” limit).
37. When performing service observing on Vector Directory Number (VDN), the service observer was bridged on for the entire call, including wait steps, announcements and queue time. A new `yes/no` field has been added to the VDN form called `Service Observing on Cutthru`. The default value is `n(o).` When the option is set to `y(es)`, the VDN service observer is bridged onto the call at the point where it is answered at some endpoint.
38. Remote Logout of Agent via a VDN was blocked by an invalid test on Class of Service (COS).
39. The **node-names** form did not have a text message explaining how to use the new node-names commands.
40. When an administrator removed a station, there was a significant delay before the endpoint was logged out. The endpoint now unregisters immediately.
41. When performing Remote Logout of Agent via a VDN, the agent did not get a confirmation tone when successful and the call did not drop until the activator hung up.
42. An agent’s occupancy was not displayed in the output of the **list members hunt-group** command, if the `Least Occupied Agent` customer option was enabled.
43. The in-use value for Simultaneous Send Dual Tone Multi-Frequency (DTMF) sessions in the Performance Measurements feature was being incremented along with the failed-attempts value.
44. When provisioning features, it was necessary to use TTI. A new feature, Customer Telephone Activation (CTA), may now be used. The feature is activated by #* followed by a valid AWOH extension.
45. If CCRON and DCS Call Coverage were both enabled in the system-parameters customer-options form, a coverage call over DCS could return intercept tone to the caller and leave the coverage point station ringing.
46. The **status processor-channels** command could show incorrect information in the `socket status:` field.

47. The `Mode Code Interface` feature was administered on the **system-parameters customer-options** form. The feature is now administered as follows:

    1) If the administered G3 Version is "V8" or earlier, there are NO changes to the current feature operation.

    2) If the administered G3 Version is "V9" or later, the following operation occurs:

        The `Mode Code Interface` field no longer appears on the **system-parameters customer-options** form. Instead, it appears on page 5 of the **system-parameters features** form.

48. IP trunk calls made using the IP Media Processor board(TN2302AP) occasionally had poor audio levels that could not be adjusted. The audio level is now adjusted by changing the `Voice Receive` level on the **change terminal-parameter 6400** screen.

49. The command **list history** truncated any change or add of the abbreviated-dialing personal (station #) (list #) entry, resulting in the list number not being shown.

50. Both the `any` predefined name and `specific` node names were allowed as the `remote node name` with the same local node for SAT services on the **ip-services** form. If `any` and `specific` are now defined for the same local node for an SAT service type, the following error message appears:

    `'Specific' and 'any' remote node name not allowed for the same local node`

51. In order to change the address of a node-name that was used on the **ip-interfaces** or a **signaling-group** form, the user had to remove the name from the other form. Now, if an assigned node-name's address changes:

    Case One: The old address is used and THE NEW ADDRESS IS UNIQUE:

        If the address is used by an IP-interface, require the user to disable the interface before allowing the change.

        Error: `Must disable associated IP-Interface before changing IP address`

        If the address is used as a Far-End on one or more signaling-groups, require the user to busyout all signaling-groups using it before allowing the change.

        Error: `Must disable all associated signaling-groups before changing IP address`

    Case Two: The old address is used ANYWHERE and THE NEW ADDRESS IS NOT UNIQUE:

        Require the user to delete, then add the node name.

        Error: `Cannot change an assigned address to a non-unique value; must remove then add`

52. The command **status station** did not display product ID for IP endpoints. Page 2 now displays the product ID.
53. H.323 IP signaling groups were not taken Out of Service (OOS) after the Gateway unregistered.
54. Interconnectivity of network regions was not working after a reboot or system restart.
55. Calls to DWBS/DECT stations occasionally went straight to coverage or left other parties on the call in strange states.
56. When an IP SoftPhone customer unregistered, the physical station associated with the extension to which they registered was not restored to full service.
57. Firmware alarms were not downgradeable via the **set options** form.
58. DCS SSE calls that went to remote AUDIX did not attempt DCS with reroute.
59. If a DWBS/DECT station was the destination or bridged to the destination of an Incoming Call Line IDentification (ICLID)-enabled CO trunk, then the ICLID display was lost and in the bridging case the call was dropped.
60. Trunk Access Code (TAC)-dialing over H.323 IP trunks, with the far-end administered for 'enbloc' receiving of digits, did not work.
61. Native mode H.323 stations were becoming unregistered immediately after registering.
62. Some hospitality display messages were previously available in English, but not in Italian, French, or Spanish.
63. The dual connect IP telephone took approximately three seconds to receive a dial tone from the time it went off-hook. The time is now approximately one-half second.
64. IP calls to/from an IP SoftPhone did not have a talk path and the calls dropped.
65. With TTI on, a DCP set taken over by an IP SoftPhone did not have TTI service. The DCP set now has TTI service while the IP SoftPhone is registered.
66. An H.323 IP trunk call to a VDN extension containing a collect digit step caused the VDN to timeout because of missing digit collection.
67. An agent could be auto-reserved regardless of the Service Level Supervisor state of the skill. Now, an agent will not be auto-reserved if the skill is over the level 1 threshold.
68. Transfer out of AUDIX calls that were routed to coverage sometimes failed and were connected to intercept tone, instead of following the cover path.
69. Calls to DWBS/DECT stations with a 12x3 display length, attached to certain DAS II systems, would not alert. They now alert as long as the display length is less than 35 characters.

70. The default value for `length of display` on the **XMOBILE station** form was `16x2`, and is now `12x3`.

71. If there were only one IP Media Processor board in connected regions, IP trunks in the region that did not have an IP Media Processor board would not be in service.

72. When a logged-in EAS agent attempted to perform a Remote Logout for another logged-in agent, COS 0 was checked for Console Permissions. The Class of Service (COS); of the station where the agent is logged-in is now checked.

73. The `Maximum Concurrently Registered IP Stations` default was `1`.

    The following modifications have been made:

    1) Changed the default of the `Maximum Concurrently Registered IP Stations` field from `1` to `5`. (NOTE: the IP ID Limit default remains at `1`).

    2) On existing upgrades:

        Set `Maximum Concurrently Registered IP Stations` to `5` if the old Max IP Stations value is less than `5`.

        Set the `IP Agent Limit` to X, where X is either `1` (if the old Max IP Stations value was `0`) or the old Max IP Station value, OR the old `Logged-In IP Station Agents` field value, whichever is smaller.

        Set the `IP Soft Limit` to X, where X is either `1` (if the old Max IP Stations value was `0`) or the old Max IP Station value, MINUS the old `Logged-In IP Station Agents` field value. If the result is less than `1`, set the Limit to `1`.

    3) When upgrading existing Release 9 switches:

        Set `Maximum Concurrently Registered IP Stations` to `5` if the old value is less than `5`.

        MAKE NO CHANGE to any IP ID Limit.

74. The **ping** and **traceroute** commands were not allowing a remote source to be used as the source of **ping** or **traceroute**.

75. No time/date CDR record was output at midnight.

76. TTI ports could be included in the **list registered-ip-stations** command output.

77. The **test failed-ip-network-region** command was not working properly.

78. The system might warm start if there were network regions administered and there were no IP stations registered.

79. The data link between the switch and the PMS adjunct or the link between the switch and AUDIX occasionally stopped working.

80. On a duplicated G3si with no board administered in location 1C00, the **display circuit-pack** form showed "?" in both the `Code` and `Name` fields.
81. The **status station** command was not working for a station registered through the PROCR interface.
82. Users registering in the Native H.323 configuration were not counted against the total number of registered users, allowing registration attempts that could exceed the maximum allowed by administration on the **customer-options** form.
83. A Digital Communication Protocol (DCP) set with a traditional equipment location whose extension was taken over by an IP SoftPhone would not be restored to full service after the user unregistered the IP SoftPhone.
84. If a DWBS/DECT station was administered as the bridge of a principal desk set, and call forwarding was activated, there was inconsistency in feature interactions. Calls to the principal did not alert the DECT/ PHS handsets. However, a forwarded call to the principal still alerted the DWBS/DECT station.
85. Network Call Redirection / Network Call Transfer did not work with the Nortel DMS250 PSTN switch to allow an incoming 800-number call to be redirected, since the only "service type" the DMS250 permitted for the NCT operation to the second leg of the call was "SDN", and the DEFINITY was using the non-SDN "service type" of the incoming 800-number call.

    Also, the NCT feature was not being invoked by the DEFINITY when an ISDN "PROGRESS" message was received before a "CONNECT" message for the second call-leg of the NCT call.
86. If the CLAN circuit pack lost connection to the ethernet, no error or alarm was generated.
87. A system with an ATM Center Stage under a heavy traffic load experienced the intercept tone being incorrectly applied to some calls.
88. If there was a registration problem, the end user did not receive a proper information message.
89. An H.323 IP unanswered trunk call would ring for five minutes and drop. The call now rings for two hours, and drops if the wait answer supervision timer is not set. If the wait answer supervision timer is set for a value less than two hours, the ring call will drop according to the administered timer.
90. Tenant Partitioning was not available in Offer B.
91. TTI and IP station registration interactions occasionally became corrupted.
92. The loss group administered for IP trunk groups was not used to calculate the loss/gain to be applied to the call.
93. Read Translation Response messages could be sent incorrectly to the Multi-Application Platform (MAP), causing message buffers to be exhausted and the system to reset.

94. Network region interconnection maintenance was leaving alarms and active errors and not clearing them correctly when regions were administered that had no IP resource boards.
95. Executing a **list signaling-group** command could cause a system reset.
96. If the release number of an IP endpoint's application was less than the administered release for that application (Product ID) on the **customer-options** form, the registration was denied.
97. When a call redirected to a Coverage of Calls Redirected Off-Net (CCRON) coverage point and then to a local coverage point, the redirection code on the display of the local coverage point indicated that the call redirected because the principal did not answer.
98. Externally originated DCS calls to a DWBS/DECT station with `display` set to `n`, presented no calling party information to the mobile customer.
99. The **display/change circuit-packs** command displayed the wrong board code for the PROCESSOR circuit-pack in slot "01" of carrier "A" for the G3csi (Prologix) system.
100. When the DEFINITY went through a **reset system 2**, the registration counts were not cleared, although all the endpoints were unregistered.
101. When a data module extension was entered in the IP Station filter data, the Error Encountered Cannot Complete Request (EECCR) message displayed and a procedure error occurred. Also, if there was a blank in the middle of the list, changes after the blank line were ignored.
102. Incoming Call Line IDentification (ICLID) did not work in Canada over CO trunks.
103. The system did not recognize the flash disk if it was not inserted when the system was booted.
104. Approximately one persent of direct-IP tandem trunk calls did not have a talk path.
105. DEFINITY did not send alarm strings to INADS, and did not send SNMP traps.
106. In entries listing IP Solutions registrations and unregistrations, the **list history** command could return extraneous characters embedded in the port field, as follows:

    8/22 8:24 S00035z psa-ipa cha station 67485

    8/22 8:23 S00035z psa-ipu cha station 67485
107. When performing vector administration from the G3V9 CMS, the "tilde-r" digit in the route-to-number vector step and the "holiday conditional" in the go-to vector step were not allowed.

108. Calls that were hairpinned by a wireless adjunct presented two problem cases: 1) If the originator of the call was local to the switch and was not an DWBS/DECT station, then the hairpinned call went nowhere; and 2) If the originator was an DWBS/DECT station, then the hairpinned call was conferenced with the original call.

109. When whisper paging a station that is active on a call, the resulting display on both the paging and paged stations truncated the displayed extension by one digit if it was a five digit extension.

110. New systems did not have correct default translation.

111. H.323 IP signaling groups could become corrupted during transactions.

112. The **start** command could not start LucentLogger once it was shutdown.

113. d1stat did not show non-running processes with a -l option, and it showed NTconsole as either UP or DOWN. Now, d1stat shows non-running processes and NTconsole is either IN USE or FREE.

114. Attempting to remove a registered IP endpoint could fail, leaving the appearance that the extension remained registered while the phone was actually unregistered. This also resulted in the phone not being able to reregister with that extension.

115. Pressing the Malicious Call Trace (MCT)-control button on a station that has a Send All Calls (SAC) button for another station resulted in the status lamp incorrectly lighting for the SAC button, and SAC being activated for the station that pushed the MCT-control button. The status lamp now lights and SAC is activated only if the MCT-controlling station has a SAC button for that same station.

116. The **release** command on an IP Station was printing out the result “ABORT” even though the correct result was "PASS". In addition, the **status station** command on a registered IP Station caused a system reset on DEFINITY ONE if the command was executed about 300 times.

117. It was not possible to execute **shutdown/reboot** after **shutdown all**.

118. An analog station on the remote office might not have been shuffled.

119. Interdigit timing for endpoints on the remote office did not work.

120. An H.323 IP extensions were unregistered after hanging up a call.

121. The following commands could not be accessed:

    status asai/adjunct-ip-link

    status asai-ip-link

    status adjunct-ip-link

    status processor-ip-interface

122. On the **list measurements ip dsp** and **list measurements codec** forms, the Erlang measurements were truncated to .1 Erlangs. Now, these measurements are rounded to the nearest .1 Erlang.

123. The **oss** command could not blank out an INADS phone number. It is now possible to do so with a null argument of ''.

124. End-to-end digits might not have been passed when interworking an H.323 IP trunk to a central office trunk.

125. Calls from remote office analog endpoints to a vector with a collect step could result in a one-way talk path.

126. DWBS/DECT users were not able to pass touchtone digits over H.323 IP trunks.

127. Hourly polling for information from CLAN boards resulted in excessive MDM_RESOLVE messages, used many images, and caused the system to warm restart. Now, the hourly polling has been disabled, and the system no longer does a restart due to message buffer exhaustion.

128. DEFINITY ONE and IP600 bash commands **alarmorig**, **oss**, and **productid** required that DEFINITY be rebooted before it would see the data associated with each command.

129. SNMP v2 traps were not sent when an alarm occurred.

130. The command **status ip-board** was not working correctly for MEDPRO boards or CLAN boards.

131. The IP Media Processor board selection criteria included as a last step to search all boards in the port network to determine if there was an available resource on a board and if that board had connectivity to the EPT's region.

    Now, the IP Media Processor board selection criteria, as the last step, searches each LAN Region that has connectivity to the EPT's region for an available resource on any board in that region.

132. A **reset system 1** command caused a firmware download schedule in the future to be aborted. A **reset system 1** or **reset system 2** command on a running schedule caused all the remaining schedule to be aborted.

    Now, a **reset system 1** command does not abort a firmware download schedule that is to run after the reset. The schedule runs at its appointed time.

    Also, a running schedule is aborted on either a **reset system 1** or a **reset system 2** command. The current board in such cases is marked failed and all other remaining targets are marked aborted. The status of the download schedule may be viewed by using the command **status firmware download last**. These failed schedules cannot be alarmed because resets cause all alarms and error logs to be cleared. If a user finds an aborted/failed firmware download schedule without any alarms, the command **display initcauses** can be used to see if the schedule failed because of a system reset 1 or 2.

133. The **list measurements ip signaling-group** forms had a column for number of available sockets that was hard coded to 511. This number is not accurate and the column has been removed from the form.

134. Lamp updates from a DEFINITY to an IPC Turret system sometimes did not occur.

135. A **test inads** command caused the SNMP trap handler to loop continuously.

136. Under some conditions, a trap occurred in the gip in the svrRecvAcpt function when no IP match was made. Now, a processor channel to log a “no IP match” failure is created before attempting to log the failure.

137. If four and five digit dialing were available with the same first digit, and the media extenson of an IP phone had a 4 digit extension, it would take 5 seconds to receive dialtone. This delay has been reduced to about one-half second.

138. Stations with a bridged appearance assigned to the first button on the set could lock up the button if the station was unmerged and later merged using TTI.

139. Taking over an IP Telephone from an IP SoftPhone R2 was not successful.

140. Calls from an IP phone to an analog central office trunk could result in the user hearing a very discernable echo.

Feature or category	See item numbers
Message Sequence Tracer	101
N	
Network Call Redirection (NCR)	11
P	
Property Management System (PMS)/Hospitality	5, 16, 62, 79
S	
Send All Calls (SAC)	115
Service Observing	37
System Access Terminal (SAT)	130
System Resets	24, 26, 31, 93, 95, 116, 132
T	
Tape	103
Tenant Partitioning	90
Terminal Translation Initialization (TTI)	44, 65, 76, 138
Tone Detectors	87
Tones & Intercept Treatment	27
Traffic	87
Transfer	68
Translations	110, 111
Trunk Access Code (TAC)	60
Trunks	92, 111, 124
V	
Vector Directory Number (VDN)	37, 38, 41