



System 25 Communications System R3V3 Upgrade

Because of the North American Numbering Plan changes effective in 1995, many customers have requested that their System 25 Communications Systems be upgraded to R3V3. R3V3 contains the necessary changes so that customers who use Automatic Route Selection (ARS), Pool Facilities, or Personal Lines can be compatible with the network.

When you upgrade a System 25 Communications System to R3V3 for the Improved North American Dial Plan (INPA), you must set various items in the system to minimize customer problems following the upgrade.

In the INPA mode the following administration items are AUTOMATICALLY SET (administering these items does not change their values) to the following values:

1. Is the "1" prefix required to dial outside your area code "YES"
(Menu 4 Action = 32, Data = 1)
2. Is the "1" prefix required to dial toll calls within your area code? "NO"
(Menu 4 Action = 33, Data = 0)

The only item that can be administered is the dialing plan for Home Area Code (HAC) calls.

"Require 10 digits for HAC" (scroll) "YES/NO"
(Menu 4, Action = 37, Data = 0 for 7-digit dialing or 1 for 10-digit dialing)

Toll Restrictions/Dial Options

Home Area Code

This should reflect the Home Area Code (HAC) for the installing customer.

Set toll restriction options under Menu 4 (Basic Administration) or in the Advanced Administration System (AAS); an example is shown in Figure 1.

TOLL RESTRICTION/DIALING OPTIONS		10/19/1995 10:23:58
TOLL RESTRICTION/DIALING OPTIONS		
'Home' area code:		303
May toll restricted stations make toll calls in Home area code (scroll):		no
'1' prefix required for dialing outside the 'Home' area code (scroll):		yes
'1' prefix required for dialing within the 'Home' area code (scroll):		no
Toll restrictions on PBX/Centrex calls start with this digit (scroll):		9
Select the Required IXC Digits - (scroll):		10XXX
INPA Dialing Utilized - YES/NO (scroll):		yes
Require 10 Digits for HAC Calls - YES/NO (scroll):		no
Require 15 Digit International Dialing - YES/NO (scroll):		no

Figure 1. Toll Restriction/Dialing Option Menu

May Toll-Restricted Stations Make Toll Calls In HAC?

This should reflect your customer's decision to allow or disallow calls within the HAC. Be aware that how you answer other questions may affect the operation of this feature.

To ALLOW toll-restricted stations to DIAL 911 (INPA) via Automatic Route Selection (ARS), follow the example of Figure 1:

1. Select "no" for "May toll restricted stations make toll calls in Home area code (scroll)." This action may also be found under Menu 4 as Action 31.
2. If toll-restricted stations are allowed to make toll calls within the home area code (HAC), in the appropriate Toll Call Allowed List, enter 911 and any other allowed central office code, or (...) for all central offices (COs).

To ALLOW toll-restricted stations to dial Directory Assistance in areas that require the prefix "1" (1-411) in the INPA mode, take the following steps:

1. Select Automatic Route Selection (ARS).
2. Enter the X11 code table.
3. Direct 411 to a vacant ARS pattern.
4. Return to Main Menu and select Toll Allowed/Disallowed Lists.
5. Enter 411 and any other allowed central office code or enter three dots (...) for all central office codes in the appropriate toll-allowed list.
6. Proceed to Speed-Dialing/Virtual Facility Number (VFN).

7. Administer a VFN with facility access code and pause, i.e., (100*).
8. Place the VFN in the pattern to which 411 is directed.
9. Perform digit translation on the selected VFN to:
 - a. Enter Home Area Code.
 - b. Leave digits to remove at "0".
 - c. For "digit pattern to add for calls within this NPA," enter "1".
 - d. Do not enter any digits for calls outside this NPA.

THE CUSTOMER NOW DIALS 411 (not 1-411) FROM ALL STATIONS, toll-restricted and non-restricted. The system will prefix the digit "1" when 411 is dialed.

To allow Toll-Restricted stations to dial 1-411 when the customer uses Pool Facilities instead of ARS, the following items should be administered:

1. Assign a Facility Access (Pool) button on the station. Single-line stations use the facility access code.
2. In the appropriate Toll Allowed List, enter 411... (*. * wild card) and other allowed central office code or 3 dots (...) for all office codes.

Non-restricted and restricted stations dial Facility Access Code (FAC) plus 1-411.

Dial Plan Options

Select "yes" for INPA dialing. Otherwise, select "no" (Action = 37, Data = 1).

In areas that deviate from the normal INPA numbering plan, i.e., where three dial options (7, 10, and 11 digits) are used, do the following:

1. Select "yes" for INPA dialing requiring 11 digits (Action = 36, Data = 1).
2. Select "no" for "Requires 10-digit dialing for HAC calls" (Action = 37, Data = 0). This permits 7-digit dialing in the HAC.
3. Implement 10-digit dialing in one of two ways:
 - Using Virtual Facility Numbers (VFNs): The customer dials 1 + NPA + AAA + AAAA, 11 digits (where N = 2 to 9, P = 0 to 9, and A = 0 to 9) for all 10- and 11-digit numbers. Numbers that require 10 digits use a separate ARS pattern with a unique VFN to strip the leading digit ("1"). The required 10-digit numbers are entered in the Other Area Code Exception list and sent to the pattern that uses the VFN.

- Use of pool facilities: Non-restricted stations can dial all numbers (7, 10, or 11). For Toll-Restricted Stations, enter the 3-digit area code (NAA) for 10-digit numbers and 6 digits (NAA-AAA or NAA-..., wild card *.*.) for 11-digit numbers in the appropriate Toll Call Allowed (TCA) list. This satisfies the situation where an area code is added and central offices do not exist in the originating area code with the same 3 digits as the added area code.

Additional Area Codes for ARS Use

New area codes are not part of the default translations for the new System 25 upgrade. YOU MUST enter the new area codes as they become available. ADD the following known new area codes to the appropriate pattern either in AAS to the NAA tables or in Menu 11, Actions 300 and 301 in basic administration:

- | | | | |
|-------|-------|-------|-------|
| • 210 | • 410 | • 610 | • 864 |
| • 281 | • 423 | • 630 | • 910 |
| • 310 | • 441 | • 710 | • 941 |
| • 320 | • 510 | • 770 | • 954 |
| • 334 | • 520 | • 810 | • 970 |
| • 352 | • 540 | • 847 | • 972 |
| • 360 | • 562 | • 860 | |

Some of these numbers existed in previous versions of the system but were lost when the system was cold started and the upgrade reload was made.

Avoiding Upgrade Problems

Appendix D of the *Installation and Maintenance Manual* (555-540-103) does not include all the necessary steps for all releases to be upgraded to R3V3. Not all required feature changes are included.

CAUTION:

Complete the following steps in the order given. Failure to completely follow these steps may degrade system performance.

Upgrade Procedure from R1V1 or R1V2 to R3V3

Follow these steps to upgrade from R1V1 or R1V2 to R3V3:

1. Untranslated the Service Circuit (auxiliary equipment) from Port 10301.
 - a. Select 1 (PORT) from Main Menu.
 - b. Enter "10301" at PORT.
 - c. Bring up the DATA value (by pressing "d" on the keyboard) and change the value from "1101" to "0".
2. Save the translations to a 90-minute tape or a file.
 - a. Select 9 (Save/Restore) from the Main Menu.
 - b. Enter the following values:
 - At Action =, enter 1
 - At Data =, enter 1
 - c. Press "c" to continue.
3. Verify the translations.
 - a. Select 9 (Save/Restore) from the Main Menu.
 - b. Enter the following values:
 - At Action =, enter 2
 - At Data =, enter 1
 - c. Press "c" to continue.

4. Power down the system.
5. Move the 25-pair cable at the back of the cabinet from Slot 2 to Slot 1.
6. Remove the Memory, Processor, and Service Circuits (Slots 1, 2, and 3).
7. Insert the new MEM/CPU (ZTN142) into Slot 1 and the Service Circuit (ZTN131) into Slot 2.
8. Power up the system.
9. Do a limited cold start (without translations).
 - a. Select 9 (Save/Restore) from the Main Menu.
 - b. Enter the following values:
 - At Action =, enter 20
 - At Data =, enter 2
 - c. Press "c" to continue.
10. Restore translations from tape or file:
 - a. Select 9 (Save/Restore) from the Main Menu.
 - b. Enter the following values:
 - At Action =, enter 3
 - At Data =, enter 1
 - c. Press "c" to continue.
11. Program the Service Circuit (auxiliary equipment—ZTN131) to Slot 10201. A ZTN85 Service Circuit may be used instead.
 - a. Select 1 (PORT) from the Main Menu.
 - b. Enter the following values:
 - At Port =, enter 10201
 - At Action =, enter 1
 - At Data =, enter 1101
12. Save and verify translation (see Steps 2 and 3).
13. Set the time and date.

Upgrades from R2 or R3 to R3V3

Follow these steps to upgrade from R2 or R3 to R3V3:

1. Save and verify translations to tape or file (see Steps 2 and 3 above).
2. Power down the system.
3. Remove the MEM/CPU from Slot 1 and the Service Circuit (ZTN85) from Slot 2. The ZTN85 may not have to be changed depending on the customer's configuration.
4. Add the new MEM/CPU (ZTN142C) to Slot 1 and the new Service Circuit (ZTN131), if required, to Slot 2.
5. Perform a limited cold start (see Step 9 above).
6. Restore translations from tape or file (see Step 10 above).
7. Save and verify translations to tape or file (see Steps 2 and 3 above).
8. Set the time and date.

Upgrade Adjustments

When you upgrade your System 25 Communications System to R3V3, certain items change to default values or change status. Check the following and reset or adjust them as necessary to minimize any system problems after the upgrade.

Date and Time

After an upgrade, the date and time are set at default values. If you do not set the system to the current date and time, the SMDR reports and ARS time-of-day routing will be affected.

Direct Group Calling

Check to see if the system translations support a Direct Group Calling (DGC) delay announcement. If they do, remove the current announcement and retranslate via the ACTION/DATA or AAS with the R3V3 information and personal dial code (PDC). Follow these steps:

1. To untranslated the current announcement machine:
 - a. Select 1 (PORT) from the Main Menu.
 - b. At Action =, enter 1.

- c. At Data =, change the value from "255" to "0".
1. To add or retranslate an announcement machine, do the following:
 - a. Select 1 (PORT) from the Main Menu.
 - b. At Action =, enter 1.
 - c. At Data =, enter 255.
 - d. At Action =, enter 2.
 - e. At Data =, enter the assigned PDC.
 - f. At Action =, enter 3.
 - g. At Data =, enter 1 (dial accessible).
 - h. Press "a" for action.
 - i. At Action =, enter 90.
 - j. At Data =, enter "ID of announcement 11 characters or less."

Add the assigned DGC announcement to the DGC, and set the timing for the announcement activation. Main Menu 4, Action 7, which set the number of rings before the unanswered DGC calls were sent to the delay announcement, no longer exists. Instead, the new translations set the number of *seconds* before a DGC call is sent to the announcement. (Four seconds = one ring cycle.) The customer may now have up to 32 individual DGC announcements. To change the time interval after which an unanswered DGC call is sent to the announcement, follow these steps:

1. Select 6 from the Main Menu.
2. At DGC =, enter the group number.
3. At Action =, enter 20.
4. Under Data, enter "PDC ASSIGNED TO ANNOUNCEMENT."
5. At Action =, enter 21.
6. At Data, enter the TIME INTERVAL IN SECONDS (1-255 seconds)

Forwarding, Follow Me, and FPDCs

Following any tape restore or upgrade procedure, you must log all Floating Personal Dial codes (FPDCs) back into the appropriate stations. Until you re-establish them, Call Forwarding and Follow Me are not active.

Voice Messaging

If you upgrade your voice messaging from a 3B1 to a 6386 WGS or higher computer, you must correct system options:

1. Select 4 from the Main Menu.
2. At Action =, enter 96.
3. At Data =, enter:
 - 0 for 3B1
 - 1 for 6386WGS or higher computer

Call Accounting

Because R3V3 upgrades include NPA changes, 10-digit dialing, and 15-digit international calling, check the Call Accounting software used. Current Call Accounting releases are not compatible with INPA. If the Call Accounting package is provided by AT&T, Marketing should advise the customer of the need to upgrade this package. If the package is provided by another vendor, notify the customer.

Callback Queuing

Explain Callback Queuing to customers who upgrade from a pre-release R2 system. Callback Queuing did not exist in their previous system operations, and this can cause some confusion in the operation of the system.

