Avaya™ Interchange

Release 5.4/Intuity™ Interchange R5.3
Adding an AMIS System to Your Network

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Notice
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Toll Fraud is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or working on your company's behalf). Be aware that there is a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

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Telecommunications security of voice, data, and/or video communications is the prevention of any type of intrusion to, that is, either unauthorized or malicious access to or use of, your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, o ra person working on your company's behalf. Whereas, a "malicious party" is anyone, including someone who may be otherwise authorized, who accesses your telecommunications equipment with either malicious or mischievous intent.

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- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there could be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company, including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

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- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
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- Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products

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Adding an AMIS System to Your Network

This document describes how to add to your Interchange network a new system that uses the AMIS analog protocol.

Please keep in mind the following aspects of the instructions:

- Examples are included to aid in understanding, but the actual configurations and data you enter can vary greatly.
- The instructions apply to both Intuity™ Interchange R5.3 and Avaya™ Interchange R5.4.
- In general, it is recommended that the dial plan of the Interchange maintain as much consistency as possible between the addresses to send messages and the phone numbers subscribers dial when simply calling other subscribers. The examples in this document are designed to show such consistency.

Checklist for Adding an AMIS Endpoint

To add a new AMIS analog messaging system to an existing Avaya or Intuity Interchange network, do the following:

Task	Details of Task
Task 1: Get Information About the System You Are Adding (see page 3)	Complete the Planning Worksheet included in this document. The switch administrator for your Interchange system and possibly the switch administrator for the new system will need to give you the dial plan, exact phone numbers, and exact caller IDs.
Task 2: Determine How to Map the New System's Dial Plan (see page 7)	Complete the Dial Plan Mapping Worksheet in this document (Professional Services normally does this for you).
Task 3: Check the AMIS Analog Callback Number (see page 18)	Display the AMIS Analog Parameters screen.

Task 4: Identify the New System to the Interchange System (see page 19)	Complete the AMIS Analog Machine Administration screen for the new system.
Task 5: Administer Remote Machine Parameters (see page 21)	Complete the Remote Machine Parameters screen for the new system. Also complete the AMIS Analog Machine Profile screen by using the Dial Plan Mapping Worksheet.
Task 6: Map the New System's Dial Plan for Interchange (see page 27)	Complete the Dial Plan Mapping screen for the new system by using the Dial Plan Mapping Worksheet.
Task 7: Administer AMIS Analog Timing Parameters (see page 30)	Look for the appropriate type of timing parameters for the new system on the Timing Parameter Definition screen and then select that type on the Remote Machine Mapping screen.
Task 8: Add Remote Subscribers to Interchange (see page 32)	Set up the self-registration phone number on the General Parameters screen and then tell remote subscribers on the new system to send a message.
Task 9: Verify That the Endpoint Has Been Administered (see page 37)	Check for a new system entry on the Remote Machine List and the Remote Machine Dial Plan List.
Task 10: Create an Interchange Profile on the New System (see page 39)	Enter the Interchange as an AMIS network node into the new system. **NOTE:** Be sure to enter the *exact* name, phone number, and caller ID number of Interchange.
Task 11: Test the Connection (see page 40)	Send messages to and from the test mailbox on the new system.
Task 12: Update Remote Systems for Subscribers on the New System	Add information to Directory Views, if appropriate. Run **get remote_update** from Intuity AUDIX® systems. Run Demand Update Push from Interchange to Aria®, Serenade®, and Octel® 100 systems.

Task 1: Get Information About the System You Are Adding

You need the following information about the system you are adding:

- The phone digits Interchange will dial to call the system
- The range of mailbox extensions (mailbox IDs)
- The prefix or prefixes that the Interchange system will attach to mailbox IDs so they fit the Interchange network dial plan
- A specific mailbox ID on the new system that will receive and send a test message over the Interchange network.

Your Account Executive determines with you the needed information about the new system and completes a *Planning Worksheet for AMIS*. Retrieve these items and enter them in the Planning Worksheet that follows.

Additionally, you need to know how many digits, usually 7 or 10, are in the Interchange dial plan.

Planning Worksheet

AMIS Incoming Dial String (or Delivery Number)* _____

End Node Test Mailbox(es):** _____

***(This number may or may not be used to retrieve messages depending on the vendor's specifications. It's also referred to as the lead or "Welcome to" number.)

****These mailboxes should be identified by the customer and must fall within the System dial plan and must be a unique network address.

Full Network Address Ranges for this End Node: excluding address ranges associated with mailboxes which never receive messages, such as Auto Attendant, Bulletin Board, etc. **Keep ranges as specific to the actual mailboxes as possible** and consider any potential growth. In an existing system, verify existing ranges (see Existing Point to Point Screen Information for mailbox list information. Interchange requires one network address length.

	Area Code and/or Local Exchange Prefix	Starting Extension	Ending Extension	Can this system support "simultaneous connections"?
1.				If so, indicate maximum quantity.
2.				

3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

To complete the worksheet, do the following:

1. Determine the **`AMIS Incoming Dial String`**, or phone number, the Interchange uses to call the AMIS system. Consult with your local switch administrator and the switch administrator for the new system.

   The main consideration is whether the phone number uses:

   - The public network
   - A private network

   Secondly, you must know if the local Interchange switch or new system's switch:

   - Deletes or inserts digits when the systems call each other
   - Reroutes calls between Interchange and the new system such that the caller ID changes

   Phone Number over Public Network

   If you do *not* have a private phone network over which the Interchange calls the new messaging system, the phone number will be a public phone number and include some or all of the following (see also Figure 1):

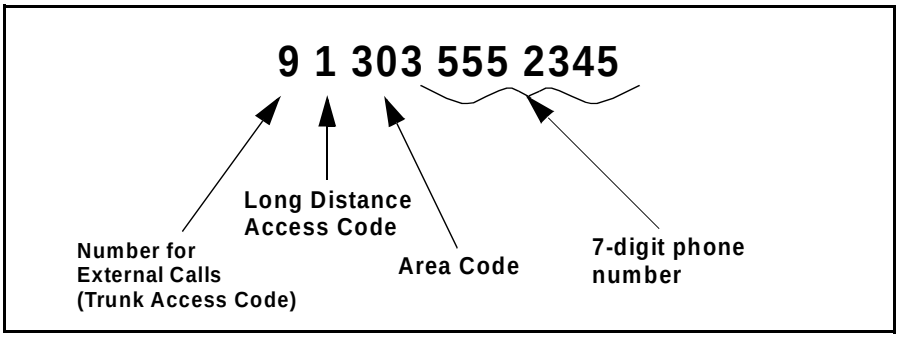


Figure 1. Dial String Example over Public Network

NOTE:
Be sure Interchange is allowed to make long distance calls. This capability is usually determined by Interchange's assigned Class of Restriction on your switch. The area code, which is always required for long distance calls, might also be required if local calls require 10-digit dialing.

Usually, the 7-digit number is the same number that subscribers use to get their messages. Sometimes, however, there is a separate AMIS hunt group with a second phone number. This AMIS hunt group allows the voice ports on the *first* hunt group to be free for local voice messaging. Check with the switch administrator for the new system.

Phone Number over Private Network

If Interchange calls the system over a private network, the phone number includes one of the following (see Figure 2 or Figure 3):

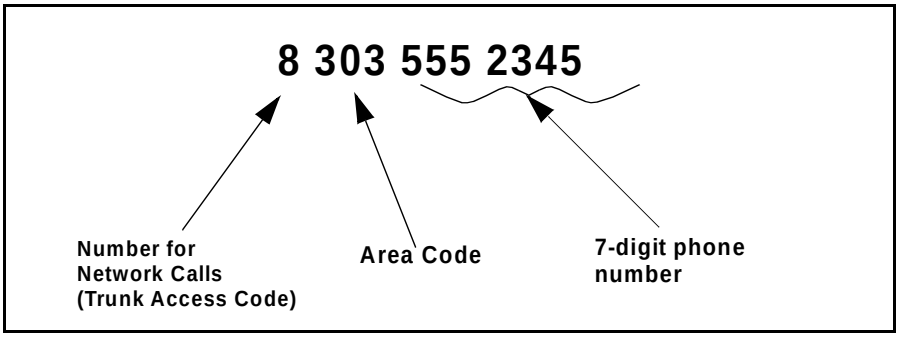


Figure 2. Dial String Example over Private Network (with Dial Access Code)

NOTE:
In this example, Interchange dials the private network access code, **8**, for toll-free calls to another company location. In addition, Interchange dials a 10-digit or a 7-digit phone number, as in the public network example. Again, check with the switch administrator for the new system, because there could be a second phone number specifically for AMIS. Notice, you do *not* dial a **1** for long distance.

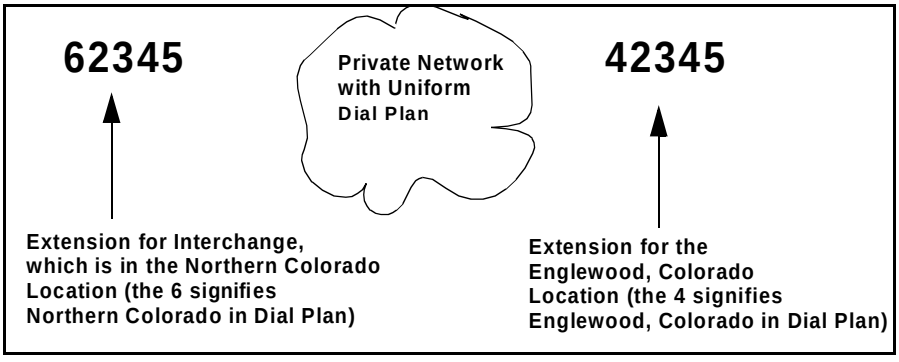


Figure 3. Dial String Example over Private Network (with Uniform Dial Plan)

NOTE:
In a private network with a uniform dial plan, extension numbers are usually 4 or 5 digits. The initial digit often signifies a specific location. In the example, **4** designates the Englewood location in the dial plan.

Dial Plan-Related Screens on DEFINITY Switches

On DEFINITY and IP600 switches, switch administrators use the following screens to determine which number the Interchange needs to and is allowed to dial:

- Dial Plan
- Uniform Dial Plan
- Class of Restriction (COR)
- AAR or ARS Digit Analysis[1]
- AAR or ARS Digit Conversion
- Route Pattern

2. Determine the **End Node Test Mailbox** on the new system. You use this mailbox to send and receive test messages through Interchange. Ask the administrator of the new system for a mailbox number.
3. Determine the ranges (up to 10) of the voice mailboxes on the new system, and enter them in the **Starting** and **Ending Extensions** fields of your Planning Worksheet (see page 3). Consult with the administrator of the new system to determine the appropriate ranges.

   The remote messaging system can have 3-digit, 4-digit, 5-digit, or up to 10-digit extensions in various ranges. For example, it can have 5-digit ranges of **20000** to **29999**, followed by **30000** to **39999**, and finally **50000** to **59999**.

1. Automatic Alternate Routing (AAR) is the feature for routing calls over a private network. Alternate Routing Selection (ARS) is the feature for routing calls over a public network.

CAUTION:

*Be sure that ranges do **not** include the extensions of automated attendants, bulletin boards, and other special mailboxes that are not intended to accept messages. If these mailboxes are included, then messages sent to Enterprise Lists defined by remote machine will fail and will show up in your delivery status reports. More importantly, messages might actually be sent to mailboxes that are not intended to receive E-list messages.*

4. Determine the **Area Code and/or Local Exchange Prefix(es)** that Interchange must use to send messages to mailboxes on the new system. Enter them in your Planning Worksheet (see page 3).

   Ask the switch administrator for the new system to get the correct digits. These digits are required because Interchange uses a specified address length (normally 7 or 10 digits for the US) to process all messages.

   The prefix comprises the digits that normally precede the mailbox IDs when someone calls the mailbox from outside of the switch location. The prefix could actually replace digits in the mailbox IDs, as will be defined as a part of Dial Plan Mapping. Usually, prefixes are associated with Direct Inward Dial (DID) trunks that direct calls to the mailboxes. That is, the prefix combined with the mailbox ID is usually the phone number of a subscriber.

   For example, mailboxes in the range **20000** to **29999** may normally be preceded by **303-55**. Therefore, if an outside caller wanted to leave a message for mailbox **20001**, that caller would actually dial **303-552-0001**. This example assumes the local area requires 10-digit dialing.

   It is possible, however, in a 10-digit dialing area, that mailboxes on the new system could be preceded by *different* prefixes. Therefore, although some mailboxes are preceded by **303-55,** the extension range **50000** to **59999** might be preceded by **720-48**. In this case, an outside caller would dial **720-485-5460** to call mailbox **55460**.

Task 2: Determine How to Map the New System's Dial Plan

NOTE:

Avaya Professional Services normally determines how to map the dial plan for you and sends you a Dial Plan Mapping Worksheet. In this case, you can skip this task.

The Interchange network dial plan can use a uniform address length that consists of from 3 to 10 digits. However, it is strongly recommended that Interchange use a 7-digit or 10-digit dial plan. The new system, on the other hand, will likely have a

different dial plan, one that usually uses 4 or 5 digits. In most cases, therefore, you will have to map the dial plan of the new system to the Interchange network address length.

NOTE:
If the mailbox IDs on the new system have exactly the same number of digits as the address length used in the Interchange network dial plan, then you might not need to perform dial plan mapping. For example, if the Interchange dial plan calls for 10-digit addresses, and the mailbox IDs on the new system always use 10 digits, you do not need to map the dial plans. As another example, if the Interchange dial plan uses the 5-digit uniform dial plan of a private network, and the new system's mailbox IDs also use the same 5-digit uniform dial plan within the same private network, you do not need to map the dial plans.

CAUTION:
Since every Interchange address must be unique, there might be circumstances in which the new system's mailbox ID length matches the Interchange dial plan, but because the new system is not part of the same switch private network, the mailbox IDs might not be unique within the Interchange network. This situation is quite common, which is why it is normally recommended to use a 10-digit Interchange dial plan and dial plan mapping.

Use the following instructions and the Dial Plan Mapping Worksheet (see page 16), to determine how to map the new system's dial plan. This worksheet is usually provided to you by Avaya Professional Services.

1. Note these two critical rules:
   - The digit or digits you enter in the Map From column for each Mailbox ID range must be *unique*.
   - If you have only one prefix that you are mapping to and you do not have to replace the initial digit or digits of the mailbox IDs[2], you can set the Map From Length to **0**.

     CAUTION:
     If you change your dial plan later (for example, if you add more extensions that have a different DID prefix) and need to add Mailbox ID ranges for this system, you will have to remove the system from the Interchange network and add it again to the network with the new dial plan. This task could entail a significant amount of work.

2. If the new system's mailbox IDs must conform to a Uniform Dial Plan, the initial digit or digits of the mailbox IDs can overlap, **and differ from**, the ending digit or digits of the local exchange prefix. See Sample Dial Plan Mapping (When Prefixes Replace Initial Mailbox Digits) (see page 14).

*Therefore, if you anticipate the need to change the dial plan for this endpoint in the future, you might want to use a Map From Length of **1** or more. See Figure 7 on page 12, which illustrates the alternative to Map From Length **0** in anticipation of future changes.*

2. Check your Planning Worksheet (see page 3) for the mailbox ID (extension) ranges of the new system. Review the examples that follow, and fill out the Dial Plan Mapping Worksheet (see page 16), according to whether you have:
   - A broken or unbroken range of extensions
   - Ranges of extensions that have different prefixes and the first digit or digits in the `Start` field are unique.
   - Ranges of extensions that have different prefixes and the first digit or digits in the `Start` field are shared.
   - Initial digits in mailbox IDs that must be replaced with different digits.

Sample Dial Plan Mapping (Single Unbroken Range of Mailbox IDs)

In Figure 4, since there is a single unbroken MAILBOX ID range (**2000** to **5999**), you enter **0** in the `Map From Length` field on the Dial Mapping Worksheet. In this case, you leave the `Map From` field for the range blank. Then, the **`Map To`** digits specify the area code and local exchange 3-digit prefix. You can get these numbers from your Planning Worksheet (see page 3).

When these digits are added to the 4-digit mailbox IDs, Interchange has the necessary 10 digits.

Remote Machine Name: Englewood — Mailbox ID Length: 4
Map From Length: **0**

MAILBOX ID:		NETWORK ADDRESS DIAL PLAN MAPPING	
Start	End	Map From	Map To
2000	5999		303555

Figure 4. Sample Dial Plan Map with a Single Range (0 Map From Length)

Keep in mind that Interchange allows you to use a **`Map From Length`** of up to **9**. In some circumstances with the previous example, you might choose to use a **`Map From Length`** of **1**, **2**, **3**, or even **4** with the range **2000** to **5999**.

In a likely scenario with range **2000** to **5999,** you might anticipate the need to change the Dial Plan Mapping later, so you choose **1** for the **`Map From Length`**, *not* **0**. In this case, the map would appear as follows (Figure 5).

Remote Machine Name: Englew

Mailbox ID Length: 4

Map From Length: **1**

MAILBOX ID:

Start	End
2000	5999

NETWORK ADDRESS DIAL PLAN MAPPING

Map From	Map To
2	3035552
3	3035553
4	3035554
5	3035555

Figure 5. Sample Dial Plan Map with a Single Range (1 Map From Length)

Sample Dial Plan Mapping (Broken Ranges of Mailbox IDs with Map From 0)

In Figure 6, there are broken MAILBOX ID ranges. In this case, ranges 4000 to 4999 and 5500 to 5799 might be omitted for one of two reasons:

- The range contains auto-attendant mailboxes and other extensions for which mailboxes have not been assigned.
- Another messaging system, which uses the same prefix as this system, will use the mailbox ranges 4000 to 4999 and 5500 to 5799.

In this example, you can still enter **0** in the `Map From Length` field on the Dial Mapping Worksheet. In this case, you leave the `Map From` field for the range blank. Then, for the **`Map To`** digits for the first range, specify the area code and local exchange 3-digit prefix. Then, leave the remaining Map From and Map To fields blank. Interchange will automatically apply the prefix to the remaining ranges.

When the prefix digits are added to the 4-digit mailbox IDs, Interchange has the necessary 10 digits.

CAUTION:

*If it is possible that this system will add mailbox ranges at a later time, do **not** use Map From Length **0**. Instead, use Map From Length **1**, as in Figure 7. If you use Map From Length 0, and then later must change the dial plan so that you must use a different Map From Length, you will have to remove the system from the Interchange network and then add it again.*

Remote Machine Name: Englewood

Mailbox ID Length: 4

Map From Length: **0**

MAILBOX ID:		NETWORK ADDRESS DIAL PLAN MAPPING	
Start	End	Map From	Map To
2000	2999		303555
3000	3999		
5000	5499		
5800	5999		

Figure 6. Sample Dial Plan Map with Multiple Ranges (0 Map From Length)

Sample Dial Plan Mapping (Broken Ranges of Mailbox IDs with Map From 1)

In Figure 7, as in the previous example, there are also broken MAILBOX ID ranges.

However, say that in this example, you anticipate that you will need to change the dial plan for this system in the future, so you avoid entering a **0** Map From Length. If you were to enter **0**, you would have to remove the system and add it again to change its dial plan. So, instead, you can enter **1** in the `Map From Length` field on the Dial Mapping Worksheet. In this case, enter the first digit of the first Mailbox ID range in the `Map From` field. Then, for the **`Map To`** digits for the first range, specify the area code, local exchange 3-digit prefix, and the first digit of that same Mailbox ID range. Then, enter the first digit of the next range with a unique start digit, and so on.

When the prefix digits are added to the 4-digit mailbox IDs, Interchange has the necessary 10 digits.

NOTE:

Notice that the last Mailbox ID range, **5800** to **5899** does not have **`Map From`** and **`Map To`** digits entered next to it. This is because the

`Map From` 5 and **`Map To` 3035555** digits apply to any range that starts with **5**.

Remote Machine Name: Englewood — Mailbox ID Length: 4
Map From Length: **1**

MAILBOX ID: Start	MAILBOX ID: End	NETWORK ADDRESS DIAL PLAN MAPPING: Map From	NETWORK ADDRESS DIAL PLAN MAPPING: Map To
2000	2999	2	3035552
3000	3999	3	3035553
5000	5499	5	3035555
5800	5999		

Figure 7. Sample Dial Plan Map with Multiple Ranges (1 Map From Length)

Sample Dial Plan Mapping (Ranges That Require Different Prefixes)

In Figure 8, there are broken MAILBOX ID ranges, and one range has a different **`Map To`** prefix. This situation requires a **`Map From Length`** of **1** or greater.

In this example, the range with a different prefix, 5000 to 5999 begins with a unique Start digit. Therefore, you can enter **1** in the `Map From Length` field on the Dial Mapping Worksheet. In this case, then, the **`Map To`** digits for the ranges consist of the first digit of each range, and the **`Map From`** digits specify the area codes and local exchange 3-digit prefixes for their respective Mailbox ID ranges.

Remote Machine Name: Englewood — Mailbox ID Length: 4
Map From Length: **1**

MAILBOX ID: Start	MAILBOX ID: End	NETWORK ADDRESS DIAL PLAN MAPPING: Map From	NETWORK ADDRESS DIAL PLAN MAPPING: Map To
2000	2999	2	3035552
3000	3999	3	3035553
5000	5999	5	7205515

Figure 8. Sample Dial Plan Map with Multiple Prefixes (1 Map From Length)

Sample Dial Plan Mapping (Ranges with Different Prefixes and Shared Start Digits)

In the following example, the new system had two MAILBOX ID ranges with the same initial digit **5** (**5000** to **5499** and **5500** to **5999**), but their DID prefixes were different and, therefore, must be differentiated in the Dial Plan Map. Also, because entries in the **Map From** column for each range must be unique, there must be **2** Map From digits. That is, you ***cannot*** set up dial plan mapping with one Map From digit as follows:

Remote Machine Name: Englewood

Mailbox ID Length: 4

Map From Length: **1**

You cannot do this!! See Figure 9 instead.

MAILBOX ID:		NETWORK ADDRESS DIAL PLAN MAPPING	
Start	End	Map From	Map To
2000	2999	2	3035552
3000	3999	3	3035553
5000	5499	**5**	3035555
5500	5999	**5**	7205515

Instead, you must break out every MAILBOX ID range so that the first two digits in each range are unique (see Figure 9). This requirement includes ranges that have unique initial digits (**2000** to **2999** and **3000** to **3999** in the example). The **Map To** digits include 8 digits that specify area code, the local exchange 3-digit prefix, and two additional digits that match the **Map From** digits. When the Map To digits are added to the remaining 2 digits of the mailbox IDs, Interchange has the 10 digits required for the mailboxes.

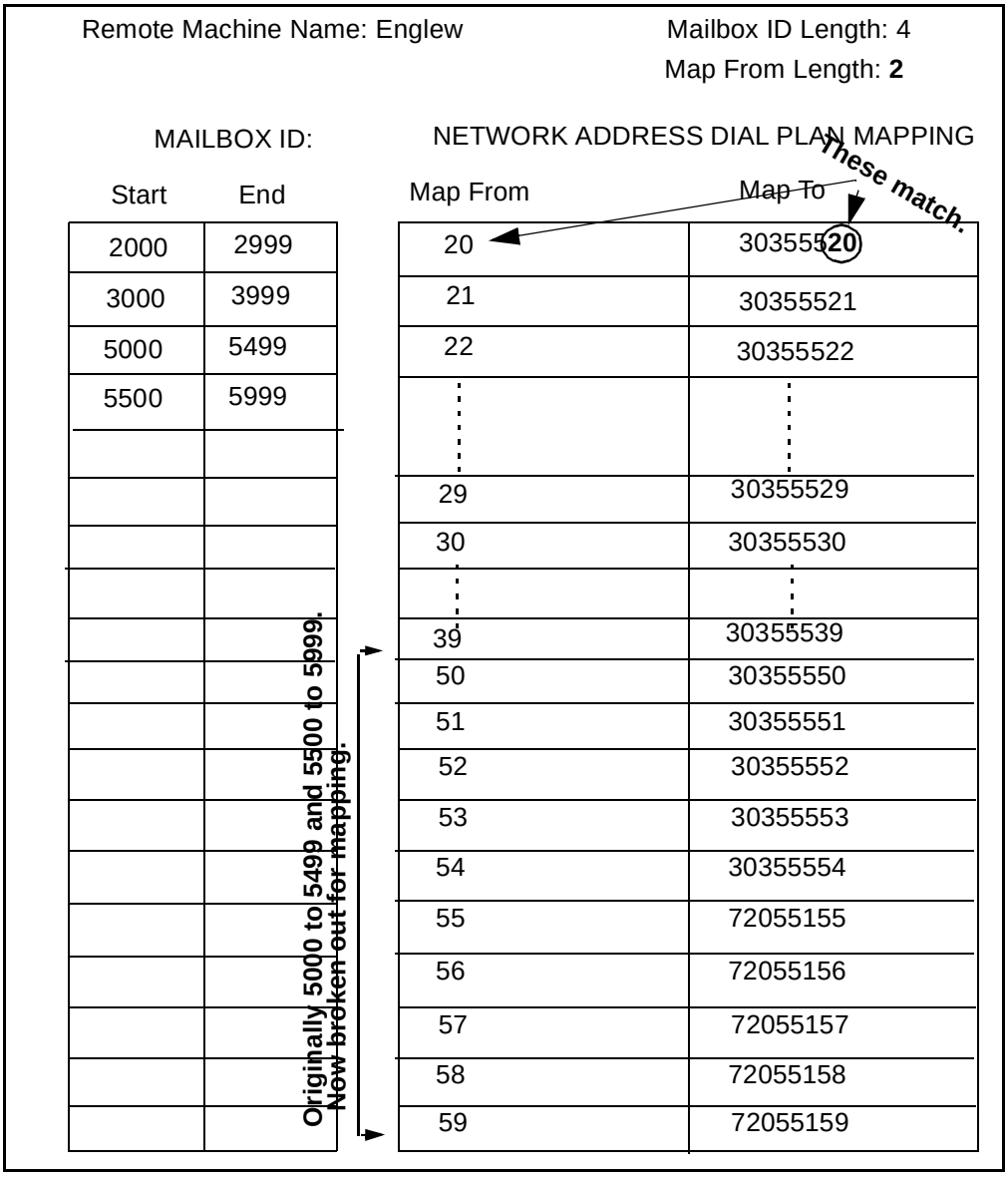


Figure 9. Dial Plan with Multiple Prefixes (2 Map From Length)

Sample Dial Plan Mapping (When Prefixes Replace Initial Mailbox Digits)

In Figure 10, there are broken MAILBOX ID ranges, and the two ranges have different **`Map To`** prefixes. *Additionally*, the mailbox IDs are part of a 5-digit Uniform Dial Plan across two switches so that the initial digits of the mailbox IDs overlap the final digits of the phone number prefixes. In this case, the Dial Plan

Map will replace the initial digit of the MAILBOX ID ranges with a different digit. This situation also requires a **`Map From Length`** of **1** or greater.

In this example, a mailbox in the first range might be **21333**, but its external phone number would be **303-555-1333**. In the Dial Plan Mapping screen, the initial mailbox digit **2** is replaced with the final digit of the prefix, in this case, **5**. A mailbox in the second range might be **54444**, but its external phone number would be **720-551-4444**. In the Dial Plan Mapping screen, the initial mailbox digit **5** is replaced with the final digit of the prefix, in this case, **1**.

Remote Machine Name: Englewood Mailbox ID Length: **5**
Map From Length: **1**

MAILBOX ID:		NETWORK ADDRESS DIAL PLAN MAPPING	
Start	End	Map From	Map To
20000	29999	2	303555
50000	59999	5	720551

Figure 10. Sample Dial Plan Map When Prefixes Replace Initial Mailbox Digits (1 Map From Length)

Dial Plan Mapping Worksheet

Remote Machine Name: _____ Mailbox ID Length: ___
Map From Length: ___

MAILBOX ID:		NETWORK ADDRESS DIAL PLAN MAPPING	
Start	End	Map From	Map To

3. In the **`Mailbox ID Length`** field, enter the number of digits in each mailbox ID. Normally, this number is **4** or **5**. Check your Planning Worksheet (see page 3).

4. In the **Map From Length** field, enter the number of digits that Interchange will replace with mapping digits to convert the current mailbox IDs to Interchange network address length and to ensure unique addresses across the Interchange network.

   The **Map From Length** can be **0** to **9** digits, and how many digits you map can vary greatly depending on how readily the new system's mailbox ranges fit into the existing Interchange network. However, as in the preceding samples, this number will often be based on considerations such as the following:

   - One range (for example, **0000** to **9999** — in this case, you might type **0**) (but see the Caution that follows).
   - Broken ranges, each with unique prefixes (for example, **2000** to **2999** with prefix 303-555 and **4000** to **4999** with prefix 720-551 — in this case, you might type **1**).
   - Multiple ranges that share start digits but have different prefixes (for example, **5000** to **5499** with prefix 303-555 and **5500** to **5999** with prefix 720-551, where **5** is a shared start digit — in this case, you might type **2**).
   - Ranges whose initial digits must be replaced with different digits (for example, a uniform dial plan range of **50000** to **59999**, but a local exchange prefix that ends in **1** — in this case, you might type **1**).

   CAUTION:
   *If you use Map From Length **0**, you **cannot** change this value later. Instead, you must remove the remote system from the Interchange network and add it again.*

5. In the **Mailbox ID Start** and **End** fields, list the mailbox ID ranges of the new system. You get the ranges from your Dial Plan Mapping Worksheet (see page 16).
6. In the first **Map From** field, type the digit(s) that match the first digit or digits of the first **MAILBOX ID Start** and **End** range. This field can be blank if Interchange will add the same Map To digits for all ranges, and no digits in the mailbox IDs must be replaced with different digits. However, the number of digits you enter must match the number of digits specified in the **Map From Length** field.

   In the example in Figure 9, the first field contains **20**, because the mailbox ID range starts with 20, and these first two digits will be replaced with the last two digits of the **Map To** digit string.
7. In the first **Map To** field, type the area code and DID prefix of the mailbox IDs. For these numbers, check your Planning Worksheet. The last digits in this field must match the digits in the **Map From** field.

In the example in Figure 9, the first field contains **30355520**, with the last two digits, **20**, as substitutes for the first two digits **20** of the mailbox range, thereby creating mailbox IDs of 10 digits. For example, the first mailbox would have a network address of **303-555-2000**, and the last mailbox in this range would have an address of **303-555-2099**.

NOTE:
If the **Map From** field is blank, the **Map To** digits will simply be added to the mailbox IDs to total 10 digits.

Task 3: Check the AMIS Analog Callback Number

1. Start at the Interchange main menu and select

```
> Interchange Administration
    > System Parameters
        > AMIS Analog Parameters
```

The system displays the AMIS Analog Parameters screen. (Figure 11).

```
                    AMIS Analog Parameters

Default Interchange Callback Number:

          Country Code      Area/Trunk      Telephone Number
               1                970              5551111

          Touch Tone Administration?  n
```

Figure 11. AMIS Analog Parameters Screen

2. Check that the **Country Code**, **Area/Trunk**, and **Telephone Number** fields are complete. Together, these fields define the hunt group (or lead) phone number on the switch that connects to Interchange. If the fields are blank, complete these fields as follows:

Country Code	Type the country code for the Interchange system. For the United States and Canada, the code is **1**. The code for the United Kingdom is **44**.
Area/Trunk	Type the 3-digit area code (US and Canada) or another appropriate code.
Telephone Number	Type the 7-digit local phone number (US and Canada) of the Interchange system or another appropriate number for the country you are in.

3. In the **Touch Tone Administration** field, leave the default **n**.
4. Press F3 (Save).

Task 4: Identify the New System to the Interchange System

1. Start at the Interchange main menu and select

```
> Networking Administration
    > Remote Machine Administration
        > AMIS Analog Machine Administration
```

The system displays the AMIS Analog Machine Administration screen (Figure 12).

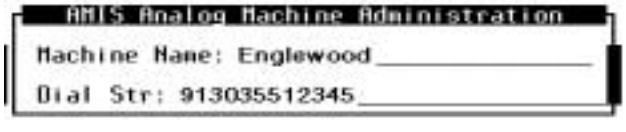


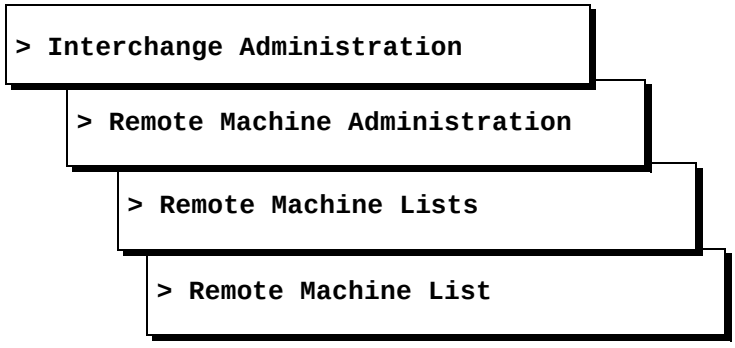
Figure 12. AMIS Analog Machine Administration Screen

2. In the `Machine Name` field, enter a name for the new system. Check with the administrator of the new system for the exact name. In the example, the name is **Englewood**, which is the location of the system.

   The name must be unique within your Interchange network.

   Use F2 (Choices) to view the existing AMIS machine names to make sure that you enter a unique name.

   CAUTION:
   The name must be unique on both the local Interchange and any other Interchange systems, if you have them, in your network. To make sure that you are using a unique name, you can check the Remote Machine List on all Interchange systems in your network. This screen lists all machine names, including AUDIX systems and those that use Serenade Digital, Aria Digital, and Octel Analog Networking protocols. The path to access this screen is as follows:



3. In the **`Dial Str`** field, enter the main phone number (the lead or "Welcome to" number) the Interchange system will use to call the new system. Get this number from your Planning Worksheet. This number could be:

   - A 4-digit or 5-digit number in a private phone network
   - An **8** (or another trunk access number) followed by a 7-digit or 10-digit number in a private network
   - A public phone number preceded by a **9**

   In the example, the number **913035512345** indicates the Interchange must call over the public network (requires **9** for outside access) and the call is long distance (requires **1**).

   You can also enter a "**P"** (including quotes) to make the Interchange pause. One pause equals 1.5 seconds. For example, if you were to enter the dial string as **9"P"13035512345**, the effect would be a 1.5-second pause after the Interchange system dialed **9**.

4. When you finish entering information for the new system, press F8 (Chg-Keys).
5. Press F2 (Add).

   After you press the key, the system adds the information and returns you to the Machine Name field. You see the following message on your screen:

   ```
   Machine Added, Enter Machine Name, use <CHOICES> for
   list
   ```

Task 5: Administer Remote Machine Parameters

Perform this task to define other characteristics of the new system, most importantly, the dial plan of the mailboxes on the new system. Use the Dial Plan Mapping Worksheet from Avaya Professional Services or your Dial Plan Mapping Worksheet (see page 16) to complete this task.

To set remote machine parameters, do the following:

1. Start at the Interchange main menu and select

   > Interchange Administration
   > Remote Machine Administration
   > Remote Machine Parameters

   The system displays the Remote Machine Parameters screen (Figure 13).

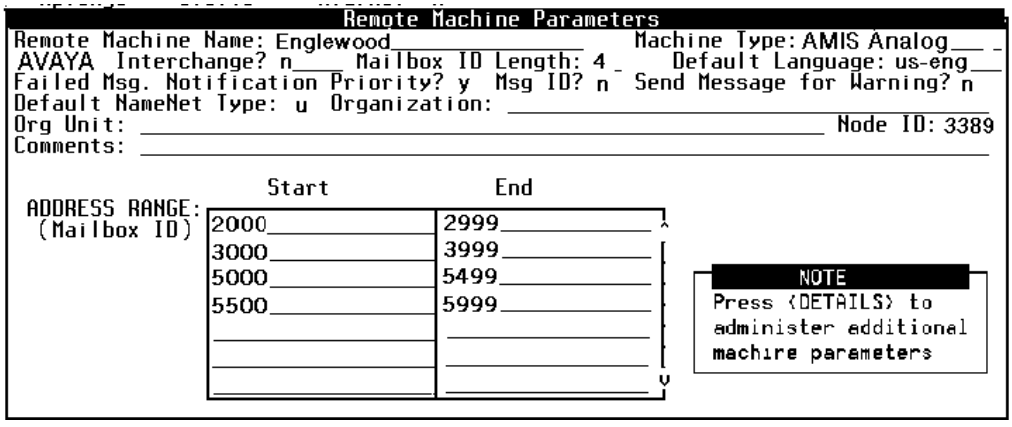


Figure 13. Remote Machine Parameters Screen

2. In the **Remote Machine Name** field, type the name of the new system you added in Task 4: Identify the New System to the Interchange System (see page 19) and press ENTER. If you do not remember the exact name, press F2 (Choices) to display a list of valid remote machines. In the example, you would type **Englewood**.

   The system automatically fills in the **Machine Type** field with **AMIS Analog**.

3. In the **Avaya** or **Intuity Interchange?** field, leave the default **n** (no). The new remote system is not an Interchange.

4. In the **Mailbox ID Length** field, type the length of the mailbox IDs of the new system. If a sample mailbox ID (or extension) is **2345**, the length is ***4***.

   In most cases, this number is **4** or **5**, but the number can be up to 10 digits if, for example, mailboxes have their own incoming trunk group. In the example, the mailbox IDs are **4** digits long.

5. Leave the defaults in the following fields:

   - **Default Language: us-eng**

     There are no other languages currently supported.

   - **Failed Msg. Notification Priority? n**

     y means that a subscriber on this system who sends a message to a subscriber on another system will receive a priority notification if the message is not delivered to that subscriber.

   - **Msg ID? n**

y means that failed message notification, if turned on, will include the original message ID.

- **Send Message for Warning? n**

  y indicates that the **original** message is sent back to a subscriber after he or she has sent a message from the Serenade system to a subscriber on a remote system that has the Extended Absence Greeting (EAG) warning activated. The return of this message is in addition to the message indicating the actual EAG warning condition.

- **Default NameNet Type: U**

  U means ‘‘usage-based’’ and indicates that directory entries are temporarily available based on the network traffic of a particular remote system. This field is used when subscribers associated with this new system are stored on a legacy Octel system as NameNet entries.

- **Organization:** Leave blank.

  This field is for your information. It can be a record of the name of the organization this system supports, the name of the organization that maintains the system, or any other name you choose.

- **Org Unit:** Leave blank.

  This field is for your information. It can be a record of the department number this system supports, the department number that maintains the system, or any other name or number you choose.

- **Node ID:** Display only, created by Interchange.

- **Comments:** Leave **none.**

  This field is for your information. You might want to enter the name and phone number of the contact person for the new system.

6. In the **ADDRESS RANGE (Mailbox ID)** fields, type the address ranges (up to 10) of the new system. While the screen allows you to enter more than 10 ranges, Interchange recognizes only the first 10 ranges you enter. Check your Dial Plan Mapping Worksheet for these ranges.

   CAUTION:
   *Do **not** simply use the ranges from your Planning Worksheet or the ranges given to you by the switch administrator for the new system. Also use the Dial Plan Mapping Worksheet that you received from Professional Services or the worksheet you completed yourself. The ranges you enter here will reappear on the Dial Plan Mapping screen, which you will complete in* *Task 6: Map the New System’s Dial Plan for Interchange (see page 27)**.*

   In the example (Figure 13), the mailbox ranges reflect the ranges

*entered on the Planning Worksheet as **2000** to **2999**, **3000** to **3999**, **5000** to **5499**, and **5500** to **5999**. The 5000 to 5999 range was broken out into two ranges to simply illustrate and emphasize the fact that the latter half of the range, **5500** to **5999**, has a different area code and local exchange prefix from that of **5000** to **5499**. You could actually enter the 5000 to 5999 range as a single range on the Remote Parameters screen and then later break down the range on the Dial Plan Mapping screen to deal with the differing prefixes within the range.*

CAUTION:
*Be sure that ranges do **not** include the extensions of automated attendants, bulletin boards, and other special mailboxes that are not intended to accept messages. If these mailboxes are included, then messages sent to Enterprise Lists defined by remote machine will fail and will show up in your delivery status reports. More importantly, messages might actually be sent to mailboxes that are not intended to receive E-list messages.*

7. Press ENTER or TAB if you need to add more ranges than those that are available on the initial screen.
8. After you have entered all appropriate address ranges, press F5 (Details).

   The Machine Profile screen appears (Figure 14). It contains display-only defaults for the **Remote Machine Name** and **Timing Type** fields.

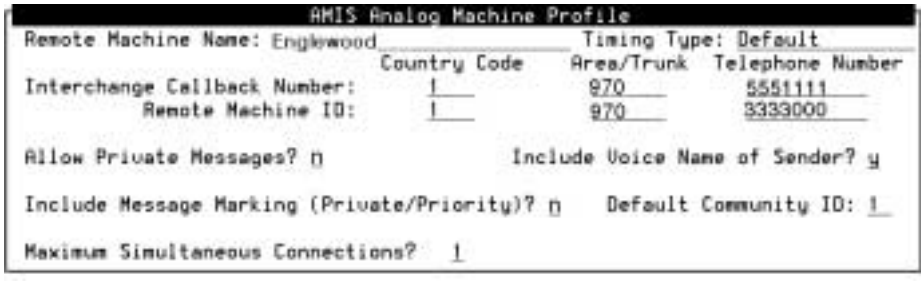


Figure 14. AMIS Analog Machine Profile Screen

9. Note the **Interchange Callback Number** fields. The number in these fields is the default, if any, entered in the AMIS Analog Parameters screen. If necessary, you can change this number for the specific system you are adding. This might be the case if, for example, the new system were able to call Interchange by using a 5-digit private network extension.

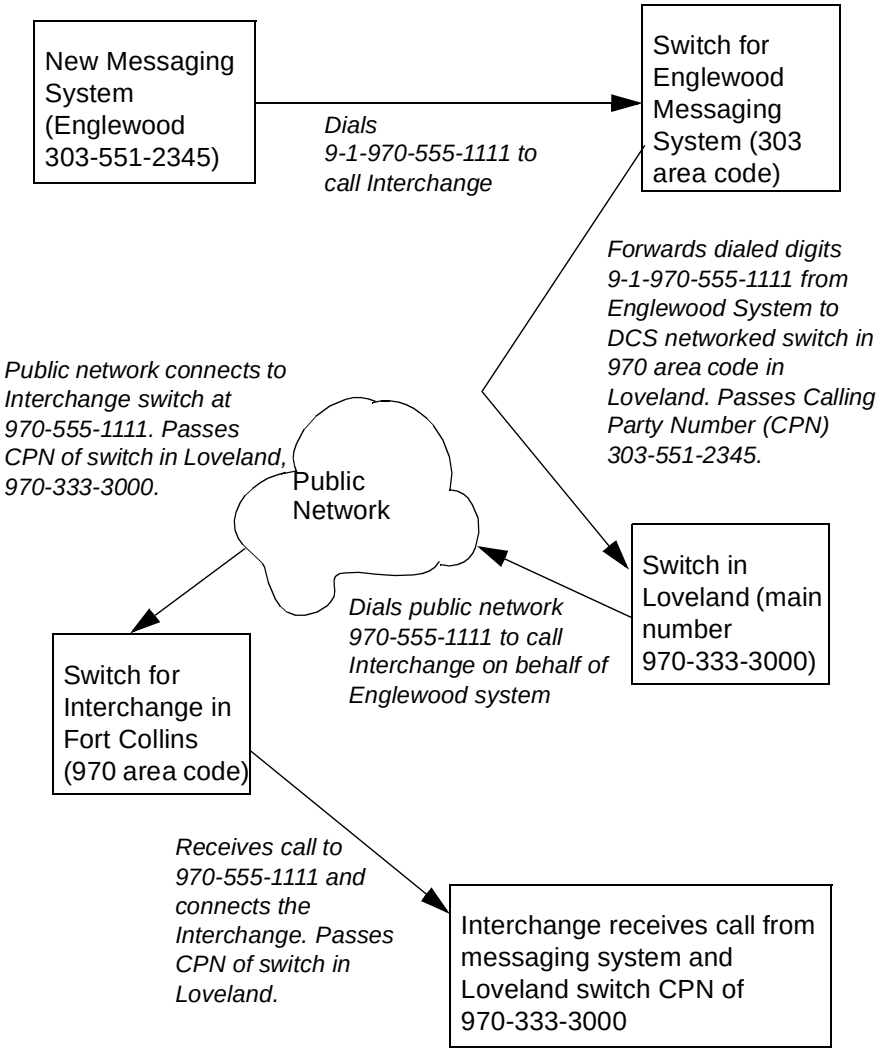
In the example, the number is **1 970 555 1111**, which is in the United States and has a Northern Colorado area code.

CAUTION:
This number must match exactly the dial string, or phone number, that the new messaging system will use to call the Interchange system. You must check with the switch administrator and/or messaging system administrator of the new system to find out what the actual number is that the system will dial. As with the Dial String for Interchange to call the new system, this number will vary depending on whether the system calls by using the public network, a private network with a trunk access code, or a private uniform dialing plan.

10. In the **`Remote Machine ID`** field, type the dialed digits that Interchange receives when the messaging system calls. These digits serve as a password so that Interchange can recognize the messaging system as a valid caller.

CAUTION:
*This number might or **might not** be the same phone number that Interchange dials to call the messaging system (as entered on the AMIS Analog Machine Administration screen, Figure 14). Therefore, as in Step 9, you must check with the switch administrator of the new messaging system to determine what these digits will be. On DEFINITY and IP600 switches that use Alternate Route Selection (ARS — for public networks) or Automatic Alternate Routing (AAR — for private networks), AAR/ARS Digit Analysis and Route Pattern Selection can cause profound differences in the digits the messaging system's phone number and the digits the Interchange receives.*

See the following diagram for an example of how digits can change:



In the example, the messaging system, whose number is **303-551-2345**, dials the public long distance number for Interchange **9-1-970-555-1111**. However, the Calling Party Number that Interchange receives is the phone number of the Loveland switch, **970-333-3000**.

11. Leave the defaults in the following fields:

    - **`Allow Private Messages? n`**

      y allows Interchange to send private messages to mailboxes on this system.

      CAUTION:
      *If set to **y**, subscribers can forward a private message they have received.*

- **Include Voice Name of Sender? y**

  y allows Interchange to send, along with the message, the recorded name of the sender to the recipient on the new system.

- **Include Message Marking (Private/ Priority)? y**

  y allows Interchange to send the private or priority marking of messages to mailboxes on the new system.

12. In the **Default Community ID** field, leave the default **1**.

    Additional communities might exist on AUDIX systems in the network. If you want to give permissions to subscribers on this system for specific AUDIX community IDs, use the Subscriber Parameter Administration screen.

13. In the **Maximum Simultaneous Connections** field, type the maximum number of simultaneous AMIS connections the new messaging system will allow. This number must match exactly the maximum allowable AMIS connections (or ports) administered on the new system. Check with the administrator of the new system.

    Normally, when there is a single hunt group assigned to the messaging system, **1** AMIS port, or connection, on that hunt group is allowed so that the remaining ports will be free for regular messaging. In the example, **1** simultaneous connection is allowed.

    If the new system has a second messaging hunt group specifically for AMIS, the maximum simultaneous ports can be as many as are assigned for that hunt group.

14. Press F3 (Save).

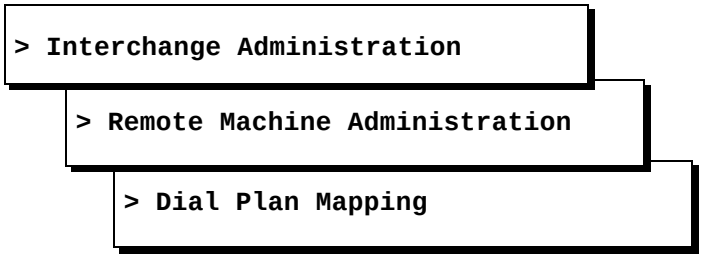
Task 6: Map the New System's Dial Plan for Interchange

Interchange uses a single-length dial plan for its network. You will have to map the dial plan of the new system to the Interchange network address length.

To do this mapping, you need the Dial Plan Mapping Worksheet from Professional Services or a worksheet you completed on your own. These worksheets list the area codes and central office prefixes that can be used in conjunction with the new system's dial plan to create Interchange network addresses, usually addresses that match external direct dialing of the new system's mailboxes.

To administer the remote machine dial plan, do the following:

1. Start at the Interchange Main menu and select



The system displays the Dial Plan Mapping screen (Figure 15).

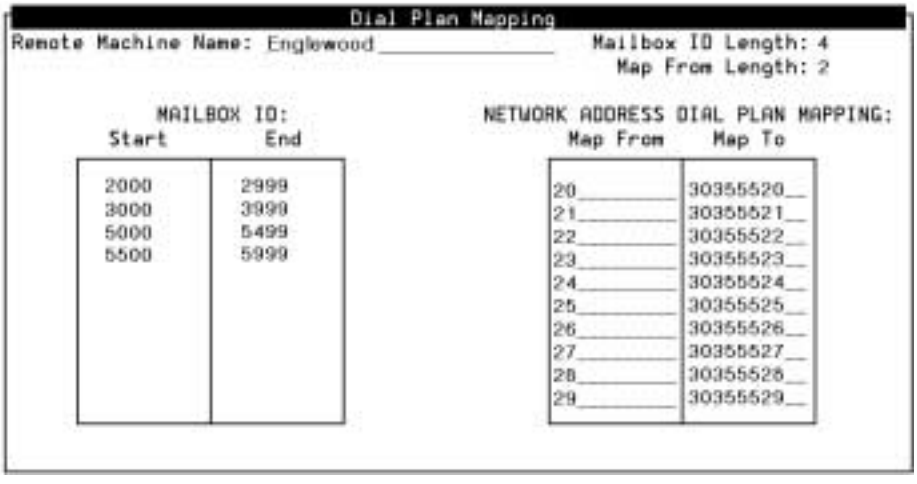


Figure 15. Dial Plan Mapping Screen

2. In the **Remote Machine Name** field, type the name of the new system, and press ENTER. If you do not remember the exact name, press F2 (Choices) to display a list of valid remote machines. In the example, you would type **Englewood**.

   After you press ENTER, the system displays information in the Mailbox ID Length and MAILBOX ID Start and End fields. You had entered this information previously in the Remote Machine Parameters screen.

3. In the **Map From Length** field, type the number of digits, within each mailbox ID, for which Interchange will substitute digits. Check the list of **MAILBOX ID**s. If you have a single range (for example, **30000** to **60000**) or multiple ranges that use the same prefix, enter **0** in the Map From Length field. In this case, you can leave the Map From column for the range blank.

If you have more than one range (usually to accommodate different area codes or DID prefixes), and the first digit of the `Start` and `End` fields for each range are unique, enter **1** in the `Map From Length` field. Also enter **1** if the last digit of the **`Map From`** prefix has to replace the first digit of the **`MAILBOX IDS`**.

If any ranges share first digits but have different prefixes, then you may need to enter **2** or higher in the `Map From Length` field.

CAUTION:
*Be careful about using **0** in the **`Map From Length`** field. If you change your dial plan later (for example, if you add more extensions that have a different DID prefix) and need to add Mailbox ID ranges for this system, you will have to remove the system from the Interchange network and add it again with the new dial plan. This task could entail a significant amount of work.*

*Therefore, if you anticipate the need to change the dial plan for this endpoint in the future, you might want to use a "Map From Length" of **1** or more. See Figure 7 on page 12, which illustrates the alternative to Map From Length **0** in anticipation of future changes.*

4. In the first **`Map From`** field, type the digit (or digits) that match the first digit (or digits) of the first **`MAILBOX ID Start`** and **`End`** range. This field must be blank if the `Map From Length` field is **0**. Otherwise, the number of digits you enter must match the number of digits specified in the **`Map From Length`** field.

   In the example, the first field contains **20**, because the mailbox ID range starts with 20, and these first two digits will be replaced with the last two digits of the **`Map To`** digit string.

5. In the first **`Map To`** field, type the area code and DID prefix of the mailbox IDs. Check your Planning Worksheet for these numbers. The last digits in this field must match the digits in the **`Map From`** field.

   In the example, the field contains **30355520**, with the last two digits, **20,** as substitutes for the first two digits **20** of the mailbox range, thereby creating mailbox IDs of 10 digits. For example, the first mailbox would have an Interchange network address of **303-555-2000**, and the last mailbox in this range would have an address of **303-555-2099**.

   NOTE:
   If the **`Map From`** field is blank, the **`Map To`** digits will simply be added to the mailbox IDs to total 10 digits.

6. Repeat Step 4 and Step 5 for each mailbox ID range.

NOTE:
There can be more than one DID prefix for the new system. Again, check your Planning Worksheet or consult your switch administrator for the new system.

In the example (see Figure 9 on page 14 for a full illustration), the range **5500** to **5999** has the area code **720** and the local exchange prefix of **551**, which is different than the prefix for the range **5000** to **5499**.

7. Press F3 (Save).

CAUTION:
Use F7 (Options) only as described later in this document. Do not use F7 to delete or replace subscribers without first contacting your service support representatives, as the options can cause unexpected negative results.

Task 7: Administer AMIS Analog Timing Parameters

The AMIS Analog Timing Administration screens allow you to define the timing parameters used by AMIS Analog protocol.

CAUTION:
It is strongly recommended that you simply select a set of existing timing parameters appropriate for AMIS. Changing specific parameters can have an adverse effect on the quality of your messaging.

Defining Timing Parameters

To define timing parameters, do the following:

1. Start at the Interchange main menu and select

```
> Interchange Administration
    > Remote Machine Administration
        > AMIS Analog Timing Administration
            > Timing Parameter Definition
```

The system displays the Timing Parameter Definition screen (Figure 16).

Figure 16. Timing Parameter Definition Screen

2. Review the timing parameters (descriptions are in Table 16-1 that follows), and find the **Timing Type** that matches the type of the new messaging system. Note the Timing Type, and write it down.
3. Press F3 (Save).
4. Press F6 (Cancel) to return to the AMIS Analog Timing Administration menu.

Table 16-1. Timing Parameter Definition Screen Field Descriptions

Field	Description
SENDING	
Transmit Delay	Amount of time (in seconds) to wait before transmitting an analog protocol frame to a remote machine
Response Delay	Amount of time (in seconds) to wait before sending a response to a remote machine
Play Delay	Amount of time (in seconds) to wait before playing a message for a remote machine
RECEIVING	
Transmit Delay	Amount of time (in seconds) to wait before looking for or acknowledging an analog protocol frame from a remote machine
Response Delay	Amount of time (in seconds) to wait before sending a response to a remote machine regarding a message received
Record Delay	Amount of time (in seconds) to wait before recording a message from a remote machine

5. Start at the AMIS Analog Timing Administration menu and select

```
> Remote Machine Mapping
```

The system displays the Remote Machine Mapping screen (Figure 17).

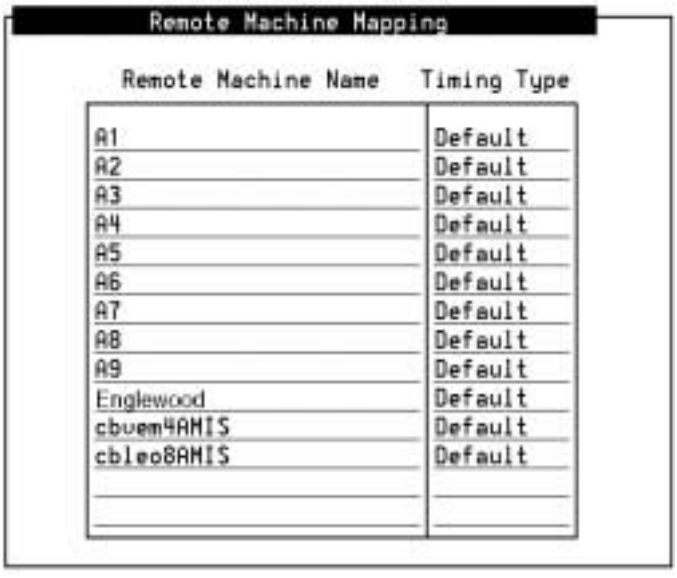


Figure 17. Remote Machine Mapping Screen

6. Tab to the **Timing Type** field associated with the system name you are adding, and type the Timing Type you wrote down in Step 2.

NOTE:
For a list of timing types, press the F2 (Choices) key.

7. Press F3 (Save).
8. Press F6 (Cancel) to return to the Interchange Administration menu.

Task 8: Add Remote Subscribers to Interchange

Add remote subscribers to Interchange so that Interchange can pass on messages to those subscribers.

The following options for adding subscribers are available:

- Bulk Subscriber Administration by FTP File (recommended)

- Universal Self-Registration Agent (recommended)
- Sending Messages Through Interchange
- Adding Subscribers Through the Subscriber Parameters Administration screen
- Bulk Subscriber Administration by Range

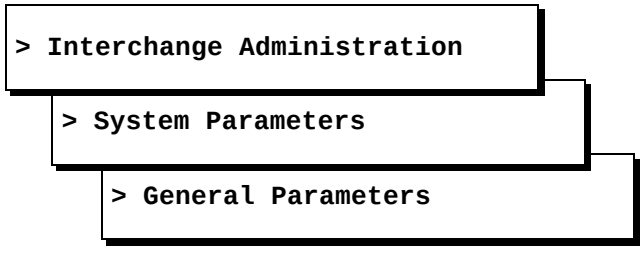
Avaya does *not* recommend the use of bulk administration by range to add subscribers because this method reserves disk space for every extension or mailbox ID included in the range, even if no subscribers have been administered within the range. Use this option only as a last resort.

Adding Subscribers Through Self-Registration

Avaya recommends subscriber self-registration for AMIS systems. For self-registration, you notify each subscriber to send his or her voiced name to Interchange, which registers the subscribers' mailboxes and captures the voice recordings of their names so that the names can be sent across the network with AMIS messages.

For self-registration, do the following:

1. Start at the Interchange main menu and select



The system displays the General Parameters screen (Figure 18).

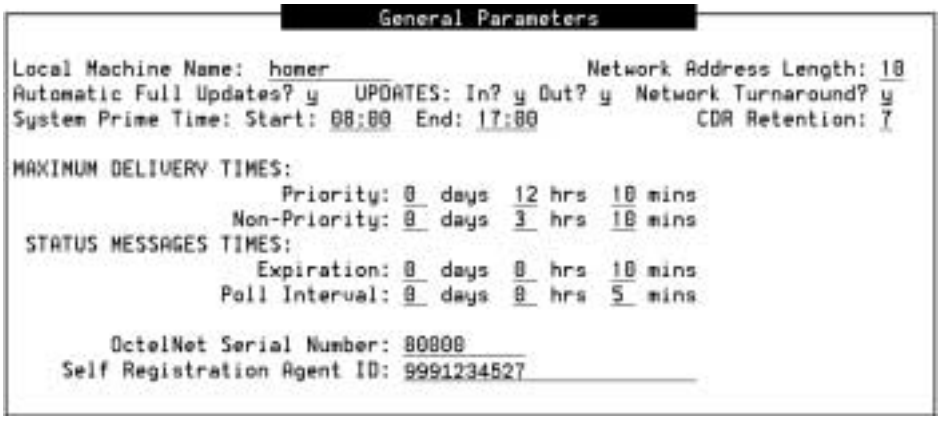


Figure 18. General Parameters Screen

2. In the **Self Registration Agent ID** field, type a 10-digit phone number to which each remote subscriber can send a message with a recording of the subscriber's voiced name only. Other messaging systems (VPIM and Aria Octel Analog Networking systems) in the Interchange network might also use this number.

   This number should use a fictitious area code and prefix to ensure the messages do not go to a real phone number or mailbox, either within your Interchange network or in the public network. You might use an alphabetical code so subscribers can easily remember the number. For example, the number 734 478 3763 spells REGISTER ME on the telephone dial pad.

   In the example, the phone number for self-registration is **9991234527**.

3. Press F3 (Save).
4. Press F6 (Cancel) to return to the System Parameters menu.
5. Use a broadcast message, recorded by the administrator of the new messaging system, to notify subscribers of self-registration.

   Instructions might tell each subscriber to:

   a. Log in to the messaging system.

   b. Record only his or her name in a message.

   c. Send the message to the self-registration phone number.

If subscribers fail to self-register, they will fail to receive messages from other messaging systems. However, if subscribers on the new system later send messages through the Interchange network, Interchange can identify them and register those subscribers for the new system. In this latter case, Interchange will not send the voiced names.

Adding Subscribers Through FTP

Avaya also recommends the use of FTP to upload the names of subscribers on the new system so that other subscribers within the network can address messages by using the names of the new subscribers.

To use FTP to load subscriber lists to Interchange, do the following:

1. Create an ASCII file with a text-only tool such as NotePad.
2. Give the file a name in the format **`name.add`** (in the example, the file name would be **Englewood.add**).
3. Using the following format, type subscriber names into the file:

   `machine_name`|*`mailbox_ID`*|*`lastname,firstname`*|*`community_ID`*||

   `mailbox ID` is the actual mailbox ID as it appears on the new messaging system. **`community_ID`** can be blank or **1**, unless the new messaging system uses more than one community ID. The "pipe" symbol (|) is used to separate units of data and normally appears on your keyboard on the same key as the backslash (\).

   Our example might have an entry such as:

   Englew|22444|jones,bob|1||

   or leave the community ID field blank as in:

   Englew|22444|jones,bob|||

   CAUTION:
   Be sure there are no blank spaces after the comma, pipe symbols, or at the beginning or end of each entry. Also, the names are case sensitive.

4. Press ENTER or the equivalent of a carriage return on your keyboard.
5. Repeat Step 3 for every subscriber currently administered on the new messaging system.
6. Save the file.
7. Upload the file to Interchange by using the following steps. You can use an FTP tool you are familiar with. However, be sure to transfer the file as an *ASCII* file, *not* as a binary file.

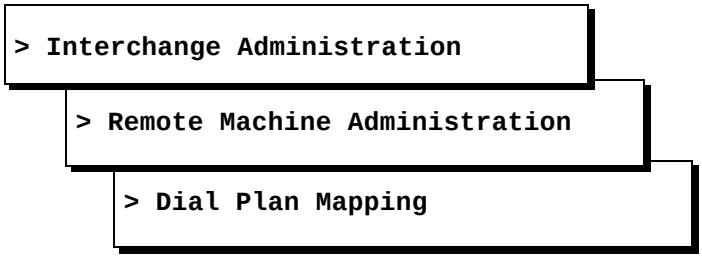
   a. In the tool, enter the IP address of the Interchange.

   b. Enter the user ID *icftp* and password for the Interchange *iclog/icftp* directory.

   c. Select the *amis_sub* subdirectory and move the FTP file, *as an ASCII file*, to the directory.

   When the file is uploaded, exit from your FTP tool and continue with Step 8.

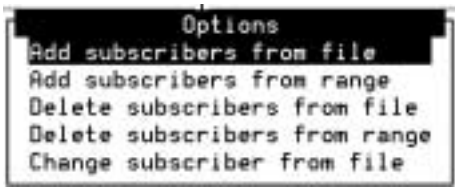
8. Start at the Interchange main menu and select



   The system displays the Dial Plan Mapping screen (Figure 15).

9. Press F7 (Options).

   The system displays the Options menu.



10. Select **Add subscribers from file**, and press ENTER**.**

    The system displays the Confirm window (Figure 19).

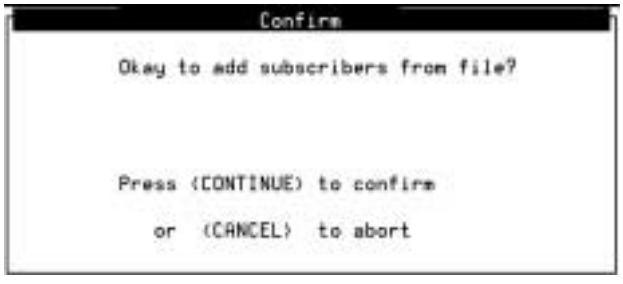


Figure 19. Confirm Window

11. Press F3 (Continue).

    The system will add all subscriber names. Additionally, Interchange changes the name of file *filename.add* to *filename.add.done* and adds a file called *filename.add.log.* In the example, the files would be called **Englewood.add.done** *and* **Englewood.add.log***.*

12. Press F6 (Cancel) to return to the Interchange Administration menu.

13. Access the Interchange FTP directory with your FTP tool again.

14. Download to your computer from Interchange the file *filename.add.log.*
15. Open the *filename.add.log* file in an ASCII text editor such as NotePad to see if there were any problems with adding subscribers.
16. From the Interchange main menu, select

```
> Interchange Administration
    > Subscriber Administration
        > Subscriber Lists
```

The system displays the Subscriber Lists menu (Figure 20).

Figure 20. Subscriber Lists Menu

17. Select **By Remote Machine Name**.

    The Subscriber List By Remote Machine Name appears.
18. Check the number of subscribers to see if the number matches the number of subscribers administered on the AMIS system.
19. Press F6 (Cancel) to return to the Interchange Administration menu.

Task 9: Verify That the Endpoint Has Been Administered

Use the Remote Machine List and Remote Machine Dial Plan List to verify that you have appropriately added the new messaging system.

To access the Remote Machine List, do the following:

1. Start at the Interchange main menu and select

```
> Interchange Administration
    > Remote Machine Administration
        > Remote Machine Lists
            > Remote Machine List
```

The system displays the Remote Machine List (Figure 21).

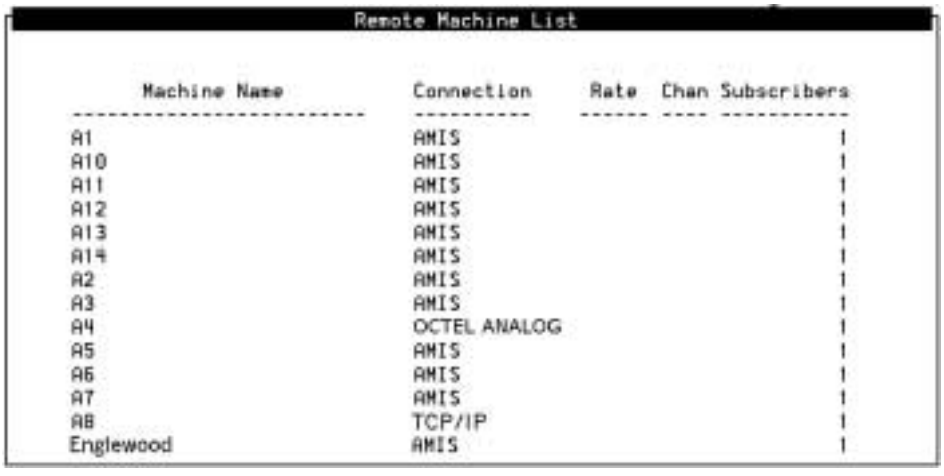


Figure 21. Remote Machine List

2. In the **Machine Name** column, look for the name of the new system. The name would be **Englewood**, in the example.
3. Verify that the **Connection** column for your new system says **AMIS**.
4. Press F6 (Cancel) to return to the Remote Machine List menu.
5. From the Remote Machine List menu, select

```
> Remote Machine Dial Plan List
```

The system displays the Remote Machine Dial Plan List (Figure 22).

Remote Machine Dial Plan List

Machine Name	Type	Mailbox ID Start	Mailbox ID End	Extension Mapping From	Extension Mapping To
A1	AMIS	6148682778	6148682778		
A10	AMIS	6148682787	6148682787		
A11	AMIS	6148682788	6148682788		
A12	AMIS	6148682789	6148682789		
A13	AMIS	6148682790	6148682790		
Englewood	AMIS	2000	2999	20	30355520
Englewood	AMIS	3000	3999	21	30355521

Figure 22. Remote Machine Dial Plan List Screen

6. In the **Machine Name** column, locate the name of the new system.
7. Verify that the data in every column is correct.
8. Press F6 (Cancel) to exit the Remote Machine Dial Plan List.

Task 10: Create an Interchange Profile on the New System

After you have completed your administration of Interchange so that Interchange recognizes the new system, you must administer the new system so that it recognizes Interchange.

The key information you need is:

- The phone number the new system must use to call Interchange

  As when Interchange dials the new system, the phone number you enter must take into account whether the calls will occur over a private or public network. This, in turn, will determine whether an outside access number (normally 9), a network access number (normally 8), or a private network extension (usually 4 or 5 digits) will be used, and whether a long-distance number (1) needs to be included.

- The actual phone digits the new system receives to identify the Interchange system

When the new system calls Interchange and Interchange receives digits to identify the new system, the new system will receive digits identifying Interchange. The actual digits the new system receives, however, could be different from the Interchange phone number, depending on how Interchange calls to the system are routed.

The administrator of the new messaging system must check with the Interchange local switch administrator to determine which digits the new messaging system will receive.

Task 11: Test the Connection

To test the connection between Interchange and the new messaging system, do the following:

1. Log in to a test voice mailbox of the new messaging system. Either you or the system administrator of the new messaging system can do this. For the test mailbox, check the **End Node Test Mailboxes** identified in your Planning Worksheet (see page 3).
2. Self-register the voice mailbox with Interchange by doing the following:
    a. Create a test message that contains only the name of the mailbox.
    b. Send the message to the Self-Registration address you created in Task 8: Add Remote Subscribers to Interchange (see page 32).
3. Log in to a voice mailbox on a *different* messaging system in the Interchange network.
4. Create a test message (for example, “This is a test message from Bob. Please message me back”).
5. Address and send the message to the test mailbox on the new messaging system. The address includes the whole Interchange network address, which includes the Map To digits, as defined in Task 6: Map the New System’s Dial Plan for Interchange (see page 27), and the remaining digits of the specific mailbox.
6. In the test mailbox on the new system, listen to the test message sent in Step 5. Also, in the test mailbox, send a reply to the test message back to the mailbox on the other system.
7. Listen to the reply in the mailbox you logged in to in Step 3.

Task 12: Update Remote Systems for Subscribers on the New System

Once you have added the new system to the Interchange network, the other remote systems in the network need to recognize the subscribers on the new system for name addressing. The method you use to update a remote system for

the new system's subscribers depends on what type of system the remote system is and how you have administered the Subscriber Update Type for that system (see Table 1).

NOTE:
If, over a short period of time, you are adding more than one system to your Interchange network, you might want to wait until all systems have been added before manually updating the existing systems in your network.

Table 1. Remote Node Update Options

Update Type	Remote System Type	Steps to Update a Remote System
Full	Intuity AUDIX TCP/IP, DCP, RS-232	If you have the **full** Subscriber Update Type turned on for an Intuity AUDIX remote system, perform Manually Update an Intuity AUDIX System (see page 42) (do this during off-hours for RS-232 systems).
	Aria, Serenade, and Octel 100	If you have the **full** Subscriber Update Type turned on for an Aria, Serenade, or Octel 100 remote system, perform the steps in Manually Update an Aria or Serenade System (see page 44) for the remote system. These steps are identical for all Aria, Serenade, and Octel 100 systems. If the remote system uses Octel Analog Networking, complete this task during off hours.
	VPIM/AMIS	Full updates are not supported.
Dynamic	All systems	No action is required if the remote system already uses dynamic updates. Subscribers on the new system become known to subscribers on the existing remote system as subscribers from the new system send messages to subscribers on the remote system or vice-versa. This method, of course, means that subscribers on the remote system cannot address a subscriber by name on the new system until a message has been sent to or from that subscriber.

Table 1. Remote Node Update Options

Directory Views	Intuity AUDIX TCP/IP, DCP, RS-232	If you have directory views turned on for an Intuity AUDIX remote system, add the new system to the Directory Views screen for the Intuity AUDIX. Then, perform Manually Update an Intuity AUDIX System (see page 42) (do this during off-hours for RS-232 systems).
	Aria, Serenade, and Octel 100	If you have directory views turned on for an Aria or Serenade remote system, add the new system to the Directory Views screen for the remote system. Then, perform the steps in Manually Update an Aria or Serenade System (see page 44) for the remote system. These steps are identical for all Aria, Serenade, and Octel 100 systems. If the remote system uses Octel Analog Networking, complete this task during off hours.
	VPIM/AMIS	Directory Views are not supported.

Manually Update an Intuity AUDIX System

NOTE:
You perform this task on the Intuity AUDIX endpoint itself, not on Interchange. This task applies only to Intuity AUDIX systems that have full or directory views for their subscriber update types.

To update an Intuity AUDIX system in the network with subscribers in the system you just added, use the following steps:

1. Starting from the Intuity AUDIX main menu, select

   ```
   >AUDIX Administration
   ```

   The system displays a blank AUDIX screen.

2. Enter **list measurements feature day** at the **`enter command:`** prompt.

   The system displays the Feature Daily Traffic screen.

3. Write down the current number of remote users.

4. Press F6 (Cancel).

   The cursor returns to the command line.

5. Enter **get remote_updates *remote_machine_name*** at the `enter command:` prompt, where ***remote_machine_name*** is the name of Interchange.

In the example, the name for Interchange is **central**.

The system displays the Remote Update Request screen (Figure 2).

```
fort collins          Active          Alarms:  mwA                    Logins: 4
get remote_updates central                                          Page 1 of 1
                            REMOTE UPDATE REQUEST


Request Full Update from Machine:  central

            Status of Last Update:  completed

            Last Completed Update:  01/10/01 19:54

    Press [Enter]  for Full Update Request
          [Cancel] to Abort









enter command: get remote_updates central
```

Figure 2. Intuity AUDIX Remote Update Request Screen

6. Press ENTER to begin the remote update or press F6 (Cancel).

   The system begins the remote update.

   NOTE:
   The update might take some time, possibly hours, depending on the number of users on the remote system.

7. When the remote update is completed, enter **list remote extensions *remote_machine_name*** at the **`enter command:`** prompt, where ***remote_machine_name*** is Interchange's name.

   The system displays the List Remote Extensions screen.

8. Check that the remote users of Interchange's new system are listed.

9. Enter **list measurements feature day** at the **`enter command:`** prompt.

   The system displays the Feature Daily Traffic screen.

10. Verify the new number of remote users.

11. Enter **display administration-log** at the **`enter command:`** prompt.

The system displays the Administration Log screen.

12. Verify that no conflicts or problems occurred with the remote update.
13. Press F1 (Cancel).

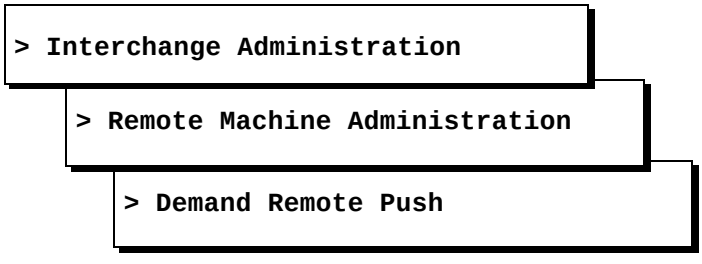
    The cursor returns to the command line, and the system displays the message `Command Successfully Completed`.
14. Enter **exit** at the **`enter command:`** prompt to leave AUDIX Administration.

Manually Update an Aria or Serenade System

NOTE:
The following procedure can require a great deal of time to complete since the communication is over an analog connection. As a result, full and Directory View updates are generally not recommended for systems using Octel Analog Networking.

To update Aria, Serenade, and Octel 100 systems with the subscribers in the system you just added, perform a demand remote push on Interchange. To perform a demand remote push, do the following:

1. Start at the Interchange main menu and select



The system displays the Demand Remote Push screen (Figure 3).

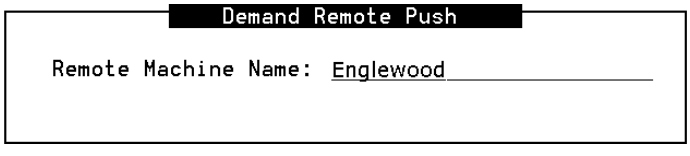


Figure 3. Demand Remote Push Screen

2. Enter a remote machine name, or press F2 (Choices) to display a list of valid remote machines.
3. Press F3 (Continue).

4. The system will display the following Demand Remote Push screen (Figure 3-1).

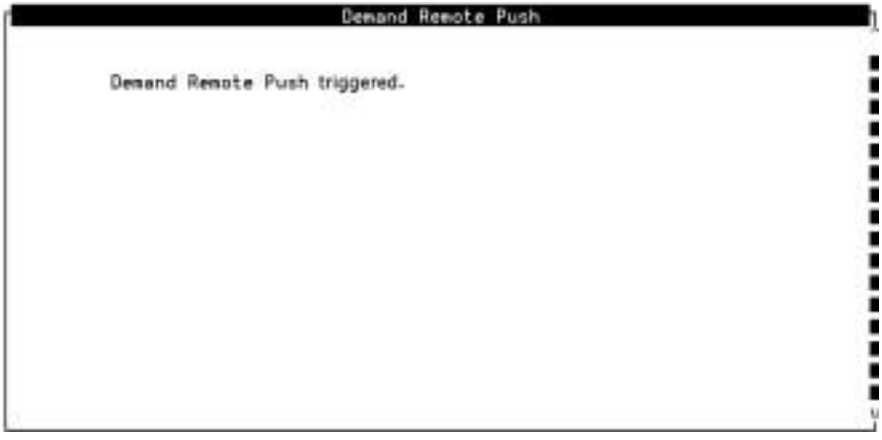


Figure 3-1. Demand Remote Push Screen

The system will now update the Aria, Serenade, or Octel 100 remote system with any ASCII or voiced names which have been added on Interchange from the new system.

NOTE:
You can press F5 (Abort) to stop the demand remote push or F6 (Cancel) to return to the previous and re-enter an extension range.

5. Press F6 (Cancel) until you return to the Interchange Administration menu.