

MiCollab Advanced Messaging 23.2

Analog Networking

System Administrator Guide

For version 23.2 and above

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Preface

This guide describes analog networking, an optional feature of MiCollab Advanced Messaging (MiCollab AM) that lets companies link their voice-messaging systems.

This guide is written for Mitel-certified administrators and technicians who are familiar with MiCollab Advanced Messaging (MiCollab AM) procedures and terminology, the **MiCollab AM Configuration** utility, and the Microsoft Windows® operating system.

References

A catalog of technical documentation is included on the MiCollab AM Installation Media. If you are installing any advanced applications, such as Networking and Fax Server applications, you should refer to the appropriate technical documentation for application and installation information.

Documentation

The technical documentation is produced in the PDF format and requires the PDF reader to view it. The MiCollab AM Documentation Library includes the following documents and resources:

- **Administration Documentation.** Available as a PDF only. Contains the following:
 - **Administration Guides.** Available as a PDF only. Contains administrative guides for administrators about how to manage and configure the messaging system.
 - **Quick Reference Cards (QRC).** Contains shortcuts and quick instructions telling subscribers how to access and use the messaging system.
 - **User Guides.** Available as a PDF only. Contains user guides for subscribers about accessing the messaging system and checking and sending messages.
- **Server Documentation.** Available as a PDF only. Contains the following:
 - **Developer Resources.** Contains programming guides and API references for developers for integrating the server clients and web applications with MiCollab AM.
 - **Installation and Configuration.** Available as a PDF only. Contains installation and configuration guides for server administrators about how to install and configure the messaging system.
 - **Integration Technical Notes (ITN).** Contains a set of guides that describe the integration methods and instructions for a variety of phone systems to work with MiCollab AM. The ITNs are generally used by resellers or administrators who are experienced with MiCollab AM and familiar with the integration procedures and terminology.
 - **Spare Parts Documentation.** Contains a set of guides that describe the instructions for installing and configuring hardware parts to work with MiCollab AM. These documents are

written for Mitel-certified MiCollab AM technicians who are experienced with MiCollab AM and familiar with the procedures and terminology.

- **Software Release Notice (SRN).** This notice introduces the new features, capabilities, and hardware/software requirements for the corresponding MiCollab AM version.

Documentation Updates

Documentation updates may be available from the following sources:

- Mitel-certified technicians can view or download documents and program files from our partner web site: www.mitel.com

Help

The primary source of information about MiCollab AM is the online help available within any of its administrative utilities. You can access **Help** by clicking the **Help** button in the dialog box or window in which you are working.

Document Conventions

The following conventions are used in this document:

- **Key Names.** Names of keys on the keyboard are shown in a box.

Example: **Enter**

When two keys must be pressed simultaneously, they are joined by a + sign.

Example: **Alt** + **Tab**

- **Reference to Document** Titles of other documents are shown in italics.

Example: See the *System Installation and Configuration Guide*.

- **User Interface (UI) Element Names.** Names of UI elements such as dialog boxes, windows, screens, menu items, tabs, buttons, and icons are shown in bold.

Example: On the **Startup** screen, click the **Start** icon.

- **User Input.** Information required to be typed is shown in italics.

Example: Type the password *voicemail*.

- **Warning, Caution, Important, and Notes.** Text for the contents that require attention are shown as follows:

WARNING A warning paragraph advises you of circumstances that can result in the loss of data, harm to the MiCollab AM System Server platform, or personal harm.

CAUTION Failure to follow these recommendations can result in unauthorized access to the system and consequent loss of data.

IMPORTANT An important paragraph gives decision-making information or informs you of the order in which tasks need to be completed.

NOTE A note gives additional information, provides an explanation, or indicates an exception to the information in the preceding text.

For more related documents, refer to the following list of references:

Table 1. References

| Document Type | Document Title |
|----------------------|--|
| Server Documentation | <i>System Installation and Configuration Guide</i> |
| Server Documentation | <i>NetConnect Digital Networking</i> |

Overview of Analog Networking

Analog networking allows companies to link the voice-messaging systems in multiple offices, whether they are located in one city or spread across the country. With analog networking, the boundaries of the local voice-messaging system become transparent to the subscribers, allowing them to communicate with remote subscribers as easily as they do with local subscribers.

This application offers the following features:

- Allows MiCollab AM system servers to exchange voice messages with one another.
Once Networking is installed on it, each system server can exchange voice messages with other system servers using Mitel voice networking protocols.
- Allows MiCollab AM systems to exchange voice messages with voice messaging systems manufactured by other companies.
To communicate with other brands of voice-messaging systems, MiCollab AM uses the Audio Messaging Interchange Specification (AMIS), an industry standard for network communications between different voice-messaging systems.
- Gives companies the flexibility to communicate with an unlimited number of other voice-messaging systems.
MiCollab AM does not restrict the number of systems that can be networked. Instead, the number of systems in a network is limited by the mailbox numbering plan and by the amount of hard drive space available on those systems. So, you can easily add locations just by adding the appropriate mailbox for each new location. Of course, as message traffic increases, it may be necessary to purchase additional ports or storage capacity.
- Ensures that MiCollab AM subscribers confidentially receive voice messages from other people's systems regardless if the messages are from another MiCollab AM system.

IMPORTANT MiCollab AM analog networking and AMIS networking transfer voice messages only, not faxes or email.

- Allows you create local mailboxes for those subscribers on remote systems that receive messages frequently, making it easier to send network messages to them.
This feature uses the local alias mailbox. After a subscriber enters a local alias mailbox number, the local alias mailbox directs the subscriber's message to the network mailbox of the recipient's system and requests that the message be forwarded to the recipient's home subscriber mailbox.
- Gives system administrators the ability to control network callouts by specifying the number of lines available.
This feature ensures that lines remain free for incoming calls.
- Let system administrators decide, on an individual basis, which subscribers have network privileges and whether they can send urgent-priority messages across the network.
- Allows system administrators to determine when network messages to other Mitel systems should be sent, so companies can take advantage of lower long-distance rates. You can specify if you want

all messages to be sent together or to have them sent at different times, depending on the message priority. Urgent-priority messages are typically sent more frequently than regular messages.

NOTE AMIS network messages are always sent immediately after they are recorded; unlike MiCollab AM analog network messages, these messages cannot be transmitted according to a preset schedule.

The Analog Networking Application and MiCollab AM

Analog networking runs on the same hardware platform as MiCollab AM. It uses three mailboxes and one configuration tab:

- **Network mailbox.** This mailbox lets subscribers communicate with subscribers on other Mitel systems with networking installed. You must create a network mailbox for each remote Mitel node (site) in the network. Each network mailbox has its own message transmission schedule and can have an associated directory of subscriber mailbox numbers and names.
- **Local alias mailbox.** This mailbox allows subscribers to send network messages to subscribers on other Mitel systems by entering a single mailbox number. Otherwise, when sending a message, a subscriber must enter both the network mailbox number and subscriber mailbox number. The local alias mailbox also facilitates the use of a uniform numbering plan in a network application.
- **AMIS mailbox.** This mailbox lets subscribers communicate with people using voice-messaging systems made by other manufacturers. You must create one generic AMIS mailbox and specify it on the initial call processors so the local MiCollab AM system can receive AMIS messages. You can also create an AMIS mailbox for each site to which messages will be sent.
- **Networking tab, MiCollab AM Admin.** This tab, which you access through the MiCollab AM Admin utility, lets you control network activity on the MiCollab AM server. It also lets you deactivate or activate the network when necessary.

You create and manage the three network-related mailboxes using the same procedures used for other mailboxes. The MiCollab AM online help system contains detailed information on each of them; you can press F1 while working on a mailbox to see details about it.

NOTE Another network-related mailbox exists called the digital network mailbox. For more information on using digital network mailboxes, refer to the Digital Networking Online Book.

Understanding How Analog Networking Transmits Messages

You may find it helpful to understand how analog text messages are sent from one location to another. Messages are transmitted across the network in the sequence shown in [Table 2](#). To see how AMIS messages are sent, refer to [Table 13](#) in [Appendix B: Configuration for AMIS Only Networking](#).

Table 2. Transmission methods for MiCollab AM analog network messages

| Step | Actions |
|-----------------------------------|--|
| Message Created | A subscriber records a message for a person at a remote site (or node). Prompts guide the subscriber through the entire process of sending a network message. |
| Message Queued | After the subscriber presses the appropriate key to send the message, MiCollab AM places the message in the transmission queue for the remote node's mailbox. It will send the message based on the transmission schedule in the node's network mailbox and on the message's priority, whether regular or urgent. |
| Remote System Called | At the designated transmission time, MiCollab AM dials the other system using the telephone number specified in the remote node's network mailbox. |
| Sign-on Sequence Sent | When the remote node answers, MiCollab AM sends the correct sign-on sequence, specified in that node's network mailbox on the local system. The remote node checks the sign-on sequence against the sequence specified in the network mailbox for the calling system. |
| Line Quality and Security Checked | MiCollab AM tests the line quality and checks for security. If the line quality and security tests are successfully completed, MiCollab AM continues to the next step. Otherwise, MiCollab AM terminates the call and retries the network call after a short wait. It will continue to call the remote node until it either establishes good communication or reaches the maximum number of tries specified in the node's network mailbox. |
| Mailbox Names Transmitted | MiCollab AM transmits the recorded names from the subscriber mailboxes that generated the current batch of messages. It transmits each recorded name only once during a network call; the receiving system uses this recording to identify each message from the associated subscriber, thus reducing the time (and therefore the money) required for a network message exchange. |
| Messages Transmitted | The calling system begins to transmit messages. Each message is routed to the individual to which it was addressed. |
| Reverse Transmission | When all messages are transmitted, the calling system may ask the remote system if it has any messages to transmit. (To do so, the calling system must be set for reverse transmission.) |
| Transmission Completed | The calling system disconnects. If MiCollab AM cannot deliver a message, such as when a message is sent to a nonexistent mailbox, MiCollab AM returns the message to the |

sender with an informational error prompt. The subscriber can then choose to send the message again

Installing Analog Networking

IMPORTANT The following instructions show you how to install both MiCollab AM Analog Networking and AMIS Networking. If, however, you wish to install AMIS Networking only, please skip to [Appendix B: Configuration for AMIS Only Networking](#).

This section discusses the tasks necessary to install analog networking. It covers the following tasks in sequence:

- Reviewing Installation Requirements
- Establishing a Mailbox Numbering Plan
- Installing the Feature File
- Establishing Lines for Callouts
- Configuring the MiCollab AM Dialing Plan
- Creating Mailboxes for Remote Sites
- (Optional) Creating Local Alias Mailboxes for MiCollab AM Sites
- Setting Subscriber Authorization
- Updating Distribution Lists
- Updating Initial Call Processors With AMIS Information
- Recording Names for Remote Mailboxes
- Activating the Network
- Testing a Network Application

Reviewing Installation Requirements

This section lists the requirements for successfully installing analog networking on MiCollab AM. Be sure to review and meet these requirements before continuing to the other procedures in this document.

MiCollab AM Requirements

Make sure that the MiCollab AM system has software version 4.0 or higher installed.

Telephone System Requirements

If you plan to use either analog networking or AMIS networking, your system will use analog telephone lines to exchange voice messages with other nodes in your voice mail network. To support this, make sure your site meets the following requirements:

- One or more of the telephone system ports connected to the system server has callout capabilities.
- If long-distance dialing is required to reach the remote sites, the telephone system allows toll calls on its callout ports.

Establishing a Mailbox Numbering Plan

Before creating any network-related mailboxes, you must decide how all of your mailboxes will be numbered throughout the network. Two numbering methods are available: prefix and uniform. This section explains both methods.

You can use either the prefix or uniform method in a network numbering plan or a combination of both. The main difference between these two methods is how subscribers address messages to subscribers on remote nodes. MiCollab AM follows the same procedure to transmit messages to remote nodes as outlined earlier under [Understanding How Analog Networking Transmits Messages](#).

Prefix Numbering

If you are setting up a network application with existing MiCollab AM systems, you should select prefix numbering. This method allows you to maintain each system's current mailbox configuration and does not require a major renumbering of mailboxes throughout the network.

Prefix numbering lets you set up an application where the length of mailbox numbers can vary from node to node, depending on each node's configuration. For example, Figure 1 shows a sample network where mailbox lengths vary: Seattle and Chicago have 3-digit numbers, while New York has 4-digit numbers.

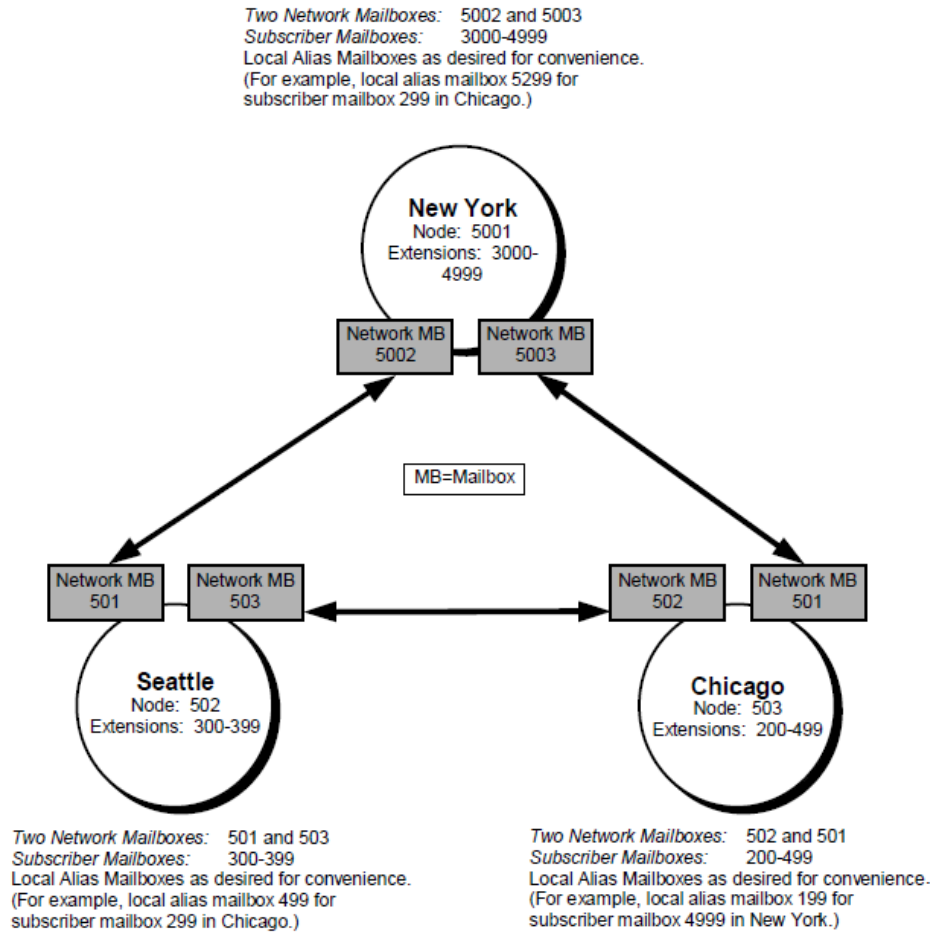


Figure 1. Network with prefix numbering

This method also allows nodes to use mailbox numbers that are not unique throughout the network. For example, as shown in Figure 1, Seattle has subscriber mailboxes from 300 to 399, whereas Chicago has subscriber mailboxes from 200 to 499.

A message sent to mailbox 300 could be hard to deliver correctly. In this case, the prefix number (the network mailbox) is required to tell MiCollab AM to which site a message to mailbox 300 should be sent.

Prefix numbering is implemented by creating network mailboxes for each MiCollab AM node that will be called frequently. As shown in Figure 1, a local node does not create a network mailbox for itself.

Network messages may be addressed using the prefix method. To send a message using this method, a subscriber in Seattle enters the network mailbox of the location, such as 501 for New York, as the destination for the message.

MiCollab AM prompts *"Enter the mailbox number of the person in New York to whom your message should be sent."* The subscriber enters the appropriate subscriber's mailbox number, such as 3040, and hears the confirmation prompt *"This message will be sent to Don Wilson in New York..."*

For convenience, you can create local alias mailboxes for subscribers on remote nodes, allowing subscribers to send network messages by entering a single mailbox number. Local alias mailboxes automatically direct messages to the network mailboxes and home subscriber mailboxes of those who are supposed to receive those messages.

MiCollab AM provides a feature that allows you to import information from remote nodes to make network maintenance easier. When maintaining a network that uses prefix numbering, you must use the prefix import option, as described in [Updating the Local Node](#) later in this book.

This option protects the mailbox files of the local system from being overwritten with remote node information. For example, if Seattle imports network information from Chicago, selecting prefix numbering protects its database of subscriber mailboxes (300-399) from being overwritten with Chicago's mailboxes (200-499).

Local alias mailboxes created on a system using prefix numbering must be manually maintained by the system administrator. The import process does not automatically update these mailboxes.

Uniform Numbering

If you are setting up a network application among new MiCollab AM systems, you may want to choose uniform numbering. This method simplifies the use of the network for subscribers.

With this method, all mailbox numbers in the network must have the same length; for example, if one node in a network must use 3-digit mailbox numbers, all of the network's other nodes must use them as well.

Also, mailbox numbers must be unique throughout the system; no two nodes can use the same numbers. For example, as shown in Figure 2, New York has subscriber mailboxes 100 to 199, Seattle has mailboxes 200 to 299, and Chicago has mailboxes 300 to 399.

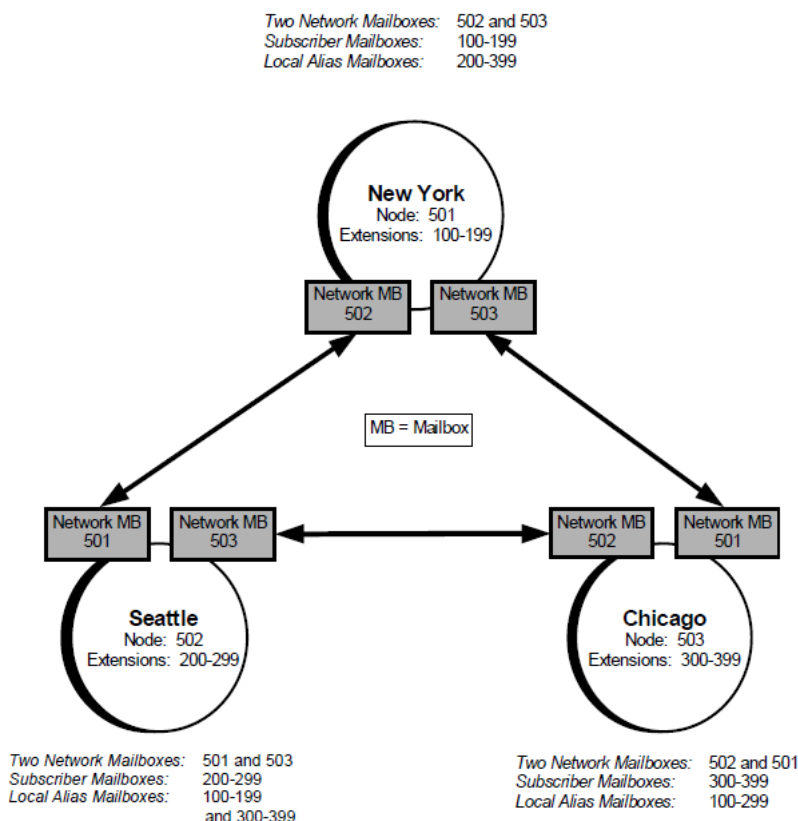


Figure 2. Network with uniform numbering

Uniform numbering uses local alias mailboxes extensively to make network use easier for subscribers. With these mailboxes, you can standardize the specific mailbox numbers for subscribers throughout the network, allowing the same number to be entered for a subscriber at any node.

In fact, the use of local alias mailboxes makes it seem as if subscribers have a mailbox on every system in the network. For example, in Figure 2, a subscriber enters mailbox number 340 at any node (even the local node) to send a message to that subscriber.

To send a message in a network using uniform numbering, a subscriber in Seattle addresses the message to the local alias mailbox number of a remote subscriber, such as 340 for Steve Russell in Chicago. MiCollab AM prompts *"This message will be sent to Steve Russell..."*

Uniform numbering is implemented by creating network mailboxes for each MiCollab AM node. As shown in Figure 2, no local node creates a network mailbox for itself.

You must also create local alias mailboxes for remote subscribers on other Mitel systems. MiCollab AM provides an export/import feature that automatically creates local alias mailboxes during the import process, using the numbers of the remote mailboxes.

To have the mailboxes created automatically, you must choose the uniform import method, as described in [Updating the Local Node](#) later in this book. When updating remote node information, this import method also allows MiCollab AM to update only those local alias mailboxes that have changed.

Assigning Mailbox Numbers

After choosing the method you will use for numbering mailboxes, you must determine what mailboxes the application requires and assign them numbers. When choosing mailbox numbers, make sure that they do not conflict with other established numbers on the local system. You should also set aside a block of mailbox numbers to allow for later additions to the network.

IMPORTANT AMIS networks allow mailbox numbers with more than 10 digits, but MiCollab AM does not. MiCollab AM will reject a message if the sender mailbox number is greater than 10 digits.

If you are using uniform numbering, choose a block of numbers that is free on all systems so that nodes will have the same number on all systems. Also, set up subscriber mailbox numbers so that no other node uses the same numbers for its subscriber mailboxes.

Be sure to assign mailbox numbers to the following:

- Each node, whether it uses a network mailbox (if it is an Mitel system) or an AMIS mailbox (if it is another manufacturer's AMIS-compliant system).
- Remote subscribers who will have local alias mailboxes.

When assigning mailbox numbers, it is important that you understand the relationship between the sending system and the receiving system. To transmit messages to another Mitel system, MiCollab AM uses the appropriate network mailbox for contacting the remote node, then signs on to its associated network mailbox on that node.

For example:

In the example shown in [Figure 2](#), Chicago has been assigned a node number of 503. To transmit a message to New York, Chicago follows the information in its own network mailbox 501 to contact New

York, then accesses network mailbox 503 in New York, which has been assigned to Chicago. After signing on, Chicago transmits its messages.

This relationship also exists for AMIS transmissions. To transmit messages to an AMIS system, MiCollab AM uses the appropriate AMIS mailbox for contacting the remote node.

Installing the Feature File

The feature file activates the applications that have been purchased, including the analog networking application. Choose the appropriate instructions below for your situation.

Table 3. Feature File Installation

| If you are installing... | Then... |
|--------------------------|---|
| A new MiCollab AM system | No installation is necessary; you have already installed the file during the MiCollab AM setup sequence. |
| On an existing system | Shut down MiCollab AM, run the License Import program from the Features tab of the MiCollab AM Configuration utility, and install the feature file. Then restart MiCollab AM. |

Establishing Lines for Callouts

To avoid overloading your system with callouts, use the following procedure to adjust the callout settings to fit your system requirements. For further details regarding these settings, please refer to *Configure Callout Settings* in the MiCollab AM online help.

To establish lines for Callouts:

- 1 Start MiCollab AM Configuration.
- 2 Click on the **Switch Section** tab.
- 3 Highlight the switch for which you want to specify network callouts.
- 4 Click **Edit**.
- 5 In the **View** drop-down list, select **Callout Limit Settings**.
- 6 Specify the maximum number of network callouts you want for this switch and click **OK**.

Switch Section Options [X]

Local Switch: Asterisk Asterisk [v] [OK]

System Switch Section: Asterisk Asterisk Section [v] [Apply]

System Switch Section Settings

Name: Asterisk Asterisk Section [v]

Node Code: [v]

Location Code: [v]

Location: Location 1 [v]

MWI Integration: Asterisk Asterisk SIP Trunk [v] [Cancel]

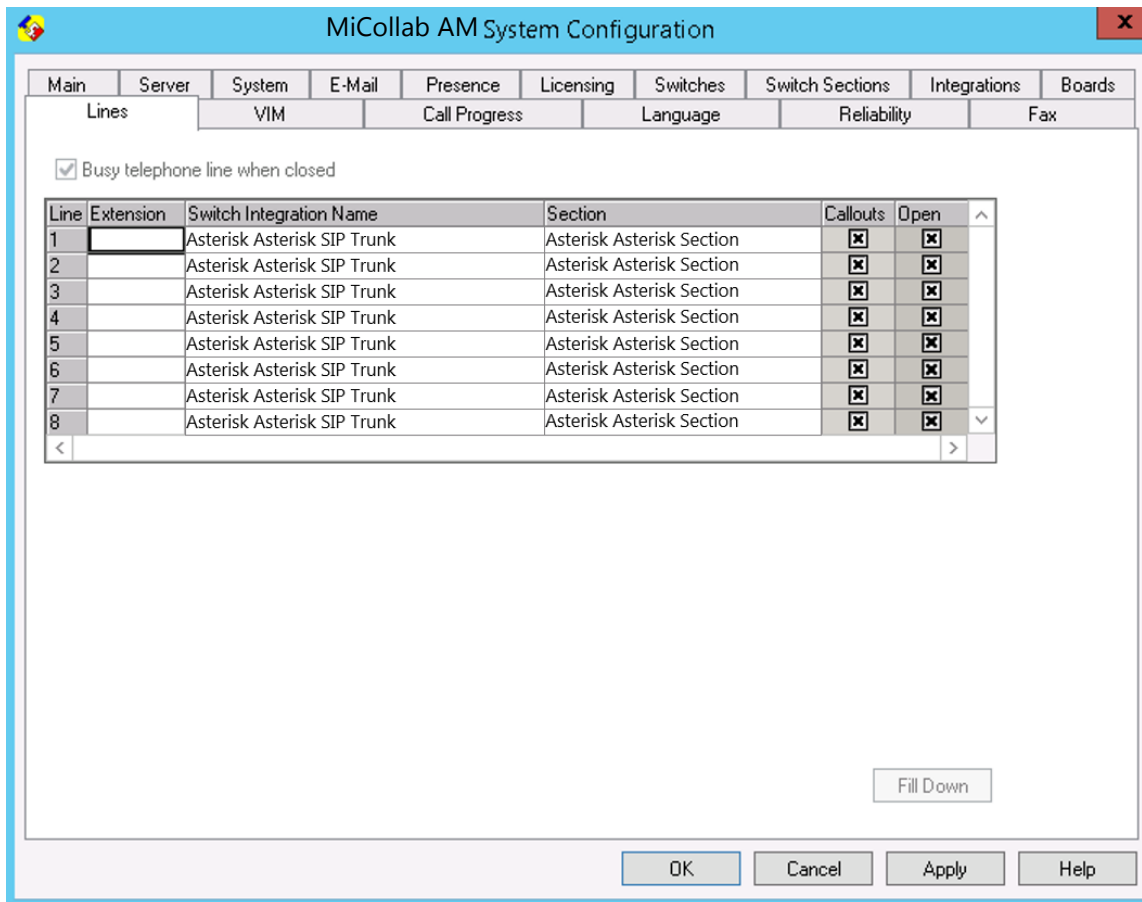
[Help]

Local Switch Section Settings

View: Callout Limit Settings [v] [Set Defaults]

| Name | Value |
|---------------------------------------|-------|
| Maximum Callouts | 16 |
| Maximum MWI Callouts | 8 |
| Maximum Network Callouts | 8 |
| Maximum Message Notification Callouts | 8 |
| Maximum Other Callouts | 8 |

- 7 Click the **Lines** tab.
- 8 Check the box in the Callouts column for each line you wish to allow network callouts. For most installations, we recommend that you mark **ALL** lines for callouts.



9 Click **OK**.

Configuring Network Parameters

By configuring network parameters, you control how MiCollab AM handles network transmissions. The Networking tab (Figure 5) in MiCollab AM Admin lets you configure the following network parameters.

- The maximum time limit for a single network call.
- The amount of time to wait before trying an unsuccessful network call again.

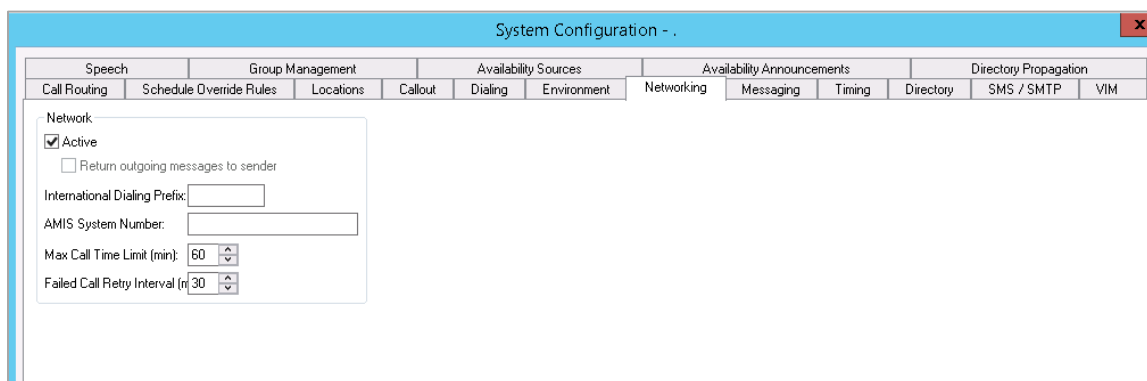


Figure 3. Networking tab in System Configuration

To configure network parameters:

- 1 Start MiCollab AM Admin.
- 2 On the **Configuration** menu, click **System**.
- 3 If necessary, select the server.
- 4 Click the **Networking** tab.
- 5 Clear the Active check box to deactivate networking. While networking is inactive, MiCollab AM does not accept incoming network calls or initiate network callouts.
- 6 Click the **Return Outgoing Messages** to Sender check box if desired.

This option allows you to have outgoing network messages returned to the subscribers who sent them if networking will be inactive for an extended period.

- 7 In the International Dialing Prefix box, enter the prefix your telephone company requires for international telephone numbers. In the AMIS System Number box, enter the full international telephone number other AMIS systems should use to contact your site, placing pound signs between the country code, the city or area code, and the local number.

For example:

If your site's MiCollab AM system is located in the United States (which gives it a country code of 1) and can be reached at (425) 555-9675 for networking calls, the contents of this field would be **1#425#5559675**.

IMPORTANT Be sure to double-check the number you enter in the AMIS System Number box. Other AMIS voice mail systems must be able to reach your MiCollab AM system by dialing their international long distance code, plus this number, to send back replies to your system's voice messages; if this number is incorrect, your subscribers will not receive replies to their AMIS messages.

- 8 In the **Max Call Time Limit** and **Failed Call Retry Interval** boxes, enter values appropriate to your application.
- 9 Click **OK** to record the changes.

Configuring the MiCollab AM Dialing Plan

To operate correctly, analog networking and AMIS networking require that the MiCollab AM dialing plan support explicit long-distance and international numbers. All telephone numbers must be specified as complete numbers, including the international dialing prefix, the country code, the area code (or city code), and the local telephone number.

The dialing plan lets MiCollab AM validate network telephone numbers entered by subscribers; it also lets MiCollab AM validate the AMIS reply telephone numbers that MiCollab AM receives from other voice-messaging systems when they are transmitting messages.

The dialing plan gives MiCollab AM dialing instructions for telephone numbers and indicates the call type: international, long distance, local, or extension. MiCollab AM can correctly place callouts to any telephone number if the dialing plan contains instructions for that number and is set up to permit calls there.

MiCollab AM also uses the call-type information it receives from the dialing plan to determine whether or not the callout is allowed. For example, if a subscriber requests a long-distance AMIS callout, MiCollab AM uses the dialing plan to determine the call type. It then checks the subscriber's mailbox to see if the subscriber is permitted long-distance callouts.

If the subscriber has long-distance callouts allowed, MiCollab AM places the call. However, if the subscriber does not have long distance callouts allowed, MiCollab AM informs the subscriber with an informational voice prompt.

To set up the MiCollab AM dial plan:

- 1 Select **System** from MiCollab AM Admin in the Configuration menu.
- 2 Click the Dialing tab. For detailed descriptions of the different options on this tab, either press the F1 key or click the **Help** button.

Creating Mailboxes for Remote Sites

Two types of network-related mailboxes are available for remote sites:

- **Network mailbox.** Allows your MiCollab AM system exchange messages with remote MiCollab AM sites; uses the Mitel proprietary voice mail networking protocol.
- **AMIS mailbox.** Allows your MiCollab AM system exchange messages with voice messaging systems made by other manufacturers; uses the industry-standard AMIS protocol.
- **Digital Networking mailbox.** Available with NetConnect Digital Networking, lets your MiCollab AM system exchange messages with voice messaging systems made by Mitel or by other manufacturers; sends the messages over the Internet using the NetConnect digital messaging protocols. For detail regarding Digital Networking, see the Digital Networking online book.

To determine which type of network mailbox is best for a specific node, review the comparative benefits of each, as shown in Table 4.

Table 4. Network Mailbox Benefits

| Benefit | Network Mailbox | AMIS Mailbox | Digital Networking Mailbox |
|---|-----------------|--------------|----------------------------|
| Allows you to save telephone charges by scheduling message transmission | 3 | | |
| Allows you to save telephone charges by exchanging messages over the Internet | | | 3 |
| Provides the option of sending and receiving messages in one call | 3 | | |
| Exchanges messages with voice mail systems made by different manufacturers, enabling messaging between your organization and others | | 3 | ✓ |

(if intervondor
support is
installed)

| | | | |
|--|---|---|---|
| Checks the validity of remote mailboxes before transmitting messages | 3 | | 3 |
| Alerts the sender by voice prompt if a message cannot be delivered | 3 | 3 | 3 |
| Can be configured for a specific mailbox on a remote node | 3 | 3 | 3 |
| Can transmit messages longer than eight minutes | 3 | | 3 |
| Can transmit more than nine messages in a batch | 3 | | 3 |
| Can transmit faxes attached to voice messages | | | 3 |
| Transmits and receives messages without tying up MiCollab AM ports | | | 3 |
| Accepts and forwards replies to messages from unknown voice mail systems | | 3 | 3 |

Creating Network Mailboxes for MiCollab AM Sites

You must set up one network mailbox (Figure 4) for each remote MiCollab AM system that will use analog networking to exchange messages with your site. Also, at each of these remote sites, someone must establish a network mailbox for your site, as shown in Figures 1 and 2 earlier in this document. Do not create a network mailbox **for** the local system **on** the local system.

Network Mailbox - Demonstration System

Number: 1003 Name: Chicago Office (Node 3) OK Cancel Help...

Security Code
☐ Set to Default
☐ Not Required
☒ Required 1234 Reset

Telephone Number: 303-555-1212
 Sign-on Sequence: #1013456
 Remote Mailbox Length: 4
 Acceptable Line Quality: 5
 Retries: 10

☒ Include in Subscriber Directory
☒ Reverse Transmissions
☒ Callbacks Allowed
☒ Validate Remote Subscribers

Active Status
☐ Inactive ☒ Active ☐ Closed

Switch Section: Asterisk Asterisk Section

Schedule

| Days/Date | Time | Message Type | Interval |
|-----------|----------|--------------|----------|
| 1 MO-FR | 12:00 AM | Urgent | 15 |
| 2 MO-FR | 12:00 AM | All | 15 |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |

Remote Directory

| ID | Name | File |
|--------|---------------|------|
| 1 3001 | Roe, Elaine | |
| 2 3002 | Russie, Steve | |
| 3 | | |

Figure 4. Network Mailbox screen

The network mailbox defines the characteristics of a remote node, such as its name and telephone number and the sign-on sequence for transmitting messages. Each network mailbox also has its own message-transmission schedule and associated directory of subscriber mailbox numbers and names. Because an application can have multiple network mailboxes, it is important to label each mailbox so its name indicates the appropriate remote node.

Before creating network mailboxes, you need to do two things:

- Gather information about each remote node.
- Determine the transmission method the local MiCollab AM system will use with each remote node.

Getting Node Information

Gather the following information about each remote node:

- **Node name.** The node name is used by MiCollab AM to identify the node in the subscriber directory. You can assign any name to the remote node. Typically, its location is used for the node name.
- **Security code.** This code prevents unauthorized access to the network. For a remote node to transmit messages to the local system, it must access its network mailbox by sending this code as part of its sign-on sequence. (Be sure to provide the security codes from your network mailboxes to the administrators at all remote nodes so that they can configure their systems to log into yours.)
- **Country code, area or city code, and telephone number.** MiCollab AM must dial these numbers to call a remote node. Remember that the system uses the callout templates, entered on MiCollab AM Admin's Dialing tab, to verify this number before dialing it.
- **Sign-on sequence.** The sign-on sequence consists of the sequence of digits used to access messages on the remote system (typically a single # for MiCollab AM systems), the network mailbox number created for your system on the remote node, and the security code for the remote network mailbox. (Be sure to get the security code from the person responsible for the remote system.)
- **Remote mailbox length.** This number sets up the remote mailbox directory in a network mailbox to match the length of the mailbox numbers used at the node to which the mailbox refers. Since the length of mailbox numbers can vary over a network, each network mailbox can accept a separate remote mailbox length ranging from 2 to 10 digits.

IMPORTANT Be sure to set the correct remote mailbox length for a network mailbox before you add any entries to its remote mailbox directory. Once you have set up this directory, you will have to delete its entries before you can change the remote mailbox length.

Determining a Message Transmission Method

MiCollab AM can assign one of two priority levels, regular or urgent, to an outgoing message. In addition, it can send that message to a remote node using any of the five transmission methods shown in [Table 5](#).

You should choose transmission methods and set up your site's transmission schedule based on how often you want to send both regular and urgent-priority messages. As you do this, weigh the importance of cost savings against efficient communications at different times.

For example:

You may want to set up a schedule that sends urgent-priority messages frequently during business hours, but sends regular messages less frequently. After business hours, both types of messages can be sent at regular but longer intervals.

Table 5. Message transmission methods

| Method | Description | Who Pays for Message Transmission |
|------------------|---|-----------------------------------|
| All | Instructs MiCollab AM to transmit all messages, both urgent and regular priority, to a remote node. MiCollab AM calls the node only when it has messages to send there. | Local node |
| Urgent | <p>Instructs MiCollab AM to transmit urgent-priority messages only. MiCollab AM calls the remote node only when it has urgent-priority messages to deliver.</p> <p>Any subscriber can define a message as urgent. However, in order for MiCollab AM to deliver it using urgent-priority, the subscriber's mailbox must also be set up to allow priority message delivery.</p> | Local node |
| Polling | Instructs MiCollab AM to call the remote node whether or not it has messages to send there. If the calling system has any messages for the remote node, it transmits them at this time. | Local node |
| Regular Callback | Instructs MiCollab AM to call a remote node if it has messages for that node; MiCollab AM then requests that the remote node call it back immediately to receive the messages. | Remote node |
| Urgent Callback | Instructs MiCollab AM to call a remote node only if it has urgent-priority messages for that node; MiCollab AM then requests that the remote node call it back immediately to receive the messages. | Remote node |

Creating Local Alias Mailboxes for MiCollab AM Sites

Local alias mailboxes (Figure 7) are a convenient way of sending messages throughout the network because they simplify the addressing of messages – sub subscribers need to remember only one number for a person at a remote site. When a local alias mailbox receives a message, it automatically passes that message and the recipient's remote subscriber mailbox number to the network mailbox of the recipient's home system.

To send a message using a local alias mailbox, a subscriber in Seattle addresses the message to the local alias mailbox number of the remote subscriber, such as 620 for V. I. Peterson. MiCollab AM prompts *"This*

message will be sent to Vic Peterson..." The subscriber can still address a message to Mr. Peterson by entering the network mailbox 503 and his remote subscriber mailbox 340; the local alias mailbox is only for convenience.

You can specify subscribers, visitors, and distribution lists at remote nodes in a local alias mailbox.

In a network using uniform numbering, this mailbox makes it seem as if subscribers have a mailbox on every system in the network. With uniform numbering, subscribers have the same number for their local alias mailbox on remote nodes as their subscriber mailbox on the local system. For more information about uniform numbering, see *"Establishing a Mailbox Numbering Plan"* earlier in this Online Book.

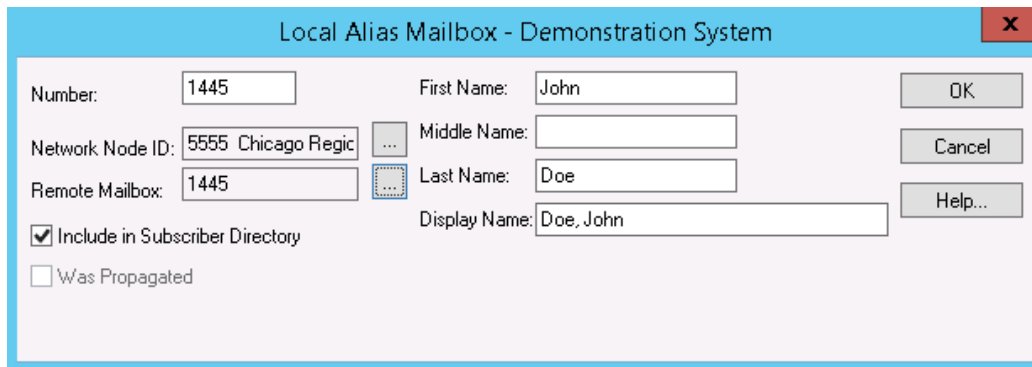
A screenshot of a software dialog box titled "Local Alias Mailbox - Demonstration System". The dialog box has a light blue header bar with a red close button (X) in the top right corner. The main area is white and contains several input fields and checkboxes. On the left side, there are three input fields: "Number:" with the value "1445", "Network Node ID:" with the value "5555 Chicago Regic", and "Remote Mailbox:" with the value "1445". Below these are two checkboxes: "Include in Subscriber Directory" (checked) and "Was Propagated" (unchecked). On the right side, there are three input fields: "First Name:" with the value "John", "Middle Name:" (empty), and "Last Name:" with the value "Doe". Below these is a "Display Name:" field with the value "Doe, John". To the right of the input fields are three buttons: "OK", "Cancel", and "Help...". There are also three small buttons with ellipses (...) next to the "Network Node ID:", "Remote Mailbox:", and "Last Name:" fields.

Figure 5. Local Alias Mailbox dialog box

You do not have to use uniform numbering to use local alias mailboxes. A network with prefix numbering can use them for sending messages to frequently called subscribers on remote nodes.

To create a local alias mailbox, refer to the MiCollab AM online help system.

IMPORTANT Before you can create a local alias mailbox, the network mailbox that you plan to specify must be created. See *Creating Mailboxes for Remote Sites* earlier in this document for instructions.

Setting Subscriber Authorization

Subscribers must have authorization to send network messages to other locations. The Subscriber Mailbox Features tab (Figure 8) contains the Network Priority list, which lets you establish each subscriber's network access privileges and the class of service: regular or priority.

IMPORTANT This procedure is not required. If the default for the network priority list is acceptable—regular network access but no priority delivery – you can leave the subscriber mailboxes unchanged.

To set up network privileges:

- 1 Start MiCollab AM Admin and open the subscriber's mailbox.
- 2 Click the **Features** tab.
- 3 From the Network Priority list, select **Regular**, **Priority**, or **None**.

Regular delivery allows the subscriber to send messages throughout the network using the regular transmission schedule. Because regular delivery is the default setting for the Network Priority list, you do not need to modify the subscriber's mailbox screen to specify this method.

A subscriber with regular access to the network can still send an urgent message. The message will be sent on the regular transmission schedule, but will be marked as urgent for the recipient. If the recipient has set message notification to be notified of urgent messages, the remote system will notify the subscriber immediately after it receives the message.

Figure 6. Subscriber Mailbox Features tab with Network Priority list

Priority delivery allows the subscriber to send messages using the urgent transmission schedule. When the subscriber sets a message's priority to urgent, that message will be delivered using the urgent transmission schedule; other messages will be delivered using the regular schedule.

The None option prevents the subscriber from sending any network messages. Subscribers who do not have network access cannot send network messages; however, they can still receive network messages. When a subscriber without network access receives a network message and tries to reply to it, MiCollab AM plays the prompt "You cannot reply to this message."

While configuring the subscriber mailboxes, you should also review the callout options. These options affect the telephone numbers subscribers are allowed to use for AMIS network callouts.

For example:

If a subscriber is authorized for extension and local callouts only, then that subscriber can send AMIS messages only to systems that can be reached by dialing a local telephone number. As needed, revise or establish the callouts each subscriber is allowed to use.

Updating Distribution Lists

When Networking is installed, the Distribution List Mailbox dialog box allows you to include remote-site mailbox numbers on your local distribution lists. When you create or edit a distribution list, the box where you select mailboxes to add to the list shows all of the local alias, analog network, digital network, and AMIS mailboxes you have created; simply double-click on the mailboxes you want to add.

For detailed information on setting up a distribution list, press the F1 key while the list is active, or click the Help button.

Updating Initial Call Processors with AMIS Information

To allow MiCollab AM to receive AMIS messages from other voice-messaging systems, you must specify the generic AMIS mailbox on all initial call processors, including weekday, weekend, holiday, and override. The generic AMIS mailbox is the mailbox you created that does not have a telephone number or recipient specified.

To update initial call processors, complete the C key box as explained below. Figure 9 shows a sample call processor.

- Specify **Access msgs** in the Action field.
- Enter the number of the generic AMIS mailbox in the Number box.

Call Processor Mailbox - Demonstration System

Number: 0000

Sponsor: [...]

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 3

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Name: DAY MAIN MENU

Next Call Processor

CP: [...]

☐ Go To Answer Mode

Switch

Section: Asterisk Asterisk Section

Node: [...]

No ASR Call Processor

CP: [...]

Call Processor Actions

View: Combined Add Edit Delete

| Key / Event | Action | Arguments | Speech Command |
|-------------|-----------------|-----------|----------------|
| 8 | Undefined | | |
| 9 | Undefined | | |
| A | Undefined | | |
| B | Undefined | | |
| C | Access Messages | 1445 | |
| D | Undefined | | |
| Fax | Undefined | | |

English - United States

Type generic AMIS mailbox number here

Figure 7. Call processor with generic AMIS mailbox specified for DTMF C tone

Recording Names for Remote Mailboxes

You must record a name for each network-related mailbox you create. You should also record names of the remote subscribers listed on the directory screens of network mailboxes.

To record remote mailbox names, open your own subscriber mailbox in MiCollab AM Admin and activate the Record Mailbox Names option on the Features tab. Then save the change. At this point, you can dial into the system from any telephone and change the name recording on any of its mailboxes.

Be aware that the process for recording names for network mailboxes is different than for other mailboxes.

After entering the network mailbox number, MiCollab AM gives you two options: pressing 1 to record the mailbox name and pressing 2 to record the name of a remote subscriber. When you press 2, you must enter the subscriber's mailbox number before making the recording.

When recording names for local alias mailboxes, you may want to record both the person's name and his location; for example, *"Don Wilson in New York."* Subscribers using the network will find this information helpful because it verifies that they have the correct person.

To save time, instead of recording names for remote subscribers, import the recorded names from remote nodes, which are recorded in that person's voice. The system administrator at the remote node exports the information following the steps in Sending Updated Information to Remote Nodes. Then, you import the information as described in Updating the Local Node.

Activating the Network

After installing Networking, you should activate the network. To activate the network, start MiCollab AM Admin and select **System** from its Configuration menu. In the dialog box that appears, click the Networking tab and click the **Active** check box to enable networking again. Then click **OK** to save the change.

Testing a Network Application

You should test the application to make sure that it works correctly before announcing its availability to your subscribers.

To test the network application:

- Send test messages to each MiCollab AM and AMIS node. Send one message set for regular delivery and one message set for urgent-priority delivery.
- Have each remote node send regular and urgent-priority messages to your system.

During these tests, make sure that the speech quality of the transmitted messages is acceptable. Also, check that the messages are delivered based on the transmission schedule established in each node's network mailbox.

If the messages are not sent based on the schedule, check the network mailbox to verify that the network schedule is configured correctly.

If no network messages are sent to a remote node, call the remote node using the telephone number specified in the network mailbox to check the telephone number and sign-on sequence that are specified in the node's network mailbox. Next, check the sign-on sequence by entering it manually; you should hear a string of DTMF tones in response. If this procedure does not work, contact the remote node's system administrator for the correct information.

If you encounter any problems with the application, consult the Network Activity report to determine what network activity occurred. If you see an error code, it will indicate what problem MiCollab AM encountered, giving you an idea of what to check next.

For a listing of possible error codes, see Troubleshooting a Network Application, later in this book.

Managing a Network

Network maintenance mostly involves keeping network mailbox directories up to date. System administrators can either import the new information from disks or manually enter the changes to the directory.

Maintenance typically occurs on an established schedule, where each node exports and imports information on pre-established days.

For example:

All nodes might export information on the fourth Monday of each month, then import the information received from the other remote nodes on the first Monday. You might want to update node information using this procedure every other month or on a quarterly basis, depending on the size of the network, the total number of subscribers involved, and the degree of change.

System administrators should then manually update network mailbox directories only for important remote subscribers. This process of importing remote node information and limiting manual changes to a few subscribers will save time for system administrators and keep the network easy to use for subscribers.

System administrators should be diligent with network maintenance to ensure that the network remains current and easy to use.

This section covers the following network maintenance procedures:

- Sending subscriber information to remote-nodes
- Updating the local node by importing remote node subscriber information
- Changing network status, if required
- Reviewing network reports to determine network performance and usage

Sending Updated Information to Remote Nodes

To keep other nodes on the network current with the changes on your local system, you can send information to them on disks so that they can update their systems easily.

The export function is used to copy local-node changes, such as new subscribers, to disks, which you can mail to remote nodes. The system administrator at the remote node can then import the information from the disks using the import function described in the next section.

By using this feature, you ensure that other nodes have accurate directories of your node. In addition, subscribers on remote nodes can hear your subscribers' mailbox names recorded in the subscribers' voices.

To export your system's information:

- 1 Start MiCollab AM Admin.

- 2 On the File menu, point to System Maintenance, then click Network Export.
- 3 In the Export Type option group, specify the information you want to export, either Network Authorized Subscribers or All Subscribers.
 - Choosing the Network Authorized Subscribers option exports the names and mailbox numbers of only those subscribers who have network privileges allowed in their mailboxes.
 - Choosing All Subscribers exports data on all subscribers.
- 4 In the Export Type option group, check the Export Spoken Names box if you want your export to include the name recordings subscribers make for their mailboxes.
- 5 In the Export Format option group, select the file format and media type you want to use to store the exported information.

If you want to use the ...

MiCollab AM export format

Click Backup/ Restore and skip to step 7.

ZIP file format

Click ZIP and continue to step 6.

NOTE If Backup.exe and Restore.exe do not exist in C:\WINNT\system32, the Backup/Restore feature will be grayed out.

- 6 If you know the exact directory path and filename of the ZIP file you want to create, type it in the text box next to the ZIP option. Otherwise, click the adjacent browse (...) button, use the file locator box to navigate to the drive and directory where you want to store the file, type the name of the file in the File Name text box, and click Save.
- 7 After you click **Export**, follow the prompts to copy system information to the disks.

NOTE Make sure that you accurately label the disks so that they can be inserted in the proper order at the remote site.

If you need additional information about the options and settings mentioned in this section, please consult the MiCollab AM online help system.

Updating the Local Node

You should update your system when new nodes are added to the network or existing nodes are modified. To update your system, simply add or modify the appropriate network-related mailboxes.

You should also update the directories of existing network mailboxes when those directories change. To update a directory, you can either manually enter the new information the remote nodes' administrators supply, or you can import modifications from export disks they have sent you.

MiCollab AM provides two methods for importing the information from the remote node: uniform and prefix. Specify the import method based on your system's numbering plan.

If your network uses a uniform numbering plan, you would specify uniform. If your network uses prefix numbering, you would specify prefix. Refer to [Establishing a Mailbox Numbering Plan](#) earlier in this book for information about uniform and prefix numbering.

When you specify uniform numbering, MiCollab AM automatically creates a local alias mailbox for each remote subscriber using the numbers of the remote mailboxes.

For example:

Three remote subscribers have mailboxes 110, 111, and 112. When you import the directory information, MiCollab AM creates three local alias mailboxes with the numbers 110, 111, and 112.

IMPORTANT The numbering plan at your local system must not conflict with the numbering plan for any remote site, or some of the local system's mailboxes may be overwritten.

To import directory information from a remote node:

- 1 Start MiCollab AM Admin.
- 2 On the File menu, point to System Maintenance, then click **Network Import**.
- 3 In the Network Import dialog box, set these options:
 - In the Network Mailbox number box, specify the number of the network mailbox for which you are importing data. For example, if you are importing information from Chicago, and Chicago's network mailbox number on your system is 503, select mailbox 503.
 - Under Import Method, select the appropriate method, either uniform or prefix. Note that the imported data replaces the existing directory data for that remote node.

You should specify uniform if your network uses a uniform numbering plan; MiCollab AM will automatically create a local alias mailbox for any new remote subscribers. Specify prefix if your network uses prefix numbering.
- 4 After you click **OK**, follow the prompts to import the information, inserting disks as requested.

Changing Network Status

The network should be inactive when you are initially installing it. You might also want to make the network inactive when modifying the application or troubleshooting network problems. The network has two states:

- When the network is *inactive*, MiCollab AM does not accept incoming network calls and will not initiate outgoing network calls. Outgoing messages can either be held in a queue (if the inactive status is for a short time) or returned to the local sender, whichever you specify.
- *Active* means that calls can be sent and received across the network and MiCollab AM will accept incoming network calls. You can change the network status in two ways:
- For the *local node*, enabling or disabling all network activity on the node, both the receipt and sending of messages. To change the network status for the local node, follow the information in this section.
- For a *specific remote node*, enabling or disabling network activity for that node only. To change the status for a specific remote node, set the Active Status option in its network mailbox to Inactive.

To change the network status for the local node:

- 1 Start MiCollab AM Admin.
- 2 On the Configuration menu, click **System**, then click the Networking tab.
- 3 Clear the **Active** check box to deactivate networking.
- 4 Set the Return Outgoing Messages to Sender box as appropriate for your situation; in general, you should activate this option if the network is going to be inactive for more than a few hours.

When MiCollab AM returns messages, it sends the error prompt, "This message was not delivered. All network messages have been returned." The subscriber can send the message again later when the network has been reactivated; in this case, MiCollab AM strips the error prompt from the message and sends it.

Reviewing Network Reports

Networking provides a report to help you track networking activity, called the Network Activity report. Another MiCollab AM report is helpful as well.

- The Network Activity report provides information about the network, including detailed information about each network call and a summary of network mailbox activity by day. With the information in this report, you can modify the network configuration as needed to accommodate increased activity, call length, and line availability. You can also determine the line quality of a network call, which may help with troubleshooting problems.
- The Message Status report gives the status of messages that are awaiting action by network mailboxes. With this report, you can determine what messages are queued for a particular node and track how many network messages individual subscribers are receiving. You may find this report helpful during troubleshooting.

For a detailed explanation of these reports, refer to the guide, *Administering MiCollab AM*.

NOTE The Windows Event Viewer Application Log lists any error messages related to the network. See [Troubleshooting a Network Application](#) later in this document for more information about this log.

Using Networking Features

Networking lets subscribers communicate with individuals across the country as easily as sending messages to other subscribers in the office. With Networking, subscribers can send messages to coworkers and business associates outside of the office without having to dial their telephone number directly.

This section describes how to use the following networking features:

- Sending a message to a subscriber on another MiCollab AM system server
- Sending a message to a person on another voice-messaging system using AMIS analog networking

This section documents these procedures so you can answer questions that you might receive from subscribers. To save time, you can copy the appropriate page and give it to the subscriber.

NOTE The layout of the MiCollab AM telephone user interface (TUI)—the structure of menus and commands you hear when you manage your subscriber mailbox over a telephone—can be set by the administrator of your MiCollab AM system. The procedures in this section discuss how to send network messages using either the standard MiCollab AM TUI layout or the MiCollab AM Emulation for the Octel Aria TUI. To determine which TUI layout you use, contact your system administrator.

Sending a Message Using Analog Networking

The feature lets you send a message to a subscriber at another MiCollab AM location as easily as you send a message inside the office.

To send a network message, you must have this feature enabled in your subscriber mailbox. MiCollab AM prompts *"Network access is not authorized"* if you are not currently allowed to send network messages. If you hear this message and want to send network messages, contact the system administrator to request that this feature be enabled.

To send a MiCollab AM network message using the standard MiCollab AM TUI:

- 1 Log on to your subscriber mailbox.
- 2 Press 2 to record and send a message.
- 3 Enter the mailbox number of the remote MiCollab AM location, followed by the subscriber mailbox number of the message recipient. Or, enter the local alias mailbox number of the message recipient.

If you are unsure of a mailbox number, press # to access the mailbox directory. Use the # key once to find the mailbox number of the MiCollab AM location you are calling. After you enter the

mailbox number of the location you are calling, use the # key again to find the mailbox number of the message recipient.

- 4 Press 2 to start recording your message.
- 5 Press 2 again to stop recording.
- 6 Press 5 to send the message.

MiCollab AM transmits the message to the remote system at the next scheduled time.

To send a MiCollab AM network message using the MiCollab AM Emulation for the Octel Aria TUI:

- 1 Log on to your subscriber mailbox.
- 2 Press 2 to record and send a message.
- 3 At the tone, record your message.
- 4 Press the # key to stop recording.
- 5 Enter the mailbox number of the remote MiCollab AM location, followed by the subscriber mailbox number of the message recipient. Or, enter the local alias mailbox number of the message recipient.

If you are unsure of a mailbox number, press # to search the mailbox directory. Use the # key once to find the mailbox number of the MiCollab AM location you are calling. After you enter the mailbox number of the location you are calling, use the # key again to find the mailbox number of the message recipient.

- 6 Once you have entered the mailbox numbers for the network location and the recipient, press the # key to confirm them and continue.
- 7 If you want to send the message to more people, either at your location or elsewhere in the network, press the # key to add more mailbox numbers. Otherwise, press the * key to finish addressing the message and send it. MiCollab AM transmits the message to the remote system at the next scheduled time.

Sending a Message Using AMIS Networking

This feature lets you send a network message to a person on an AMIS compatible voice-messaging system. Before trying to send an AMIS message, make sure that you know the telephone number of the remote system you are calling because MiCollab AM may request this information.

MiCollab AM also will not send AMIS messages to telephone numbers for which you are not authorized. For example, if you are not authorized for long-distance callouts by MiCollab AM, then MiCollab AM will not send your long-distance AMIS messages. If you encounter problems with sending AMIS messages to certain telephone numbers, contact the system administrator to request that your callout authorization be changed.

To send an AMIS networking message using the standard MiCollab AM TUI:

- 1 Log on to your subscriber mailbox.
- 2 Press 2 to record and send a message.
- 3 Enter the mailbox number of the location to which your message should be sent.
If desired, you can enter the mailbox number of the generic AMIS mailbox, which allows you to send a message to any system with AMIS analog networking.
- 4 Enter the mailbox number of the message recipient, followed by #.
- 5 Press 2 to start recording your message.

IMPORTANT Be careful not to record a message longer than eight minutes. Information beyond the initial eight minutes will be lost.

- 6 Press 2 again to stop recording.
- 7 Press 5 to send the message.
- 8 If requested, enter the telephone number of the location you are sending the message to, followed by #.

MiCollab AM transmits the AMIS message to the remote system shortly after you send it.

To send an AMIS networking message using the MiCollab AM Emulation for the Octel Aria TUI:

- 1 Log on to your subscriber mailbox.
- 2 Press 2 to record and send a message.
- 3 At the tone, record your message.

IMPORTANT Be careful not to record a message longer than eight minutes. Information beyond the initial eight minutes will be lost.

- 4 To stop recording, press the # key.

NOTE In the next step, you must enter a mailbox number that is associated with a specific remote location. If you are using the MiCollab AM Emulation for the Octel Aria TUI, you do not have access to the generic AMIS mailbox in your organization's MiCollab AM system.

- 5 Enter the mailbox number of the location where your message should be sent.
- 6 Enter the mailbox number of the message recipient, followed by #.
- 7 Once you have entered the mailbox numbers for the network location and the recipient, press the # key to confirm them and continue.
- 8 If you want to send the message to more people, either at your location or elsewhere in the network, press the # key to add more mailbox numbers. Otherwise, press the * key to finish addressing the message and send it.

MiCollab AM transmits the AMIS message to the remote system shortly after you send it.

Troubleshooting a Network Application

This section provides information that will help you troubleshoot a network application. It covers the following topics:

- Error messages in the Windows application event log
- Error prompts provided by MiCollab AM

Error Messages in the Windows Event Viewer Application Log

When you encounter a problem with an application, you should always check the Windows Event Viewer Application Log first before taking any action. The Application Log may provide information that will help you isolate the problem.

Except where noted otherwise, MiCollab AM will retry the call after the number of minutes specified in the Failed Call Retry Interval box on MiCollab AM Admin's Networking tab.

If you find an error message from MiCollab AM in the Windows Application Log, refer to the messages and associated solutions listed in this section for troubleshooting information.

ERROR: Net call failed: remote node busy or ring no answer

This error message indicates that the remote node with which you are trying to connect cannot be reached. Call the remote system identified in the error message manually to see if it is down. Make sure that the telephone number specified in the network or AMIS mailbox is valid. MiCollab AM tries to send network calls again based on the time specified in the Retry Busy box or the Retry No Answer box in MiCollab AM Admin; these settings appear on the Callout tab of the System Configuration dialog box. MiCollab AM will continue trying to make the network call until the remote node accepts the call.

ERROR: Net call rejected by remote system: no free ports

This error message identifies the remote node associated with this error. MiCollab AM will continue to make the network call until the remote node accepts the call. If the problem continues, ask the remote node to increase the ports enabled for network calls.

ERROR: Net call failed: no recognizable sign-on

This error message identifies the remote node associated with this error. If this message occurs repeatedly, make sure that the sign-on information entered in the Sign-on Sequence box of the remote node's network mailbox is correct. Check the network mailbox number on the remote node for the calling system to make sure that it is a valid network mailbox.

ERROR: Net call aborted: insufficient line quality

Poor line quality may have interfered with the network call. MiCollab AM will continue to retry the call until it is accepted by the remote node indicated in the error message.

If this message occurs repeatedly, work with your telephone service provider to improve the quality of the line. If that is not practical, change the Acceptable Line Quality box in the network mailbox to a lower number. For help in determining the number you should specify, refer to the Network Activity report. This report indicates the line quality of incoming calls.

ERROR: Net call failed: bad or duplicate serial numbers

This error message indicates the remote node associated with the error. If this message occurs repeatedly, make sure that the remote node is a valid MiCollab AM system with analog networking installed and that the local MiCollab AM system is not calling itself. This message indicates that the called system does not have a valid serial number for analog networking.

ERROR: Net call failed: callback not supported

This error message indicates the remote node associated with the error. If this message occurs repeatedly, make sure that the remote node is set up for callbacks at that node. Reconfigure the remote node if necessary or change the configuration on the local node so that it does not make callback requests to that node.

ERROR: Callout deleted: No network lines enabled

This error message indicates that no lines have been configured for network callouts. Go to the Lines tab in MiCollab AM Configuration and enable one or more lines for callouts. If necessary go to the Switch Section tab and edit the Callout Limit Settings to increase the number of possible Network Callouts.

ERROR: Net call failed: Network protocol versions different

If you encounter this error message, contact Customer Support.

ERROR: Network node inactive remote xxxx

or

ERROR: Network node inactive local xxxx

These error messages will appear when the Active Status option in the network mailbox is set to Inactive or Closed. The first error message occurs when you are placing a network call to another system and the remote system is inactive. The second one occurs when a remote system is trying to connect with the local system, which is inactive.

MiCollab AM automatically sets the network mailbox to closed when it has made the number of attempts specified in that mailbox's Retries box to place a network call to the mailbox's remote node, and all attempts were unsuccessful for any reason other than those listed on the next page:

- Line was not answered and timed out (that is, call failed as ring no answer).
- Line was busy.
- Remote node had inadequate free ports.
- Line quality was insufficient.

- If you receive one of these two error messages because MiCollab AM closed the network mailbox, check for any of the following causes:
- Wrong telephone number
- Wrong mailbox number
- Wrong message type
- Invalid sign-on sequence
- Wrong mailbox length
- DTMF errors
- Invalid security code

NOTE DTMF errors occur when communications between the two network sites fail for some reason and DTMF digits are lost. This problem can result from poor line quality.

MiCollab AM Error Prompts

MiCollab AM provides a number of voice error messages that you might encounter in a network application. The prompts and the circumstances when they occur are listed below.

“Message truncated.”

MiCollab AM plays this prompt to inform message recipients when it has truncated a message. To conform to AMIS standards, MiCollab AM automatically truncates AMIS messages that are longer than eight minutes at the time of delivery. Information beyond the initial eight minutes is lost. Be sure to tell subscribers not to record messages that are longer than eight minutes when sending them to an AMIS system.

“Network access is not authorized.”

MiCollab AM plays this prompt when the subscriber is not authorized to send messages across the network. Network authorization is based on how the Network Priority box is set in each subscriber’s mailbox.

If subscribers encounter this message, you may want to consider changing their network access.

“This message was not delivered.”

MiCollab AM typically plays this message before another error message, as shown later in this section. However, when MiCollab AM plays this message by itself, it means that an error occurred during transmission to the remote node, possibly due to poor line quality.

Make sure that the remote node is still active (call the remote system administrator), then request that the subscriber try resending the message.

“This message was not delivered. All network messages have been returned.”

MiCollab AM attaches this prompt to any message that must be returned to its sender because the network or a remote node is not available. Either of the following events can cause MiCollab AM to return a network message:

- Communication with a remote node has failed, and the local node has deactivated that node's network mailbox. To correct this, check the Active Status option in the network mailbox in question; if necessary, set it back to active.
- Networking has been disabled and MiCollab AM has been configured to return outgoing network messages to the subscribers who sent them. To correct this, clear the Return Outgoing Messages to Sender box and check the Active box on the Networking tab of MiCollab AM Admin's System Configuration screen.

"This message was not delivered. Delivery was requested to a nonexistent mailbox."

MiCollab AM attaches this prompt to any message that must be returned because the destination mailbox does not exist. To correct this, verify that the subscriber is using a valid mailbox number and that the destination mailbox still exists at the remote node.

"This message was not delivered. Delivery was requested to an invalid mailbox."

MiCollab AM attaches this prompt to any message that must be returned because the destination mailbox is of a type that cannot accept voice messages, such as a call processor or possibly because the destination mailbox does not exist. To correct this, verify that the subscriber is using a valid mailbox number. If so, make sure the mailbox at the remote node still exists and that its number has not been reassigned to a different type of mailbox.

"This message was not delivered. There was no message space available on the receiving system."

MiCollab AM plays this message when the remote node could not accept incoming messages due to insufficient disk space. The subscriber can resend the message again, but should wait until the remote node has corrected the situation by deleting messages or by adding storage capacity.

"You cannot reply to this message. Network access is not authorized."

MiCollab AM plays this prompt when a subscriber tries to reply to a network message and the subscriber is not authorized to send messages across the network. Network authorization is based on how the Network Priority box is configured in each subscriber's mailbox.

When subscribers encounter this message, you may want to consider changing their network access.

Appendix A: Networking Examples

Table 6. Networking Examples

| Item | Description |
|----------------------------|--|
| <i>Network Type</i> | MiCollab AM |
| <i>Number of Nodes</i> | 3 |
| <i>Transmission Method</i> | Example 1 = All, Urgent Priority Example 2 = Polling, Urgent Priority, Callback |
| <i>Numbering Plan</i> | Combination of prefix and uniform |

MiCollab AM systems are installed at all three sites. Each system has analog networking enabled. This sample application demonstrates both the prefix and uniform numbering plans. The prefix plan is used for network messaging to and from New York. The uniform plan is used between Seattle and Chicago.

Two examples of network message transmission are illustrated. In Example 1, each node pays the long distance charges for transmission of its network messages. In Example 2, the New York office pays most of the long distance charges for transmission of network messages to and from New York.

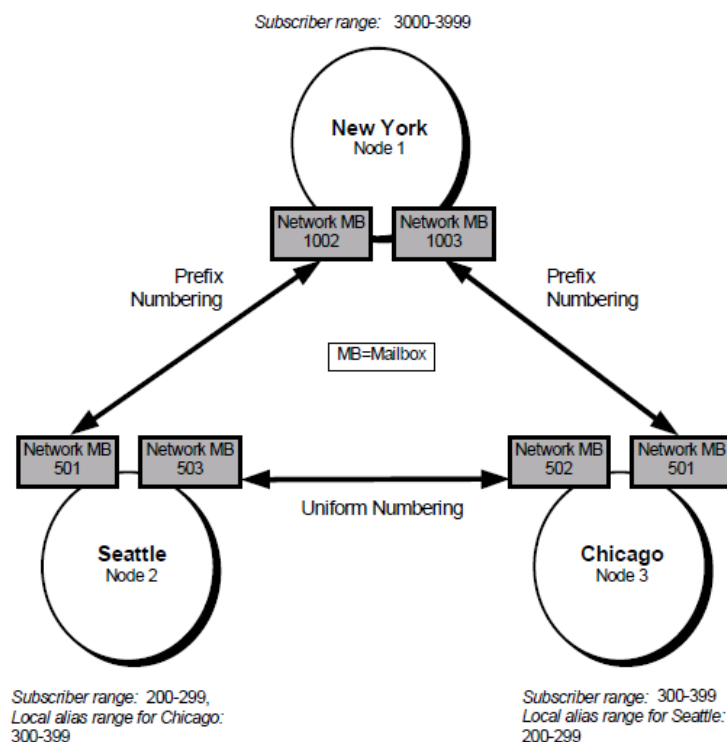


Figure 8. Sample network using prefix and uniform numbering

To help you understand the application, [Table 7](#) lists the mailboxes that pertain to networking at each site.

Table 7. Listing of mailboxes in a sample network application

| Mailbox | Name | Type |
|---|--------------------|-----------------------|
| New York System (Node 1) Local Mailbox Listing | | |
| 1002 | SEATTLE OFFICE | Network |
| 1003 | CHICAGO OFFICE | Network |
| 4001 | Hanson, Don | Subscriber |
| | Adams, William | Subscriber |
| | Lanford, Dennis | Subscriber |
| 4004 | Jordon, Mike | Subscriber |
| Seattle System (Node 2) Local Mailbox Listing | | |
| 1001 | NEW YORK OFFICE | Network |
| 1003 | CHICAGO OFFICE | Network |
| 201 | Woods, John | Subscriber |
| 202 | Sonoma, Steve | Subscriber |
| 203 | Wrightmeyer, Herb | Subscriber |
| 204 | Lancaster, Mike | Subscriber |
| 205 | Dorchester, Robert | Subscriber |
| 301 | Roe, Elaine | Local Alias (Chicago) |
| 302 | Russell, Steve | Local Alias (Chicago) |
| 303 | Lester, Bob | Local Alias (Chicago) |
| 304 | Smith, Liza | Local Alias (Chicago) |
| 305 | Boberon, John | Local Alias (Chicago) |
| Chicago System (Node 3) – Local Mailbox Listing | | |
| 1001 | NEW YORK OFFICE | Network |

| | | |
|------|--------------------|-----------------------|
| 1002 | CHICAGO OFFICE | Network |
| 201 | Woods, John | Local Alias (Seattle) |
| 202 | Sonoma, Steve | Local Alias (Seattle) |
| 203 | Wrightmeyer, Herb | Local Alias (Seattle) |
| 204 | Lancaster, Mike | Local Alias (Seattle) |
| 205 | Dorchester, Robert | Local Alias (Seattle) |
| 301 | Roe, Elaine | Subscriber |
| 302 | Russell, Steve | Subscriber |
| 303 | Lester, Bob | Subscriber |
| 304 | Smith, Liza | Subscriber |

Example 1: A Sample Network Application

The mailboxes in this example are set up so each node pays for transmission of its network messages. The transmission schedule for these nodes is the same on each network mailbox and is shown below.

Table 8. Transmission schedule

| Days/Date | Time | Message Type | Interval |
|-----------|-------|--------------|----------|
| MO-SU | 00:00 | Urgent | 15 |
| MO-FR | 08:00 | All | 120 |
| MO-FR | 17:00 | All | 60 |
| MO-FR | 23:00 | All | 30 |
| SA-SU | 00:00 | All | 30 |

This transmission schedule takes advantage of typical Direct Distance Dialing (DDD) rates, by making the fewest number of regular network calls when long distance rates are highest. For a different example, see *Example 2: Alternate Transmission Schedules* later in this appendix.

New York System (Node 1)—Network Mailboxes

Number: 1002 Name: Seattle Office (Node 2) OK Cancel Help...

Security Code
☒ Set to Default Reset
☐ Not Required
☐ Required

Telephone Number: 206-555-1212
 Sign-on Sequence: #1013456
 Remote Mailbox Length: 4
 Acceptable Line Quality: 5
 Retries: 10

☒ Include in Subscriber Directory
☒ Reverse Transmissions
☒ Callbacks Allowed
☒ Validate Remote Subscribers

Active Status
☐ Inactive ☒ Active ☐ Closed

Switch Section: Asterisk Asterisk Section

Schedule

| | Days/Date | Time | Message Type | Interval |
|---|-----------|----------|--------------|----------|
| 1 | MO-FR | 12:00 AM | Urgent | 15 |
| 2 | MO-FR | 12:00 AM | All | 15 |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |

Remote Directory

| ID | Name | File |
|----|--------------------|------|
| 1 | 2001 Woods, John | |
| 2 | 2002 Sonoma, Steve | |
| 3 | | |

Figure 9. New York calls Seattle

To transmit a network message, New York calls the Seattle system and logs on to the NEW YORK OFFICE network mailbox.

Number: 1003 Name: Chicago Office (Node 3) OK Cancel Help...

Security Code
☐ Set to Default Reset
☐ Not Required
☒ Required 1234

Telephone Number: 303-555-1212
 Sign-on Sequence: #1013456
 Remote Mailbox Length: 4
 Acceptable Line Quality: 5
 Retries: 10

☒ Include in Subscriber Directory
☒ Reverse Transmissions
☒ Callbacks Allowed
☒ Validate Remote Subscribers

Active Status
☐ Inactive ☒ Active ☐ Closed

Switch Section: Asterisk Asterisk Section

Schedule

| | Days/Date | Time | Message Type | Interval |
|---|-----------|----------|--------------|----------|
| 1 | MO-FR | 12:00 AM | Urgent | 15 |
| 2 | MO-FR | 12:00 AM | All | 15 |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |

Remote Directory

| ID | Name | File |
|----|--------------------|------|
| 1 | 3001 Roe, Elaine | |
| 2 | 3002 Russie, Steve | |
| 3 | | |

Figure 10. New York calls Chicago

To transmit a network message, New York calls the Chicago system and logs on to the NEW YORK OFFICE network mailbox.

Seattle System (Node 2)—Network Mailboxes

The screenshot shows the 'Network Mailbox - Demonstration System' window for Node 1. The 'Number' field is 1001 and the 'Name' is New York (Node 1). The 'Security Code' is set to 'Not Required'. The 'Telephone Number' is 212-555-1212 and the 'Sign-on Sequence' is #1013456. The 'Remote Mailbox Length' is 4, 'Acceptable Line Quality' is 5, and 'Retries' is 10. The 'Active Status' is 'Active'. The 'Switch Section' is 'Asterisk Asterisk Section'. The 'Schedule' table shows a message at 12:00 AM on MD-FR. The 'Remote Directory' table shows two entries: 4001 Bush, George and 4002 Clinton, Bill.

| Days/Date | Time | Message Type | Interval |
|-----------|----------|--------------|----------|
| 1 MD-FR | 12:00 AM | Urgent | 15 |
| 2 MD-FR | 12:00 AM | All | 15 |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |

| ID | Name | File |
|--------|---------------|------|
| 1 4001 | Bush, George | |
| 2 4002 | Clinton, Bill | |
| 3 | | |

Figure 11. Seattle calls New York

To transmit a network message, Seattle calls the New York system and logs on to the SEATTLE OFFICE network mailbox.

The screenshot shows the 'Network Mailbox - Demonstration System' window for Node 3. The 'Number' field is 1003 and the 'Name' is Chicago Office (Node 3). The 'Security Code' is set to 'Required' with the value 1234. The 'Telephone Number' is 303-555-1212 and the 'Sign-on Sequence' is #1013456. The 'Remote Mailbox Length' is 4, 'Acceptable Line Quality' is 5, and 'Retries' is 10. The 'Active Status' is 'Active'. The 'Switch Section' is 'Asterisk Asterisk Section'. The 'Schedule' table shows messages at 12:00 AM on MD-FR and SA-SU. The 'Remote Directory' table shows five entries: 3001 Roe, Elaine, 3002 Russie, Steve, 3003 Wilson, Russel, 3004 Sherman, Richard, and 3005 Carey, Mariah.

| Days/Date | Time | Message Type | Interval |
|-----------|----------|--------------|----------|
| 1 MD-FR | 12:00 AM | Urgent | 15 |
| 2 MD-FR | 12:00 AM | All | 15 |
| 3 MD-FR | 12:00 AM | All | 15 |
| 4 MD-FR | 12:00 AM | All | 15 |
| 5 SA-SU | 12:00 AM | All | 15 |
| 6 | | | |
| 7 | | | |

| ID | Name | File |
|--------|------------------|------|
| 1 3001 | Roe, Elaine | |
| 2 3002 | Russie, Steve | |
| 3 3003 | Wilson, Russel | |
| 4 3004 | Sherman, Richard | |
| 5 3005 | Carey, Mariah | |

Figure 12. Seattle calls Chicago

To transmit a network message, Seattle calls the Chicago system and logs on to the SEATTLE OFFICE network mailbox.

Chicago System (Node 3)—Network Mailboxes

Network Mailbox - Demonstration System

Number: 1001 Name: New York (Node 1) OK

Security Code
☐ Set to Default Reset
☒ Not Required
☐ Required

Telephone Number: 212-555-1212 Cancel
Sign-on Sequence: #1013456 Help...

Remote Mailbox Length: 4
Acceptable Line Quality: 5
Retries: 10

☒ Include in Subscriber Directory
☒ Reverse Transmissions
☒ Callbacks Allowed
☒ Validate Remote Subscribers

Active Status
☐ Inactive ☒ Active ☐ Closed

Switch Section: Asterisk Asterisk Section

Schedule

| | Days/Date | Time | Message Type | Interval |
|---|-----------|----------|--------------|----------|
| 1 | MO-FR | 12:00 AM | Urgent | 15 |
| 2 | MO-FR | 12:00 AM | All | 15 |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |

Remote Directory

| ID | Name | File |
|----|------|---------------|
| 1 | 4001 | Bush, George |
| 2 | 4002 | Clinton, Bill |
| 3 | | |

Figure 13. Chicago calls New York

To transmit a network message, Chicago calls the New York system and logs on to the CHICAGO OFFICE network mailbox.

Network Mailbox - Demonstration System

Number: 1002 Name: Seattle Office (Node 2) OK

Security Code
☒ Set to Default Reset
☐ Not Required
☐ Required

Telephone Number: 206-555-1212 Cancel
Sign-on Sequence: #1013456 Help...

Remote Mailbox Length: 4
Acceptable Line Quality: 5
Retries: 10

☒ Include in Subscriber Directory
☒ Reverse Transmissions
☒ Callbacks Allowed
☒ Validate Remote Subscribers

Active Status
☐ Inactive ☒ Active ☐ Closed

Switch Section: Asterisk Asterisk Section

Schedule

| | Days/Date | Time | Message Type | Interval |
|---|-----------|----------|--------------|----------|
| 1 | MO-FR | 12:00 AM | Urgent | 15 |
| 2 | MO-FR | 12:00 AM | All | 15 |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |

Remote Directory

| ID | Name | File |
|----|------|---------------|
| 1 | 2001 | Woods, John |
| 2 | 2002 | Sonoma, Steve |
| 3 | | |

Figure 14. Chicago calls Seattle

To transmit a network message, Chicago calls the Seattle system and logs on to the CHICAGO OFFICE network mailbox.

Example 2: Alternate Transmission Schedules

This example shows how the network message transmission schedules would be changed if the company wanted the New York office to pay most of the toll charges associated with delivering network messages. In this case, most of the network activity is between New York and the other two offices (Seattle and Chicago). Messaging between Seattle and Chicago occurs infrequently.

The New York office uses a long-distance carrier whose rates are not time-of-day sensitive. The Seattle and Chicago offices use standard Direct Distance Dialing (DDD).

The New York office uses polling and reverse transmission to receive regular network messages from Seattle and Chicago. Urgent-priority messages from Seattle and Chicago are transmitted to New York through callback.

Other network mailbox parameters remain unchanged.

New York System (Node 1)

The transmission schedules for Seattle and Chicago are shown below.

Polling times for Seattle and Chicago are offset by 30 minutes to ensure port availability for network messages.

Mailbox 1002—Seattle Office (Node 2)

Table 9. Network message transmission schedule (New York to Seattle)

| Days/Date | Time | Message Type | Interval |
|-----------|-------|--------------|----------|
| MO-FR | 08:00 | All | 600 |
| MO-FR | 08:00 | Urgent | 15 |
| MO-FR | 18:00 | All | 30 |
| MO-FR | 08:00 | Polling | 300 |
| MO-FR | 18:00 | Polling | 45 |

Mailbox 1003—Chicago Office (Node 3)

Table 10. Network message transmission schedule (New York to Chicago)

| Days/Date | Time | Message Type | Interval |
|-----------|-------|--------------|----------|
| MO-FR | 08:00 | All | 600 |
| MO-FR | 08:00 | Urgent | 15 |
| MO-FR | 18:00 | All | 30 |

| | | | |
|-------|-------|---------|-----|
| MO-FR | 08:30 | Polling | 300 |
| MO-FR | 18:00 | Polling | 45 |

Seattle System (Node 2)

Mailbox 101—NEW YORK OFFICE (Node 1)

Seattle calls New York only to request a callback for delivery of an urgent-priority message. Regular messages are transmitted through polling or reverse transmission from New York.

Table 11. Network message transmission schedule (Seattle to New York)

| Days/Date | Time | Message Type | Interval |
|-----------|-------|-----------------|----------|
| MO-SU | 00:00 | Urgent Callback | 15 |

Mailbox 103—CHICAGO OFFICE (Node 3)

The network message transmission schedule for Seattle to Chicago is the same as shown in Example 1.

Chicago System (Node 3)

Mailbox 101—NEW YORK OFFICE (Node 1)

Chicago calls New York only to request a callback for delivery of an urgent-priority message. Regular messages are transmitted through polling or reverse transmission from New York.

Table 12. Network message transmission schedule (Chicago to New York)

| Days/Date | Time | Message Type | Interval |
|-----------|-------|-----------------|----------|
| MO-SU | 00:00 | Urgent Callback | 15 |

Mailbox 102—SEATTLE OFFICE (Node 2)

The network message transmission schedule for Chicago to Seattle is the same as shown in Example 1.

Appendix B: Configuration for AMIS Only Networking

This section describes how to install and configure AMIS analog networking only. It covers the following tasks in sequence.

NOTE If you wish to install both MiCollab AM and AMIS analog networking, please consult the installation instructions earlier in this document.

- Establishing Lines for Callouts
- Specifying your international dialing prefix and you AMIS System Number
- Modifying the dialing tab of System Configuration
- Creating at least one AMIS mailbox
- Modifying all Answer Mode Call Processors to accept incoming AMIS messaging requests

Establishing Lines for Callouts

To avoid overloading your system with callouts, use the following procedure to adjust the callout settings to fit your system requirements. For further details regarding these settings, please refer to "Configure Callout Settings" in the MiCollab AM online help.

To establish lines for Network Callouts:

- 1 Start MiCollab AM Configuration.
- 2 Click on the Switch Section tab.
- 3 Highlight the switch for which you want to specify network callouts.
- 4 Click **Edit**.
- 5 In the View drop-down list, select **Callout Limit Settings**.
- 6 Specify the maximum number of network callouts you want for this switch and click **OK**.

Switch Section Options

Local Switch: Asterisk Asterisk

System Switch Section: Asterisk Asterisk Section

System Switch Section Settings

Name: Asterisk Asterisk Section

Node Code:

Location Code:

Location: Location 1

MWI Integration: Asterisk Asterisk SIP Trunk

Local Switch Section Settings

View: Callout Limit Settings

| Name | Value |
|---------------------------------------|-------|
| Maximum Callouts | 16 |
| Maximum MWI Callouts | 8 |
| Maximum Network Callouts | 8 |
| Maximum Message Notification Callouts | 8 |
| Maximum Other Callouts | 8 |

- 7 Click the **Lines** tab.
- 8 Check the box in the Callouts column for each line you wish to allow network callouts. For most installations, we recommend that you mark ALL lines for callouts.

MiCollab AM System Configuration

Main Server System E-Mail Presence Licensing Switches Switch Sections Integrations Boards

Lines VIM Call Progress Language Reliability Fax

☒ Busy telephone line when closed

| Line | Extension | Switch Integration Name | Section | Callouts | Open |
|------|-----------|-----------------------------|---------------------------|-------------------------------------|-------------------------------------|
| 1 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8 | | Asterisk Asterisk SIP Trunk | Asterisk Asterisk Section | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Fill Down

OK Cancel Apply Help

- 9 Click **OK**.

Specify International Dialing Prefix and AMIS System Number

On MiCollab AM Admin's System Configuration Networking tab, there are two fields that you must specify in order for AMIS networking to work. These fields are the International dialing prefix and the AMIS System Number fields.

The International dialing prefix tells MiCollab AM how to notify the local telephone service provider that you are making an international call. This is necessary to provide information for MiCollab AM to respond to network messages received from other countries.

The AMIS System Number contains specially formatted information which allows other AMIS-enabled voice mail systems to respond to AMIS messages that are sent from your system.

The information consists of your MiCollab AM system's fully defined telephone number including the Country code, Area/City code, and local number with a # sign separating each element. The following figure shows an example of the **Networking** tab.

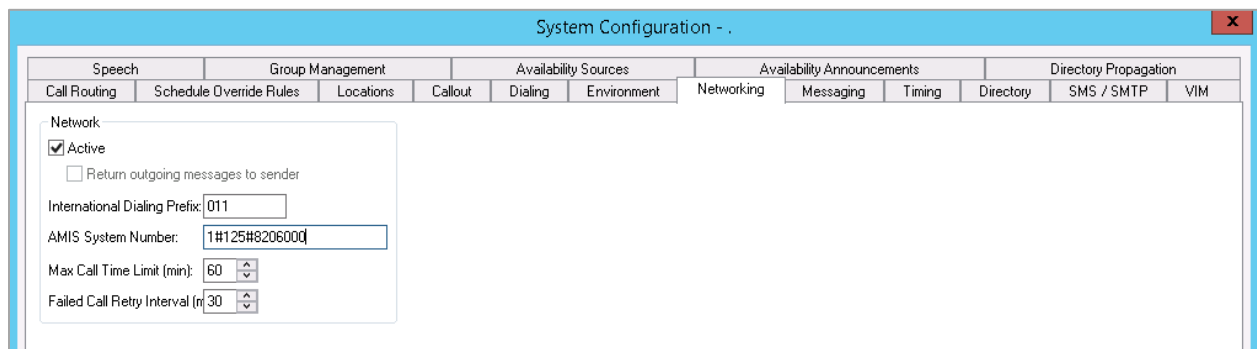
The screenshot shows the 'System Configuration -' window with the 'Networking' tab selected. The 'Networking' tab is part of a larger configuration area that includes 'Speech', 'Group Management', 'Availability Sources', 'Availability Announcements', and 'Directory Propagation'. Under 'Networking', there are sub-tabs: 'Call Routing', 'Schedule Override Rules', 'Locations', 'Callout', 'Dialing', 'Environment', 'Networking', 'Messaging', 'Timing', 'Directory', 'SMS / SMTP', and 'VIM'. The 'Networking' sub-tab is active, showing a 'Network' section with the following settings: 'Active' is checked, 'Return outgoing messages to sender' is unchecked, 'International Dialing Prefix' is '011', 'AMIS System Number' is '1#125#8206000', 'Max Call Time Limit (min)' is '60', and 'Failed Call Retry Interval (m)' is '30'.

Figure 15. Networking tab configured with AMIS information

Modify the Dialing Tab of System Configuration

The Dialing tab configuration screen must be modified so that MiCollab AM may receive callout requests, determine the type of callout, and decide how to dial the call.

If this is a previously installed MiCollab AM system, the dialing tab should have already been configured. When implementing AMIS networking, however, you may need to add some entries to the dialing plan.

The purpose of these new entries is to allow users who are restricted from making long-distance calls to send network messages that would otherwise be considered long distance calls.

For example, if a company has an office in Seattle, Washington and an office in Auckland, New Zealand, the dialing plan can be configured so that Seattle employees who are restricted from making long distance calls may send network messages to their co-workers in Auckland. Figure 20 shows how the Dialing tab may look in this situation.

Figure 16. Dialing tab showing Dialing Instruction configuration

Create at Least one AMIS Mailbox

To install and configure AMIS, you must create a generic AMIS mailbox that has no information provided in the recipient and telephone number fields. Leaving these fields blank will allow subscribers to send messages to any AMIS-enabled recipient in the world.

You may choose to create additional mailboxes, which are either fully or partially defined. This will make sending messages to frequently messaged user easier.

If you specify mailbox and telephone numbers in these mailboxes, subscribers will be able to send messages to remote recipients by entering a single mailbox number. Figure 17 shows an example of a fully defined AMIS mailbox.

NOTE Subscribers using the MiCollab AM Emulation for the Octel Aria TUI can use only fully defined AMIS mailboxes

Figure 17. AMIS Networking Mailbox dialog box

Guidelines for Creating AMIS Mailboxes

- Create a generic AMIS mailbox with no telephone number or extension number specified. This mailbox will allow your subscribers to send messages to any AMIS-compatible voice mail system because MiCollab AM will prompt the subscriber for the delivery information. Since other AMIS network nodes will use this mailbox to log in to your MiCollab AM system as well, you must create this generic mailbox regardless of what other AMIS support you add to the system.
- Create an AMIS mailbox for each non-MiCollab AM system with which the company may exchange messages, if desired. Specify the AMIS telephone number of the remote system so subscribers will not be prompted for this information.
- Create AMIS mailboxes for people on non-MiCollab AM systems that will frequently exchange messages with subscribers on the local system, if desired. In these mailboxes, specify the AMIS telephone number of the remote system, as well as the mailbox number of the appropriate person. This mailbox will allow subscribers to send messages to remote people by entering a single mailbox number.

NOTE Subscribers who use the MiCollab AM Emulation for the Octel Aria TUI have no access to the generic AMIS mailbox for sending messages.

Understanding AMIS Network Transmission

You may find it helpful to understand how analog text messages are sent from one location to another. [Table 13](#) shows the sequence of how messages are transmitted across the network.

Table 13. Transmission of AMIS network messages

| Days/Date | Time |
|-----------------------|---|
| Log on | A subscriber logs on to his own subscriber mailbox. |
| Message Created | The subscriber records a message for a person at a remote site and addresses it to the AMIS mailbox. Prompts guide the subscriber through the entire process of sending an AMIS message. |
| Remote System Called | After the subscriber presses the appropriate key to send the message, MiCollab AM dials the other system. It uses the AMIS number specified in the mailbox or entered by the subscriber. |
| Sign-on Sequence Sent | When the remote system answers, MiCollab AM sends the sign-on sequence (a single DTMF C tone) to log on to the system. The remote system responds with a single DTMF D tone. MiCollab AM transfers a sign-on sequence that includes its own international telephone number (the AMIS System Number) so that the remote system can return replies to its messages. |

| | |
|------------------------|--|
| Messages Transmitted | The calling system begins to transmit messages, up to a maximum of eight. Each message is routed to the individual to which it was addressed. |
| Transmission Completed | When all messages are transmitted, the calling system disconnects. If MiCollab AM cannot deliver a message, such as when a message is sent to a nonexistent mailbox, MiCollab AM returns the message to the sender with an informational error prompt. The subscriber can then choose to send the message again. |

Please keep the following three points in mind when using AMIS networking.

- MiCollab AM transmits AMIS messages to the remote system immediately after recording them; you cannot set up a message transmission schedule for them.
- MiCollab AM sends a maximum of nine messages per AMIS transmission. AMIS allows messages to be sent to individual mailboxes only. You cannot send messages to distribution lists, or other mailbox types.
- The AMIS standard does not support messages longer than eight minutes in length. MiCollab AM will truncate all AMIS messages to eight minutes and inform the recipient by voice prompt that the message was truncated.

Modify All Answer Mode Call Processors

Once you have established lines for network callouts, specified your international dialing prefix and your AMIS System Number, modified the dialing tab, and created at least one AMIS mailbox, you must modify all answer mode call processors to accept incoming AMIS calls.

When a voice mail system calls another to initiate an AMIS messaging session, it will dial the specified number, wait for the distant system to answer and then send out a DTMF C. This is part of the specification and cannot be changed. For your MiCollab AM system to react properly, you must make sure that the menus that answer incoming calls are configured properly to respond to AMIS requests.

To modify answer mode call processors:

- 1 Initiate a template edit of all call processors that answer calls. This usually includes answer mode call processors as well as any call processors that are activated by route codes and Extension Specific Processing.
- 2 Specify your template mailbox.
- 3 Change the action for the C key to **Access Msgs.**
- 4 Specify the mailbox number of your generic AMIS mailbox in the number field. Any time that MiCollab AM sees an Access Msgs request, followed by an AMIS mailbox, it knows that it is receiving an incoming AMIS request and will initiate the proper sequence of events to receive these messages.

Call Processor Mailbox - Demonstration System

Number: 0000

Sponsor:

Language: Default

Max Msg Length (sec): 2700

Timeout (sec): 3

Max No Match Retries: 0

Max Mismatch Retries: 0

☐ Use Speech Recognition Timeout Rules

☐ Log System Port Usage

☐ Two-Part Greeting

☒ Use Answer Mode Operator

☐ Always Confirm Names

Name: DAY MAIN MENU

Next Call Processor

CP:

☐ Go To Answer Mode

Switch

Section: Asterisk Asterisk Section

Node:

No ASR Call Processor

CP:

OK

Cancel

View References...

Help...

Call Processor Actions

View: Combined Add Edit Delete

| Key / Event | Action | Arguments | Speech Command |
|-------------|-----------------|-----------|----------------|
| 8 | Undefined | | |
| 9 | Undefined | | |
| A | Undefined | | |
| B | Undefined | | |
| C | Access Messages | 1445 | |
| D | Undefined | | |
| Fax | Undefined | | |

English - United States

Type generic AMIS mailbox number here

Figure 18. Call processor with generic AMIS mailbox specified for DTMF C tone

For more information regarding configuring AMIS messaging, please consult MiCollab AM Help.