

# MiCollab Advanced Messaging MiCollab AM Notify Administration Guide

For version 6.1 and above

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# Preface

This document contains administration and configuration details for MiCollab AM Notify. Installation instructions are contained in *MiCollab AM Notify Installation Guide*.

## 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 documentation set for this MiCollab AM includes the following documents and resources:

- **Developer Resources.** Contains programming guides and API references for developers for integrating the server clients and web applications with MiCollab AM.
- **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.
- **Quick Reference Card (QRC).** Contains shortcuts and quick instructions telling subscribers how to access and use the messaging system.
- **Server Documentation.** Available as a PDF only. Contains administrative guides for administrators about installing, configuring, and administering the messaging system, and user guides for subscribers about accessing the messaging system and checking and sending messages.
- **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: [connect.mitel.com/connect](http://connect.mitel.com/connect)

## Help

The primary source of information about MiCollab AM is the online help available within any of its administrative utilities. You can access **Help** as follows:

- Click the **Help** button in the dialog box or window in which you are working
- Press the **F1** key at any time.

## 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.** *Italics* fonts can also signify the titles of other documents.

Example: Refer to *System Installation Guide*.

- **UI Element Names.** Names of UI elements such as dialog windows, screens, menu items, tabs, buttons, icons, etc. 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 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.



# MiCollab AM Notify Overview

MiCollab AM Notify is compatible with both Automated Agent and UCConnect running on a MiCollab Advanced Messaging (MiCollab AM) System Server.

The MiCollab AM Notify application generates outbound telephone calls to a user-provided list of telephone numbers, and plays informational messages that are comprised of pre-recorded announcements and custom data elements.

Outbound calls are placed on MiCollab AM lines. The number of lines that can be used simultaneously is limited by the capacity of the MiCollab AM System Server, and the number of lines for which the application is licensed.

To initiate an outbound campaign, a user-created data file containing one or more outbound call records is provided to the application. Each call record contains details about how to process the call. In the simplest implementation, the only required details are the telephone number to call and an ID number uniquely identifying the call recipient. Additional details can be provided to customize the call dialog. Configurable default values are used when details are not included in the call record.

Outbound campaigns can also be initiated to pre-defined recipient lists through the use of an application telephone user interface (TUI). In addition to initiating campaigns, the TUI allows application administrators to record notification messages and perform certain system tasks using a touch-tone telephone.

After each call attempt the application writes a record to a call results data file containing the outcome of the attempt and other details. The call results data file can be used for application monitoring and reporting.

Application settings are specified using the provided application configuration utility. The utility provides access to settings such as the maximum number of times to attempt a call, the time period to wait before reattempting incomplete calls, and the call dialog default values.

The application consists of the following components:

- **OBINIT**                IVR scheduled script that runs at system startup.
- **OBMAINT**            IVR scheduled script that performs daily maintenance.
- **OBMON**              IVR scheduled script that monitors the call list.
- **OBOUT**                IVR script that processes outbound calls.
- **OBTUI**                IVR script that provides the administration TUI.
- **OBCFG**                Application configuration utility.

## Requirements

- Properly configured system server platform running Windows Server 2008 R2 with Service Pack 1 or Windows Server 2012 R2.
- MiCollab AM software version 6.1 or later properly installed and configured.
- MiCollab AM Automated Agent or UCConnect module properly installed and licensed.
- Optionally, a properly configured remote Windows platform for executing the IVR scripts. Refer to the appropriate Mitel MiCollab AM Software Release Notice for recommendations.
- A valid MiCollab AM Notify application license file.
- The MiCollab AM Notify application properly installed according to the instructions found in the MiCollab AM Notify Installation Guide.

# Critical Application Considerations

- MiCollab AM Notify is only supported for single Call Server implementations. Multiple Call Server implementations are not supported.
- MiCollab AM Notify relies on the ability of MiCollab AM to detect call progress. MiCollab AM determines the call progress and passes the information to MiCollab AM Notify. Therefore, accurate MiCollab AM call progress detection is crucial to a successful implementation.
- Due to call progress detection differences inherent in some IP-based integrations, some application functionality may be affected when the application is implemented on an IP-integrated system. Refer to [IP Integration Limitations](#) for specific information.
- Notification messages recorded through the administration telephone user interface are stored on the system in the same audio format that MiCollab AM uses to store voice messages. For this reason, the default recording format for messages within MiCollab AM must be set to the same audio format that is specified for IVR prompts.
- In order to avoid glare (a condition where an outbound call collides with an inbound call on the same telephone line) the callouts attribute should be enabled for the MiCollab AM lines that are least likely to receive inbound calls.

This can be done by using lines at the end of the inbound hunt group, or by dedicating lines for outbound calls only. The latter is recommended when a significant volume of both inbound and outbound calls are expected during the same time period.

- To further limit the possibility of glare, the Caller ID presented to the call recipient device can be artificially set to the incoming pilot number if allowed by the telephone switch. This is useful to prevent call recipients from returning a call to one of the active outbound ports.
- In order for notification messages recorded through the application administration telephone user interface to function properly, the default recording format for messages within MiCollab AM must be set to the audio format that matches the audio format in use for IVR prompts. Refer to [Recording Format](#) for additional information.
- It is important to perform a controlled shut down of MiCollab AM Notify when there is a need to restart the MiCollab AM System Server while outbound calls are in progress. Refer to [Application Shutdown Procedure](#) for additional information.
- The use of text-to-speech within the MiCollab AM Notify application requires one or more licensed text-to-speech channels on the MiCollab AM System Server.

# Version 2.1 Feature Enhancements

Version 2.1 builds upon version 2.0 with the addition of the following features. These features are document throughout this guide in the appropriate sections.

- The ability to record notification messages, initiate notification campaigns, and perform system tasks using a touch-tone telephone.
- Support for speaking elements of notification messages using MiCollab AM text-to-speech. The use of multiple text-to-speech languages is supported.
- Support for outbound notification calls on up to 48 simultaneous MiCollab AM ports.
- The ability to specify the switch section to use for outbound calls on MiCollab AM systems with more than one switch integration.
- Support for multiple script speech folders. Pre-recorded phrases used during notification campaigns can be segregated by folder.
- Support for standard file name wildcards in the import file specification. This allows the application to look for and import multiple files.
- The ability to increase the priority of subsequent call attempts to a destination when the initial call attempt was not successful. This gives the subsequent call attempts, or retries, priority over the initial attempt for other scheduled calls.

## Version 2.1.3 Changes

- The MiCollab AM IVR component has been renamed from Automated Agent to UCCconnect as of MiCollab AM version 5.0. Any references in this document to Automated Agent also apply to UCCconnect.
- The application has been modified to support UCCconnect installations on MiCollab AM 5.0 and later.

# Platform Configuration

## Application Services

Using the IVR Application Services applet located in the Windows Control Panel, three resource pools are required as shown below. These resource pools are automatically created during application installation.

**NOTE** For changes in the resource pool settings to take effect, the service must be restarted.

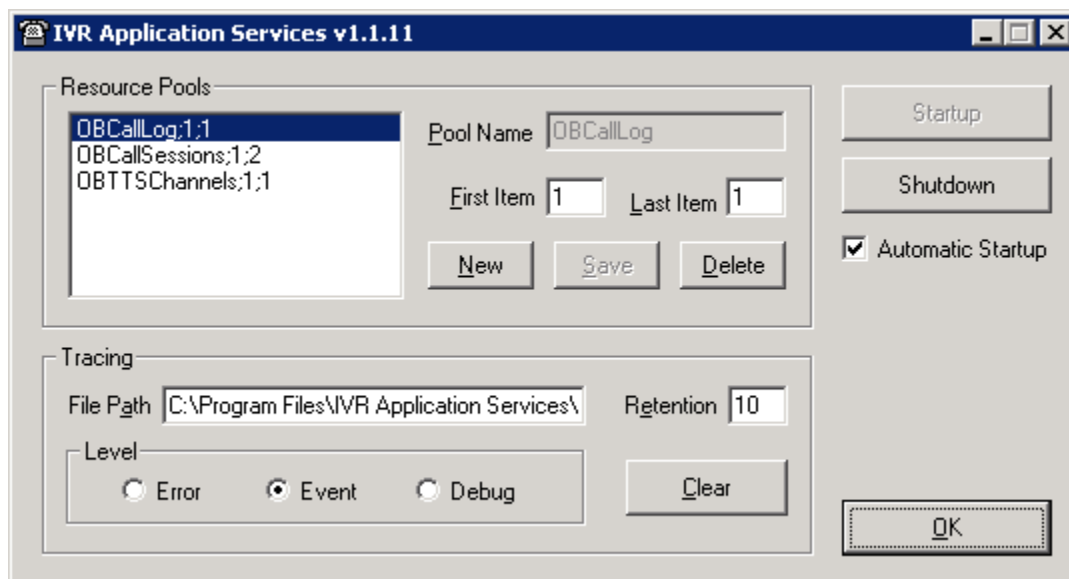


Figure 1. IVR Application Services

The **Resource Pools** are:

- |                |  |
|----------------|--|
| OBCallLog      | Single item resource pool used to serialize access to the call results file. This resource pool must not be modified.  |
| OBCallSessions | Total number of outband calls allowed to be placed simultaneously. The first item must be set to 1, and the last item is set to the total number of ports licensed for the application.  |
| OBTTChannels   | Total number of text-to-speech channels allowed to be used by the application simultaneously. The first item must be set to 1. The last item is set to the maximum number of channels to use, and must not exceed the number of licensed MiCollab AM TTS channels. |

# UCConnect

UCConnect must be configured on the MiCollab AM System Server's control panel applet.

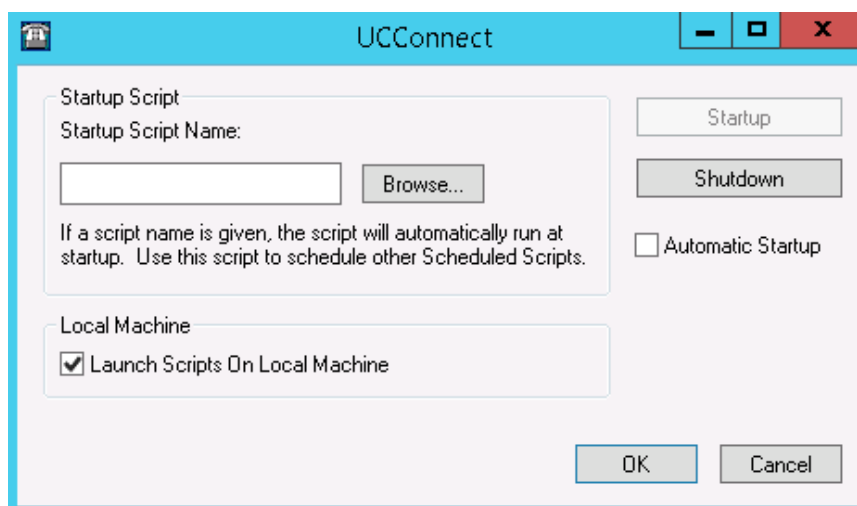


Figure 2. UCConnect - Startup Script

- The script name must be specified in the **Startup Script Name**.
- If the application is installed on the MiCollab AM System Server, **Launch Scripts On Local Machine** must be enabled. If the application is installed on a remote IVR platform, this setting must not be enabled.
- To specify that the service should start automatically when the system starts, **Automatic Startup** should be enabled.

**NOTE** The UCConnect service must be restarted in order for changes to take effect.

## MiCollab AM

### Enabling Lines For Callout

MiCollab AM must have a sufficient number of lines enabled for callouts on the Lines tab of MiCollab AM Configuration. In addition, the restrictions specified in the MiCollab AM integration Switch Sections configuration relating to the number of simultaneous callouts must be sufficient to support the number of simultaneous outbound calls placed by the application and other MiCollab AM features.

The number of lines available for callouts should be greater than or equal to the number of outbound calls that the IVR application can make simultaneously. This number is limited by the application port license, by the number of items contained in the OBCallSessions resource pool, and by the Max Call Sessions setting on the Settings tab of the application configuration utility.

In order to avoid glare (a condition where an outbound call collides with an inbound call on the same telephone line), the callouts attribute should be enabled for the MiCollab AM lines that are least likely to

receive an inbound call. This can be done by using lines at the end of the inbound hunt group, or by dedicating lines for outbound calls only.

On systems where inbound calls may arrive on the same telephone lines used for callouts, the number of lines available for callouts should exceed the number of outbound calls that can be placed simultaneously. This is to accommodate the scenario where one or more callout lines is tied up with an inbound call.

Note that even if the callout lines are not contained in the inbound hunting scheme, inbound calls may still arrive on the callout lines if the caller ID for the outbound call shows the actual telephone number of the callout line. A recipient may miss the initial outbound call and make a return call to the caller ID number.

## Dialing Plan

If the Use MiCollab AM Dial Plan option is enabled, the MiCollab AM Dialing Plan must be configured to properly format and process outbound telephone calls. Refer to the MiCollab AM online help system for further information on configuring the dialing plan.

## Call Progress

In order for the application to accurately process outbound telephone calls, MiCollab AM call progress must be configured and functioning properly. Refer to the MiCollab AM online help system for further information on call progress detection.

Note that some IP integrations do not provide MiCollab AM with complete audio call progress information. The lack of this feedback affects the operation of the application. Refer to [IP Integration Limitations](#) for more information.

## Recording Format

Notification messages recorded through the administration telephone user interface are stored on the system in the same audio format that MiCollab AM uses to store voice messages. For this reason, the default recording format for messages within MiCollab AM must be set to the same audio format that is specified for IVR prompts. If these format settings do not match, the notification messages recorded using the telephone user interface will not function properly during outbound notification calls.

The audio format used for IVR prompts can be viewed or set using the Automated Agent or UCConnect configuration utility located in the Windows Control Panel. To view or set the format, open the utility and inspect the setting in the Prompt Format box. To change the format setting, the service must be shut down.

The audio format used for messages in MiCollab AM can be viewed or set using MiCollab AM Configuration. To view or set the format, open the utility and click on the Database button located on the System tab. The setting shown as the Default Recording Format for Messages must match the setting used for IVR prompts. To change the format setting, MiCollab AM must be shut down.



## Using Switch Sections

For MiCollab AM systems with more than one configured switch section, the application supports the ability to specify the switch section to use for outbound notification calls. The specified switch section must have lines enabled for callouts as mentioned above.

Selecting the switch section involves two tasks: 1) Configuring a call processor mailbox to use the desired switch section, and 2) Specifying the number of the call processor mailbox in the Originating Mailbox setting on the Defaults tab of the control set dialog. Refer to [Defaults Tab](#) for specific information.

When configured, the switch section specified in the call processor mailbox will be used for outbound calls placed using the control set. Different control sets can specify different originating mailbox, and thus use different switch sections.

If a value is not supplied for the originating mailbox, the first switch section listed on the Switch Sections tab of MiCollab AM Configuration will be used.

## Using Text-to-Speech Languages

The application supports the use of specific MiCollab AM text-to-speech languages. The language to use for a particular notification call is specified using the Language ID setting in the applicable control set. Text-to-speech language IDs begin at 0 and increment by 1 in the order listed in the Selected Languages list on the Text to Speech tab of MiCollab AM Configuration. If an invalid ID is specified in a control set the default text-to-speech language as configured in MiCollab AM will be used.

## Launching the Telephone User Interface

The administration telephone user interface script, OBTUI, is launched from a MiCollab AM call processor mailbox using the Open Script action.

The script supports an optional parameter that can be used to specify an administrator ID number. The parameter is included in the Number field following the script name. The parameter and script name are separated by a single space character. In all cases, the entire string entered into the Number field must be enclosed in double-quotes. If an ID number is not provided as a parameter, the script will prompt the caller to enter an ID number.

### Examples:

To launch the script and allow the caller to enter an ID number:

```
Open Script    OBTUI
```

To launch the script and supply ID number 9999 as a parameter:

```
Open Script    OBTUI 9999
```

When the OBTUI script ends control returns to the launching call processor, or the next call processor if one is defined in the launching call processor. The script will return the \* key if the caller disconnects while interacting with the script. The Hangup action should be configured for the \* key. In all other cases, no digits will be returned. This information should be taken into account when configuring the call processor that will receive control upon script termination. For instance, if the launching call processor will regain control when the script terminates, the Open Script action should not be configured for the TO, or timeout, key.

# Application Configuration

## Settings and Tasks

The MiCollab AM Notify Configuration utility is started by selecting:

**Start > Programs > MiCollab AM Applications > MiCollab AM Notify Configuration**

## Settings Tab

The Settings tab contains management and control settings for the application.

The screenshot shows the 'Settings' tab of the 'MiCollab AM Notify Configuration' utility. The window has a menu bar with 'File' and 'About'. Below the menu bar are two tabs: 'Settings' (selected) and 'Tasks'. The 'Settings' tab contains a 'Control Sets' section with a table listing 2 control sets. Below the table are buttons for 'Add', 'Edit', 'Delete', and 'Edit Defaults'. The 'Management' section contains several input fields: 'Call Import File' (D:\QBCalls.csv), 'Call Results Folder' (D:\), 'User Lists Folder' (D:\), 'Maintenance Time' (01:30 AM), 'Query Interval' (60 seconds), and 'Max Call Sessions' (2). There are also buttons for 'Specify Fields', 'OK', 'Cancel', and 'Apply'. The status bar at the bottom shows 'Version 2.1' and 'CAPS NUM'.

Set ID	Default Message	From	Mach	Msg	Xfer	Atts	Start	End
01	DefaultMessage		Yes	Yes	No	3	09:00	20:00
02	Notice02	0000	Yes	No	Yes	3	16:00	21:00

Figure 3. Settings Tab

### Control Sets Grid

The Control Sets grid lists all configured control sets and displays a subset of settings for each. For more information about control sets, see [Control Sets](#).

Set ID	Control Set ID
Default Message	Default Message setting.
From	Originating Mailbox setting.

Mach	Attempt Machine Detection setting.
Msg	Default Leave Message setting.
Xfer	Default Transfer Mode setting.
Atts	Maximum Call Attempts setting.
Start	Default Call Start Time setting.
End	Default Call End Time setting.

### Control Set Buttons

Add	Add a new control set.
Edit	Edit the selected control set. Control sets may also be edited by selecting a row and pressing the Enter key or double-clicking on a row.
Delete	Delete the selected control set. Control sets may also be deleted by selecting a row and pressing the Delete key.
Edit Defaults	Edit the default call control settings. The default settings are used as a starting point for each new control set, and also apply to outbound calls that do not specify an alternate control set.

### Management

Call Import File	The location and file name of the call import text file. The application will import this file when it appears in the specified location. The file name may contain wildcards, in which case the application will import all files matching the file specification.
Specify Fields	Opens the Import File Fields configuration dialog. This dialog is used to specify the data fields included in the import file (see <a href="#">Call Import File</a> ).
Call Results Folder	The location where the call results log files will be stored by the application.
User Lists Folder	The location where the user list files will be stored.
Maintenance Time	Specifies the time of day that application daily database maintenance is initiated.
<p><b>NOTE</b> The Automated Agent or UCConnect service must be restarted for maintenance time changes to take effect.</p>	
Query Interval	The interval at which to check for pending calls and the existence of a new call import file.
Max Call Sessions	Maximum number of simultaneous call sessions allowed. This setting can be used to limit the number of outbound ports used to a subset of the total licensed ports.

# Tasks Tab

The Tasks tab provides access to various application management tasks.

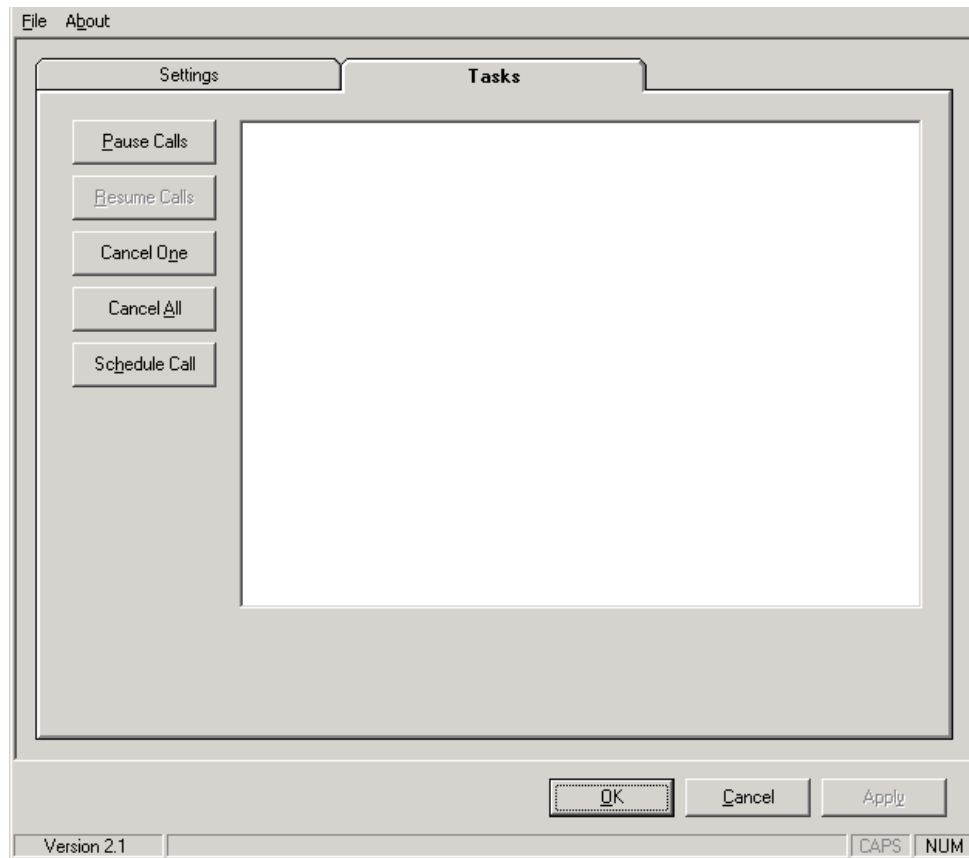


Figure 4. Tasks Tab

## Tasks

Pause Calls	Temporarily pause the placement of outbound calls. Calls already in progress will not be affected.
Resume Calls	Resume the placement of outbound calls.
Cancel One	Cancel pending calls to a specific telephone number.
Cancel All	Cancel all pending calls.
Schedule Call	Schedule a single outbound call.

**NOTE** Administrative tasks available on this tab insert a record into the administrative import file, OBAAdmin.csv, which is monitored by the application. This file is created in the folder configured for the call import file, and is renamed to OBAAdmin.old after the contents are imported. Administrative tasks can also be initiated using the application TUI or included in the call import file, allowing tasks to be executed without using the application configuration utility. For more information, see [Perform Tasks](#) in the Telephone User Interface Script section and [Task Commands](#) in the Call Import File section.

## Schedule Outbound Call Dialog

The Schedule Outbound Call dialog appears when the Schedule Call button on the Tasks tab is clicked.

The screenshot shows the 'Schedule Outbound Call' dialog box. It is organized into several sections:   
- **Recipient:** Includes text boxes for 'Telephone' (containing '5551212'), 'ID' (containing '1001'), and 'PIN'.   
- **Control Set:** Features a dropdown menu for 'Set ID' currently set to 'DEFAULT'.   
- **Phrases:** Contains text boxes for 'Message', 'Transfer' (with 'DefaultTransferPhrase'), 'Closing' (with 'DefaultClosingPhrase'), 'Menu' (with 'DefaultMenu'), 'Transfer Menu' (with 'DefaultTransferMenu'), and 'Machine Msg'. Each box has a browse button (...).   
- **Call Transfer:** Includes radio buttons for 'Mode' (No Transfer, Transfer, Prompt) and an 'Extension' text box.   
- **Calling Period:** Has 'Start' and 'End' time pickers, both set to '12:00 AM'.   
- **Origination:** Includes a 'Mailbox' text box.   
- **Call Processing:** Includes a 'Call Priority Weight' spinner (set to 0), a checked 'Leave Message' checkbox, and an unchecked 'Prevent Msg Interrupt' checkbox.   
At the bottom right are 'Schedule' and 'Cancel' buttons.

Figure 5. Schedule Outbound Call

Using this dialog an administrator is able to schedule an outbound call. This allows the administrator to test various combinations of settings without creating a regular call import file.

Entries for Recipient Telephone and Recipient ID are required. Other settings in the dialog are enabled based on the fields configured for inclusion in the call import file.

### For example:

If the call import file is configured to include the control set field, then the Control Set ID setting will be enabled and can be specified.

Only call settings that can be included in the call import file are available in the Schedule-Outbound Call dialog. To change other call settings, the control set specified for the outbound call (or control set defaults) can be modified.

**NOTE** If the setting for the Message Phrase is blank and the setting is not enabled, the control set specified for the outbound call (or control set defaults) will need to be modified to specify a message to speak during the call.

When the Schedule button is clicked, a call import record is inserted into the administrative import file, OBAAdmin.csv, which is monitored by the application. This file is created in the folder configured for the call import file, and is renamed to OBAAdmin.old after the contents are imported. The file can be opened in a text editor to view the format of the call import record if desired.

## Control Sets

A control set is as collection of settings that controls various aspects of outbound call processing. Once configured, a control set can be specified for each individual outbound call. This allows a single call import file to contain calls that will be processed differently. Up to 99 control sets can be configured.

To use a control set, the control set is configured using the dialog explained below, and a control set ID is specified for each call record in the call import file. Records in the call import file that do not specify a control set ID will use the control set default settings. Also, if control sets are not in use, the default settings will apply.

**NOTE** To use control sets, the Control Set ID field must be included in the import file field list (see [Call Import File](#)).

**NOTE** The Control Set ID must consist of all numbers if the control set is to be selected by an administrator when using the application TUI (see [Telephone User Interface Script](#)).

## Dialog Level Items

Control Set ID                      The sequence of letters and/or numbers that is used to identify the control set. The ID can be up to eight characters in length.

Reset All                              Reset all dialog settings to the control set default settings.

## Control Tab

The Control Tab contains settings related to call processing and control. Changes to the settings on this tab apply to all subsequent attempts for calls using the control set.

The screenshot shows the 'Edit Control Set 01' dialog box. At the top, the title bar reads 'Edit Control Set 01'. Below it is a text field for 'Control Set ID' containing '01'. There are four tabs: 'Control', 'Options', 'Dialog', and 'Defaults'. The 'Control' tab is selected. Inside the 'Control' tab, there is a section titled 'Callouts' containing two columns of settings. The left column includes 'Maximum Call Attempts' (a numeric spinner set to 3), 'Busy Retry Interval' (a dropdown menu set to '10 minutes'), 'No Answer Retry Interval' (a dropdown menu set to '30 minutes'), 'Retry Priority Boost' (a numeric spinner set to 0), and 'Use CallPress Dial Plan' (an unchecked checkbox). The right column includes 'Dial Prefix' (an empty text field), 'Additional Ring Count' (a numeric spinner set to 0), 'Pause After Connect' (a dropdown menu set to '0 seconds'), 'Transfer Type' (a dropdown menu set to 'Blind'), and 'Transfer Hangup Delay' (a dropdown menu set to '0 seconds'). At the bottom of the dialog are three buttons: 'Reset All', 'OK', and 'Cancel'.

Figure 6. Edit Control Tab

## Callouts

Maximum Call Attempts	Maximum number of times to attempt a call.
Busy Retry Interval	Minimum time to wait before retrying a busy call.
No Answer Retry Interval	Minimum time to wait before retrying an unanswered call.
Retry Priority Boost	Amount by which to increase the call priority weight value for each subsequent retry. Used if retries should be prioritized over initial attempts.
Use MiCollab AM Dial Plan	Whether to use the MiCollab AM Dialing configuration when placing outbound calls and performing call transfers.
Dial Prefix	Digit(s) to append to the beginning of the telephone number before dialing. If Use MiCollab AM Dial Plan is enabled this field is normally left blank.
Additional Ring Count	Number of additional rings to wait for answer beyond MiCollab AM Callout Maximum Rings setting.
Pause After Connect	Number of seconds to pause after a call is connected before beginning the call dialog. Primarily used for IP integrations. Refer to <a href="#">Call Dialog Notes</a> and <a href="#">IP Integration Limitations</a> for additional information.
Transfer Type	Type of call transfers to perform, blind or monitored. This setting should be configured based on the needs of the telephone switch. Select Blind unless a monitored transfer is required.
Transfer Hangup Delay	Number of seconds to pause before disconnecting after transferring a call. This setting should be configured based on the needs of the telephone switch.

## Options Tab

The Options Tab contains settings related to notification processing options. Changes to the settings on this tab apply to all subsequent attempts for calls using the control set.

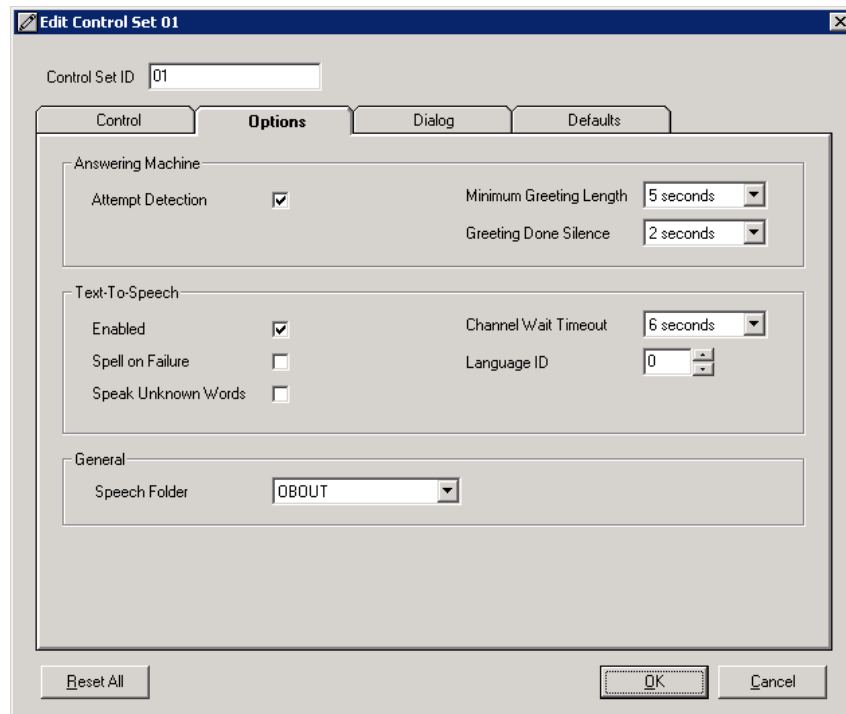


Figure 7. Edit Control Set

### Answering Machine

Attempt Detection	Whether to attempt to determine if an answering machine has answered the call. If unchecked, the script will process all answered calls as if a person has answered. Answering machine detection is not supported for IP integrations (see <a href="#">IP Integration Limitations</a> ).
Minimum Greeting Length	Minimum length of answer greeting required for the application to assume an answering machine has answered the call. This option is not processed if Attempt Detection is not enabled.
Greeting Done Silence	Length of continuous silence that indicates the answer greeting has completed. This option is not processed if Attempt Detection is not enabled.

### Text-to-Speech

Enabled	Whether to allow the use of text-to-speech within the notification message sentence.
Spell on Failure	Whether to spell TTS text in the event the application is unable to speak the text due to a channel timeout or other condition. Also, whether to spell TTS text if TTS is requested in the message sentence but not enabled.



Speak Unknown Words	Whether to use TTS to speak unknown words, or phrase elements, contained in message sentences. If not enabled, unknown phrase element names are spelled.
Channel Wait Timeout	Maximum number of seconds to wait for a TTS channel resource to become available.
Language ID	ID number of the installed TTS language to use during outbound notifications (see <a href="#">Text-To-Speech</a> ).

## General

Speech Folder	Name of Automated Agent speech folder that contains pre-recorded phrases to use during outbound notifications.
---------------	--

## Dialog Tab

The Dialog tab contains settings related to the dialog with the call recipient after the call is connected. Changes to the settings on this tab apply to all subsequent attempts for calls using the control set. For additional information, refer to [Call Dialog Notes](#).

Figure 8. Dialog Tab

## General

Play Chime	Whether to play the outbound chime recording when the call is answered. This option is useful to provide some immediate feedback to the call recipient prior to answering machine detection.
Offer Do Not Call List	Whether do-not-call list menu options are available to the call recipient during presence verification and the dialog end menu.

Repeat Machine Message	Whether to repeat the recorded informational message if the application determines an answering machine has answered the call. The message will also be repeated at the end of a human-answered call if no input is received during the call.
Menu Input Retries	Number of additional consecutive attempts the caller is allowed to enter a valid menu choice. The total number of attempts allowed is one greater than this setting.
Speak Date Format	Format in which date data values are spoken. Select a format from the drop-down list, or enter format elements directly in the text box. Refer to <a href="#">Message Sentences</a> for more information.

Valid date format elements:

d	Speak the day as a number.
dddd	Speak the day as a full name.
m	Speak the month as a number.
mmmm	Speak the month as a full name.
yy	Speak the year as a 2-digit number.
yyyy	Speak the year as a 4-digit number.

**NOTE** If the numerical day follows the month name, then the day will automatically be spoken as an ordinal (e.g. first, second, etc.).

Speak Time Format	Format in which time data values are spoken. Select a format from the drop-down list, or enter format elements directly in the text box. Refer to <a href="#">Message Sentences</a> for more information.
-------------------	---

Valid time format elements:

h	Speak the hour as a number.
n	Speak the minute as a number.
h:n	Speak the complete time.
am/pm	Use the 12-hour clock and speak AM or PM.

## Presence Verification

Establish Presence	Whether to establish the presence of a live person by requiring DTMF input before proceeding with the remainder of the call dialog. This setting is especially useful for IP-based integrations where positive call progress is not supported. Refer to <a href="#">IP Integration Limitations</a> for more information.
Allow Call Reject	Whether the call rejection option in the presence verification menu is available to the call recipient.
Assume Machine	Whether to assume an answering machine has answered the call in the event that the call recipient does not supply input in response to the

presence menu. This setting applies when the allowed number of input retries has been reached.

Menu Phrase	Pre-recorded phrase file containing a menu of choices spoken when presence verification is enabled.
Input Retries	Number of additional consecutive attempts the caller is allowed to enter a valid presence menu choice. The total number of attempts allowed is one greater than this setting.
Input Timeout	Amount of time the call recipient is given to respond to the presence verification menu prompt.

## PIN Verification

Input Retries	Number of additional consecutive attempts the caller is allowed to enter a valid PIN. The total number of attempts allowed is one greater than this setting.
Prompt Phrase	Pre-recorded phrase file spoken when PIN input is required that prompts the call recipient to enter a PIN.
Invalid Phrase	Pre-recorded phrase spoken in response to an invalid PIN entry.

## Defaults Tab

The Defaults tab contains default call settings that apply unless alternative settings are specified in imported call records. For additional details, refer to Data Field Reference.

**NOTE** The settings on this tab only apply during the initial call record import. Changes to the settings on this tab will not affect subsequent attempts for calls using the control set that have been previously scheduled.

The screenshot shows the 'Edit Control Set 01' dialog box with the 'Defaults' tab selected. The 'Control Set ID' is '01'. The 'Phrases' section contains fields for Message, Menu, Transfer, Transfer Menu, Closing, and Machine Msg, each with a default value and a browse button. The 'Call Transfer' section has a 'Mode' group box with radio buttons for 'No Transfer' (selected), 'Transfer', and 'Prompt', and an 'Extension' field. The 'Calling Period' section has 'Start' and 'End' time pickers set to 09:00 AM and 08:00 PM respectively. The 'Origination' section has a 'Mailbox' field. The 'Call Processing' section has a 'Call Priority Weight' spinner set to 0, and checkboxes for 'Leave Message' and 'Prevent Msg Interrupt'. At the bottom are 'Reset All', 'OK', and 'Cancel' buttons.

Figure 9. Defaults Tab

## Phrases

Message	Default pre-recorded phrase file containing an informational message spoken when the call is answered.
Transfer	Default pre-recorded phrase file spoken prior to transferring the call to a customer service representative if a transfer is in order.
Closing	Default pre-recorded phrase file spoken prior to ending the call.
Menu	Default pre-recorded phrase file containing a menu of choices spoken following the informational message when a call transfer is not allowed.
Transfer Menu	Default pre-recorded phrase file containing a menu of choices spoken following the informational message when a call transfer is allowed.
Machine Msg	Default pre-recorded phrase file containing an informational message spoken when the application determines that an answering machine has answered the call.

## Call Transfer

Mode	Default call transfer mode.
Extension	Default call transfer extension.

## Calling Period

Start	Default time of day at which call attempts will start.
End	Default time of day at which call attempts will end.

**NOTE** The default call start date is the date on which the call import file is processed. The default call end date is the same as the call start date.

## Origination

Mailbox	Default call processor mailbox from which calls will be originated. The switch section specified in the mailbox will determine the switch section used for outbound calls. If not specified, the first switch section will be used.
---------	---

## Call Processing

Call Priority Weight	Default setting specifying the priority weight value to apply to the call. Calls with a higher priority weight value will be placed ahead of other calls that are waiting to be processed.
Leave Message	Default setting specifying whether to leave a message and consider the call completed if it is determined that an answering machine has answered the call.
Prevent Message Interrupt	Default setting specifying whether the call recipient is prevented from interrupting message playback by entering DTMF.

**NOTE** Interruption of TTS speech cannot be prevented.

# Administrators

An administrator is a person who is allowed to access the application telephone user interface (TUI). Administrators can be assigned various permissions, and are configured by making the following selection from the application configuration utility menus:

## File > Administrators...

To provide application security, administrators are tied directly to MiCollab AM subscriber mailboxes through the administrator ID number. When accessing the telephone user interface, administrators are required to enter an ID number and the security code of the subscriber mailbox that matches the ID number. For this reason, each configured administrator must have an associated subscriber mailbox.

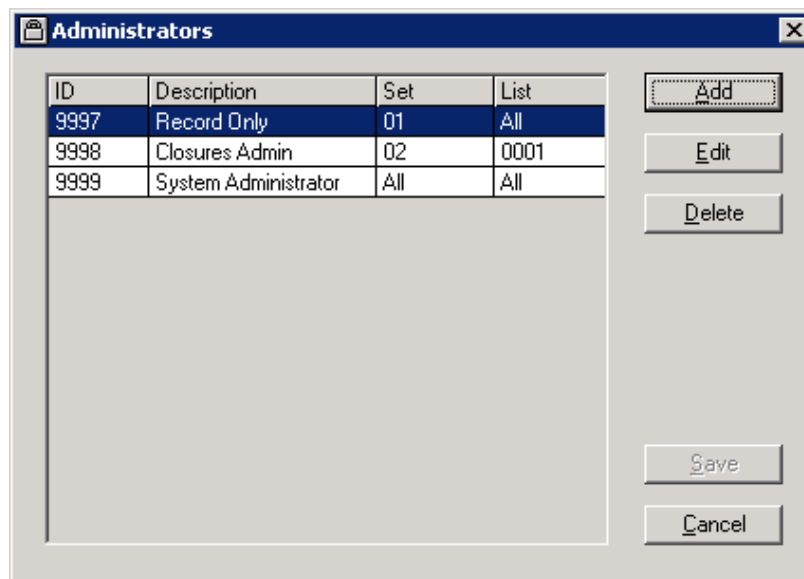


Figure 10. Administrators Grid

## Administrators Grid

ID	ID number of the administrator.
Description	Description of the administrator.
Set	Control set the administrator is allowed to utilize.
List	User list the administrator is allowed to utilize.

## Administrators Buttons

Add	Add a new administrator.
Edit	Edit the selected administrator. Administrators may also be edited by selecting a row and pressing the Enter key or double-clicking on a row.
Delete	Delete the selected administrator. Administrators may also be deleted by selecting a row and pressing the Delete key.
Save	Save the administrators configuration.
Cancel	Cancel changes and exit the dialog.

When choosing to add or edit an administrator, the following dialog is displayed:

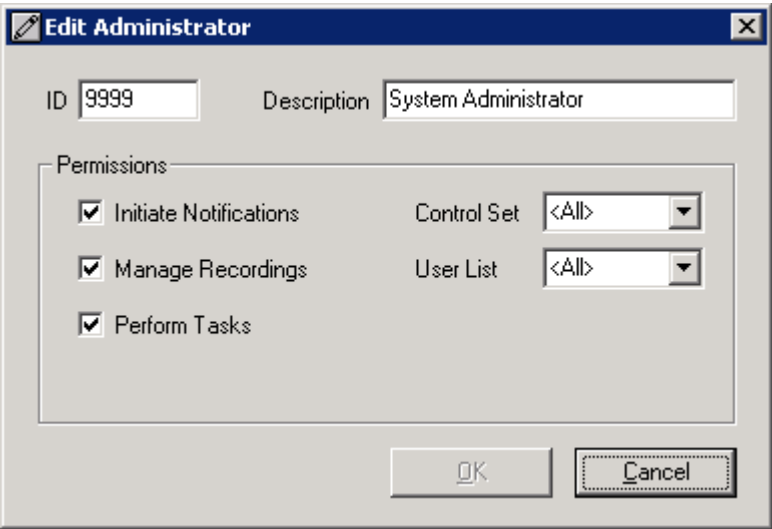


Figure 11. Edit Administrator

ID ID number of the administrator. The ID number must match the MiCollab AM subscriber mailbox used to provide application security.

Description Description of the administrator.

**Permissions**

Initiate Notifications Whether to allow the administrator to initiate notification campaigns.

Manage Recordings Whether to allow the administrator to manage recorded notification messages.

Perform Tasks Whether to allow the administrator to perform system tasks.

Control Set Optionally used to limit the control set that the administrator can utilize when initiating notifications or managing recordings.

User List Optionally used to limit the user list that the administrator can utilize when initiating notifications.

**NOTE** It is possible to specify a non-existent control set or user list by typing directly into the corresponding item’s text box. This allows administrators to be created in advance of the items. An error will occur if the item does not exist when the administrator signs into the TUI.

# Call Dialog Notes

The dialog notes in this section apply after the outbound call has been connected. That is, a MiCollab AM callout line has been obtained, the telephone number has been dialed, call progress has been evaluated, and MiCollab AM has determined that the call has been answered. For IP integrations, the call is considered connected when a trunk has been seized for the outbound call. Refer to [IP Integration Limitations](#) for more information.

The general call dialog sequence after a connection has been established is:

- 1 Pause for zero or more seconds before proceeding.
- 2 Play chime if enabled.
- 3 Attempt answering machine detection if enabled.
- 4 Establish recipient presence if enabled.
- 5 Validate recipient PIN if enabled.
- 6 Speak informational message.
- 7 Process recipient options menu.
- 8 Speak closing phrase under certain circumstances.

## Pause After Connect

Immediately after a connection is detected, the script will pause for the number of seconds specified in the Pause After Connect setting. This is primarily useful for IP integrations where a connection does not mean that the call was actually answered. For other integrations, a value of 1 is recommended if the Play Chime option is not enabled.

## Play Chime

If the Play Chime option is enabled, the phrase OutboundChime is played. This option is useful to provide some immediate feedback to the call recipient that an automated system is calling. If answering machine detection is enabled, there will be a slight pause while the system tries to determine if a machine has answered. Playing the chime can indicate to a live call recipient that the line is not dead.

## Machine Detection

If the Attempt Machine Detection option is enabled, the script will attempt to determine whether an answering machine has answered the call.

If an answering machine is detected the script will speak the informational message after the end of the machine greeting. If the Repeat Machine Message option is enabled, the script will repeat the

informational message. This can be used to accommodate the possibility that the end of the machine greeting is not properly detected and message playback begins prematurely. The script will then speak the closing phrase and end the call.

Note that if the script is instructed to leave a message on an answering machine, the message will be left regardless of whether presence verification or PIN verification is enabled. In these cases a machine message that is different from the primary information message can be specified so as not to relay sensitive information.

The script is instructed to leave a message on an answering machine using either of the following scenarios:

- 1** Supply a machine message parameter in the call record. If this parameter is supplied in the record, the script will leave a message regardless of the settings described in scenario 2 below.
- 2** Enable the Leave Message option on the Defaults tab of the Control Set dialog. If this option is enabled, the message left will be determined according to the following rules:
  - If a Machine Msg phrase is specified for the control set the script will leave this message.
  - If a Machine Msg phrase is not specified the script will leave the same informational message that would be spoken to a live call recipient.

## Presence Verification

Presence verification can be used to verify that a live person answered the call, and also to allow the call recipient to reject the call or request to be removed from the calling list prior to hearing the informational message. Presence verification is especially useful for IP-based integrations where positive call progress is not supported. Refer to [IP Integration Limitations](#) for more information.

Presence verification is subject to the settings specified on the Dialog tab of the Control Set dialog, and is enabled by using the Establish Presence setting. The Offer Do Not Call List and Allow Call Reject settings affect the menu options that are enabled.

The presence verification Menu Phrase should be specified according to the available menu options. Note that menu options can be available, but not announced to the call recipient.

Presence menu variations:

- 1** Call rejection disabled, do-not-call list disabled.  
Available menu options:  
1 – Accept the call.
- 2** Call rejection enabled, do-not-call list disabled.  
Available menu options:  
1 – Accept the call.  
2 – Reject the call.
- 3** Call rejection disabled, do-not-call list enabled.  
Available menu options:  
1 – Accept the call.



2 – Request removal from calling list.

**4** Call rejection enabled, do-not-call list enabled.

Available menu options:

1 – Accept the call.

2 – Reject the call.

3 – Request removal from calling list.

Menu option notes:

- If the call recipient accepts the call, processing continues normally.
- If the call recipient rejects the call, the closing phrase is spoken and the call is ended.
- If the call recipient requests removal from the calling list, the closing phrase is spoken and the call is ended.
- If presence cannot be verified, either because a valid response is not received or the recipient disconnects, the call is reschedule to occur after the number of minutes specified in the No Answer Retry Interval setting. If the Maximum Call Attempts limit has been reached the call is not rescheduled.
- The application waits for input from the call recipient for the amount of time specified in the Input Timeout setting. If no input is received in response to the initial prompt, the prompt will be repeated up to the number of times indicated by the Input Retries setting. When the retry limit is reached, the application concludes that presence cannot be verified. Enabling the Assume Machine option instructs the application to continue as if an answering machine has been detected. Refer to Machine Detection above for processing rules.

## PIN Verification

PIN verification can be used to help identify the call recipient and to control access to potentially sensitive information. If PIN verification is enabled, the call recipient is required to enter a valid PIN before gaining access to the message.

PIN verification is subject to the settings specified on the Dialog tab of the Control Set dialog, and is enabled by including the PIN field in the call import file field list and including a PIN value in the imported call records.

## Speak Message

Informational messages can consist of a single pre-recorded phrase or a sentence consisting of multiple phrase and data elements. Data elements can include dates, times, numbers, monetary amounts, and text strings to be spoken using text-to-speech. Refer to [Message Sentences](#) for sentence construction rules.

Call recipients can be prevented from interrupting playback of the informational message by enabling the Prevent Message Interrupt option or supplying this instruction in the call record. If this instruction is not provided, call recipients can interrupt message playback by pressing a key on their touch-tone telephone. Note that callers cannot be prevented from interrupting elements spoken using text-to-speech.

At the completion of the informational message, the call recipient is either immediately transferred to an extension, presented with the recipient options menu, or hears the closing message and the call is ended. An immediate transfer occurs if the default transfer mode is set to Transfer or a transfer mode of Yes is supplied in the call record. The recipient options menu is presented if a menu phrase is configured.

## Text-To-Speech

Informational messages can include text strings that are spoken to recipients using MiCollab AM text-to-speech. Instructions to speak text strings using text-to-speech can be explicitly embedded in the message sentence. In addition, the application can be configured to speak unknown sentence elements, i.e. words, using text-to-speech.

An unknown sentence element is any element that does not begin with a data element indicator and for which a pre-recorded phrase does not exist. Using text-to-speech for unknown elements is enabled using the Speak Unknown Words option. If this option is not enabled, unknown sentence elements will be spelled to the recipient.

MiCollab AM text-to-speech channel resources can be shared among simultaneous notification calls. Sharing is most effective when only a portion of the notification message requires text-to-speech. The number of text-to-speech channels required depends on the duration of the text spoken using text-to-speech in relation to the number of simultaneous notification calls. If a lengthy element of the notification message is spoken using text-to-speech, then one text-to-speech channel should be available for each simultaneous notification call.

The amount of time a particular notification call waits for a shared text-to-speech resource to become available is configured using the Channel Wait Timeout setting. If a resource is not available after this time has elapsed, the Spell on Failure option can be enabled to instruct the application to spell the text-to-speech element to the call recipient. If this option is not enabled, the element will be skipped.

The application supports the use of specific MiCollab AM text-to-speech languages. The language to use for a particular notification call is specified using the Language ID setting in the control set. Text-to-speech language IDs begin at 0 and increment by 1 in the order listed in the Selected Languages list on the Text to Speech tab of MiCollab AM Configuration. If an invalid ID is specified in a control set the default text-to-speech language as configured in MiCollab AM will be used.

**NOTE** Callers cannot be prevented from interrupting elements spoken using text-to-speech using the Prevent Message Interrupt option.

**NOTE** In order to utilize text-to-speech, one or more text-to-speech channels must be licensed on the MiCollab AM system.

## Recipient Options Menu

The recipient options menu is presented to the call recipient at the completion of the informational message unless there is no menu phrase configured or an immediate transfer is indicated.

When a menu is presented, there are four possible recipient options menu variations. The variation presented to the call recipient depends on the Transfer Mode and Offer Do Not Call List instructions in

effect for the call. The transfer option is available to the call recipient if the default Transfer Mode is set to Prompt or a transfer mode of Prompt is supplied in the call record.

As a fifth variation, the recipient options menu can be eliminated by clearing the default Menu and Transfer Menu settings of all text and not supplying a menu phrase in the call record. When the default transfer mode is set to No Transfer or a transfer mode of No is supplied in the call record the application will speak the informational message followed by the closing message and then the call will be ended. When the default transfer mode is set to Prompt or a transfer mode of Prompt is supplied in the call record the application will speak the informational message followed by the transfer message and then the call will be transferred.

The menu phrase spoken must be appropriate for the combination of settings in effect for the call, and is specified in the Menu Phrase field in the call record or the phrase setting value configured on the Defaults tab of the Control Set dialog as indicated in the variation descriptions below. Note that menu options can be available, but not announced to the call recipient.

Recipient options menu variations:

**1** Transfer unavailable, do-not-call list disabled.

Default phrase setting: Menu

Available menu options:

1 – Repeat the informational message.

\* – End the call.

**2** Transfer available, do-not-call list disabled.

Default phrase setting: Transfer Menu

Available menu options:

1 – Repeat the informational message.

2 – Transfer to a representative.

\* – End the call.

**3** Transfer unavailable, do-not-call list enabled.

Default phrase setting: Menu

Available menu options:

1 – Repeat the informational message.

2 – Request removal from calling list.

\* – End the call.

**4** Transfer available, do-not-call list enabled.

Default phrase setting: Transfer Menu

Available menu options:

1 – Repeat the informational message.

2 – Transfer to a representative.

3 – Request removal from calling list.

\* – End the call.

Menu option notes:

- If the call recipient requests to be removed from the calling list, the closing phrase is spoken and the call is ended.
- If a transfer is requested, the transfer phrase is spoken and a call transfer is initiated.
- If the recipient elects to end the call, the closing phrase is spoken and the call is ended.
- If the call recipient fails to make a valid selection within the number of attempts indicated by the Menu Input Retries setting, the closing phrase is spoken and the call is ended.
- If no input is received in response to the initial prompt, the prompt will be repeated up to the number of times indicated by the Menu Input Retries setting. When the retry limit is reached, the closing phrase is spoken and the call is ended. If there has been no input received during the call, the Repeat Machine Message option is enabled, and a machine message is indicated for the call, the script will speak the machine message prior to the closing message.

## Do Not Call List

Enabling the Offer Do Not Call List option on the Dialog tab of the Control Set dialog allows call recipients to be given the option of requesting that they be removed from the calling list.

Menu options are enabled in the presence verification menu and the recipient options menu. Though the options are available, they do not have to be included in the corresponding menu phrase.

**NOTE** The application does not maintain an internal do-not-call list. The application notes the request in the call results file. It is the responsibility of the list administrator to review the call results list and ensure that the call recipient is removed from future calling campaigns.

## Closing Phrase

The closing phrase is spoken at the end of the call in most circumstances. Cases where the closing phrase is not spoken include:

- Call disconnect is detected.
- Call is transferred.
- Timeout or validation input retries exception during presence verification.
- Timeout or validation input retries exception during PIN verification.

# Call Import File

The list administrator provides the call import file to the IVR application. The Call Import File setting on the Settings tab of the application configuration utility specifies the file name and location. The use of multiple character (\*) and single character (?) wildcards to specify multiple files is supported.

The application checks for the existence of call import files at the frequency specified by the Query Interval setting. If a file is found the call records contained in the file are imported and appended to the list of pending calls. The import file is then renamed with an extension of .old.

A call import file is an ASCII text file with a single line of text for each call attempt. Each line of text, or record, consists of a series of comma separated data fields. If a data field value includes a comma character, the entire contents of the field must be enclosed in double-quotes.

The contents and order of the fields in each record are specified using Import File Fields dialog, which is accessed by pressing the Specify Fields button on the Settings tab of the application configuration utility.

The only required data fields are Recipient ID and Telephone. Default values specified on the Defaults tab of the Control Set dialog can be used in place of all other importable call settings.

When import files are supplied to the application, each data record must include all selected fields. However, the fields do not have to be populated with actual data values as long as the comma separators are present. If a data value is not supplied, the defaults configured for the control set will be applied.

**NOTE** The fields included in the import file directly determine the data elements that can be specified by administrators when initiating notifications through the telephone user interface (see [Telephone User Interface Script](#)).

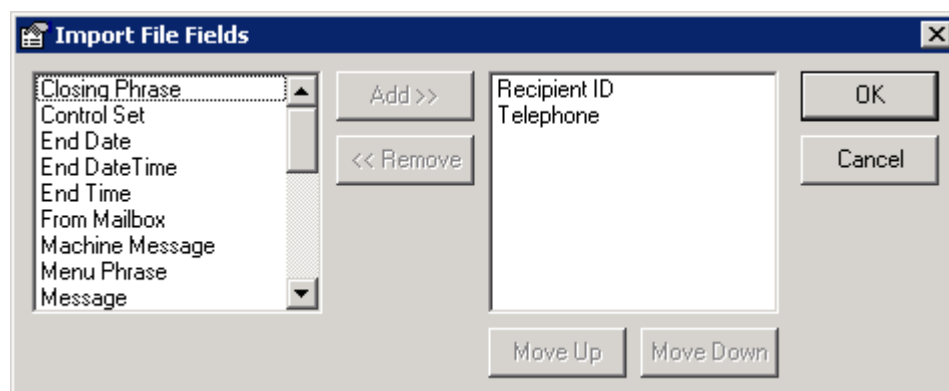


Figure 12. Import File Fields

## Data Field Listing

Closing Phrase	Phrase file to speak prior to ending the call.
Control Set	ID of the control set to use for the call.
End Date	Date on which call attempts should end.
End DateTime	Date and time at which call attempts should end.
End Time	Time of day at which call attempts should end.
From Mailbox	Call processor mailbox used to specify switch section for calls.
Machine Message	Phrase file or sentence specifying the informational message to speak when an answering machine is detected.
Menu Phrase	Phrase file to speak after the informational message which contains a menu of options.
Message	Phrase file or sentence specifying the informational message to speak.
PIN	Numeric security code that must entered to access the message.
Prevent Interrupt	Controls whether call recipient can interrupt message playback.
Priority Weight	Call priority weight value assigned to the call.
Recipient ID	ID number which uniquely identifies the call recipient.
Start Date	Date on which call attempts should start.
Start DateTime	Date and time at which call attempts should start.
Start Time	Time of day at which call attempts should start.
Telephone	Telephone number to call.
Transfer Extension	Internal extension to which the call should be transferred.
Transfer Mode	Controls if/how call transfers to internal extensions are initiated.
Transfer Phrase	Phrase file to speak prior to initiating a call transfer.
Unused1	Unused field placeholder 1.
Unused2	Unused field placeholder 2.
Unused3	Unused field placeholder 3.
Unused4	Unused field placeholder 4.
Unused5	Unused field placeholder 5.

## Data Field Reference

### Closing Phrase

Description: Phrase file to speak prior to ending the call.

Value:	String matching a pre-recorded phrase file name. The file extension .wav is assumed and must not be included.
Default:	User configured.
Notes:	The closing phrase will not be spoken if the phrase is not specified in the imported call record and no default is configured.  The closing phrase will not be spoken if the call is being transferred.

## Control Set

Description:	ID of the control set to use for the call.
Value:	String matching a configured Control Set ID.
Default:	None.
Notes:	A control set contains values that control various aspects of call processing, including default values to use for fields that are not contained in the imported call record.  If a control set value is not supplied, or the supplied value does not match a configured control set, the default call control settings will be used.

## End Date

Description:	The date on which call attempts should end.
Value:	String representing a valid date, e.g. mm/dd/yyyy.
Default:	Same value as the start date for a call.
Notes:	Must be a value equal to or greater than the start date for the call.

## End DateTime

Description:	The date and time at which call attempts should end.
Value:	String representing a valid date and time, e.g. mm/dd/yyyy hh:nn [am/pm].
Default:	Date is same value as the start date for the call. Time is user configurable (see End Time below).
Notes:	The date value must be equal to or greater than the start date for the call. The time value must be greater than the start time for the call. Time can be specified in 12 or 24-hour format (e.g. 9:30 pm or 21:30).

## End Time

Description:	The time of day at which call attempts should end.
Value:	String representing a valid time, e.g. hh:nn [am/pm].
Default:	User configured.
Notes:	Must be a value greater than the start time for a call. Can be specified in 12 or 24-hour format (e.g. 9:30 pm or 21:30).

## From Mailbox

Description:	MiCollab AM call processor mailbox that specifies the appropriate switch section to use for notification calls.
Value:	String representing a valid MiCollab AM call processor mailbox.
Default:	User configured.
Notes:	If a value is not provided, the first switch section listed on the Switch Sections tab of MiCollab AM Configuration will be used.

## Machine Message

Description:	Phrase file or sentence specifying the informational message to speak when an answering machine is detected.
Value:	String containing pre-recorded phrase file names and, optionally, data elements. The file extension .wav is assumed for phrase files and must not be included.
Default:	User configured.
Notes:	<p>If a default value is not configured, the value specified in the call record Message field is used as the default.</p> <p>This value only applies if answering machine detection is enabled.</p> <p>If this value is supplied in the call record, and an answering machine is detected, the script will leave a message regardless of the Leave Message setting. See <a href="#">Call Dialog Notes</a> for more information.</p> <p>See <a href="#">Message Sentences</a> for sentence construction rules.</p>

## Menu Phrase

Description:	Phrase file that contains a menu of options to present to the call recipient after the informational message.
Value:	String matching a pre-recorded phrase file name. The file extension .wav is assumed and must not be included.
Default:	User configured.



Notes: There are four possible menu option variations. The variation presented to the call recipient depends on the Transfer Mode and Offer Do Not Call List settings in effect for the call.

The phrase specified must be appropriate for the combination of settings in effect for the call.

It is possible to have a menu option available, but not announced to the call recipient.

See [Recipient Options Menu](#) for more information.

## Message

Description: Phrase file or sentence specifying the informational message to speak.

Value: String containing pre-recorded phrase file names and, optionally, data elements. The file extension .wav is assumed for phrase files and must not be included.

Default: User configured.

Notes: See [Message Sentences](#) for sentence construction rules.

## PIN

Description: Numeric security code that must be entered to access the message.

Value: String containing digits 0-9 only.

Default: None.

Notes: If a PIN value is included in the call record, the call recipient must enter the correct PIN to proceed to the call dialog.

Related phrases and input retries can be configured on the Dialog tab of the Control Set configuration dialog.

## Prevent Interrupt

Description: Whether to allow the call recipient to interrupt message playback by pressing a digit on the telephone keypad.

Value: Yes or No

Default: User configured.

Notes: This setting applies only to the first presentation of the informational message. After the first presentation is complete, the call recipient may interrupt all subsequent speech playbacks.

This setting does not apply to message elements spoken using text-to-speech.

## Priority Weight

Description:	Call priority weight value assigned to the call.
Value:	String containing a number between 0 and 9999.
Default:	User configured.
Notes:	Calls with a higher priority weight value will be placed ahead of other calls that are waiting to be processed. See <i>Call Placement Order</i> below for additional information.

## Recipient ID

Description:	An ID number which uniquely identifies the call recipient.
Value:	String containing alphanumeric ID number.
Default:	None.
Notes:	Required field. Used to correlate imported call records with call result records.

## Start Date

Description:	The date on which call attempts should start.
Value:	String representing a valid date, e.g. mm/dd/yyyy.
Default:	Date on which call import file is processed.
Notes:	None.

## Start DateTime

Description:	The date and time at which call attempts should start.
Value:	String representing a valid date and time, e.g. mm/dd/yyyy hh:nn [am/pm].
Default:	Date on which call import file is processed. Time is user configurable (see Start Time below).
Notes:	Time can be specified in 12 or 24-hour format (e.g. 9:00 am or 09:00).

## Start Time

Description:	The time of day at which call attempts should start.
Value:	String representing a valid time, e.g. hh:nn [am/pm].
Default:	User configured.
Notes:	Can be specified in 12 or 24-hour format (e.g. 9:00 am or 09:00).

## Telephone

Description:	The telephone number to call.
Value:	String containing telephone number to call.
Default:	None.
Notes:	Required field. Only the digits 0-9 are valid characters. All other characters will be removed from the data string.

## Transfer Extension

Description:	The internal extension to which the call should be transferred.
Value:	String containing a valid internal extension.
Default:	User configured.
Notes:	<p>The application can be configured to use a blind or monitored transfer to connect the call recipient to the internal extension. Precautions should be made to ensure that a transfer to this extension will never result in a busy signal.</p> <p>Only the digits 0-9 are valid characters. All other characters will be removed from the data string.</p> <p>If the Use MiCollab AM Dial Plan setting is enabled, the transfer will be processed according to rules configured in the MiCollab AM dialing plan.</p>

## Transfer Mode

Description:	Controls if/how call transfers to internal extensions are initiated.
Value:	One of the following words: Yes, No, Prompt
Default:	User configured.
Notes:	<p>A value of Yes will cause the call to be immediately transferred to the specified extension after completion of message playback.</p> <p>A value of No will not allow a call transfer.</p> <p>A value of Prompt will allow the caller to select an option to transfer if a Menu phrase is configured. If a menu phrase is not configured, Prompt and Yes behave identically.</p> <p>If a default transfer extension is not configured, and a transfer extension is not supplied in the call record, the transfer mode will be set to No by the script.</p>

## Transfer Phrase

Description:	Phrase file to speak prior to initiating a call transfer.
Value:	String matching a pre-recorded phrase file name. The file extension .wav is assumed and must not be included.
Default:	User configured.
Notes:	Spoken prior to automatic and user requested transfers.

## Unused1 – Unused5

Description:	Unused call record import field placeholders.
Value:	Not applicable.
Default:	Not applicable.
Notes:	Field placeholder used to indicate a field or fields in call import records that should not be imported.

## Call Placement Order

The application selects calls for placement based on the date and time the call is scheduled to take place, the call priority weight value, and, at times, the order in which the calls were imported into the database.

A call is considered waiting when the scheduled time for the call is reached or exceeded. The scheduled time can be the call start time specified for the call, or the time that an incomplete call was scheduled to be retried.

Waiting calls are ordered by priority weight, then by scheduled call time, and then by database import order. The waiting call with the highest priority weight value is always selected first. If two or more calls have the same priority weight value, then the call with the earliest scheduled time is selected. If two or more calls have the same priority weight value and the same scheduled time, then the call that was imported into the database before the others is selected.

Using the Retry Priority Boost setting, the priority weight for call retries can be increased. This allows subsequent attempts for calls that have been attempted but not completed to be prioritized ahead of other waiting calls that have not yet been attempted.

The precise time a call is placed depends on the number of waiting calls and the number of telephone lines available for outbound calls. Calls are never placed before their scheduled time, but may be placed somewhat after their scheduled time depending on these two factors.

### For example:

If six calls are scheduled for the same time, and only two lines are available, then four of the calls will be delayed until somewhat after the scheduled time. The delay can be considerable if the number of calls waiting is high and the number of lines available is limited.

# Message Sentences

The values for the Message and Machine Message fields can consist of a single pre-recorded phrase or a sentence consisting of multiple phrase and data elements. A space character is used to separate individual elements within the string.

Format: Element1 Element2 Element3 ... ElementN

To specify pre-recorded phrases, include the phrase file name as an element. The file extension .wav is assumed and must not be included. Any pre-recorded phrase that exists in the speech folder for the script can be specified. In addition, any pre-recorded phrase that exists in the Automated Agent system speech folder can be specified.

**NOTE** Message sentences must not include the ^ or = characters in any data element or phrase name. These characters are used internally by the application.

**NOTE** If the message sentence includes a comma, the entire field must be enclosed in double-quotes in the call import file.

To specify data elements, precede the element value with the following special characters.

## # Numeric value

Numeric values can include a decimal point. To specify a percentage, include the % character immediately following the last digit.

**Examples:** #123 will speak, One hundred twenty three.  
#123.45 will speak, One hundred twenty three point four five.  
#12% will speak, Twelve percent.

## \$ Monetary value

Monetary values can include a decimal point.

**Examples:** \$99 will speak, Ninety-nine dollars.  
\$99.50 will speak, Ninety-nine dollars and fifty cents.

## ~ Date value

Date values are spoken according to the value specified in the Speak Date Format setting on the Dialog tab of the Control Set dialog. The following example uses the default dddd mmmm d setting.

Date values supplied in call records are interpreted according to the Windows Regional Settings in effect on the platform.

**Example:** ~08/07/2006 will speak, Monday, August seventh.

## @ Time value

Time values are spoken according to the value specified in the Speak Time Format setting on the Dialog tab of the Control Set dialog. The following examples use the default hh:nn am/pm setting.

**Example:** @17:35 will speak, Five thirty five PM.

## [ **Text-to-speech**

Text-to-speech elements may consist of multiple words separated by spaces. For this reason, text-to-speech elements are specified by enclosing the entire element in square brackets, i.e. [ and ] characters.

**Example:** [This is the notification message] will speak, This is the notification message using text-to-speech.

If an element does not start with one of these special characters, the application will check for a pre-recorded phrase matching the element. If a phrase is not found the individual characters of the element will spoken (i.e. the value will be spelled). However, if text-to-speech is enabled and the Speak Unknown Words option is enabled, the application will attempt to speak the element using text-to-speech.

## Task Commands

Administrative task commands can be included in the call import file. The administrative tasks available mimic the tasks available through the application configuration utility. Supporting administrative tasks in the call import file allows the tasks to be executed without using the application configuration utility.

Task commands are not subject to the import field list configuration. Task commands can be mixed with call records, and are included as a single line of text in the import file as specified below.

### **Commands:**

PAUSE	Temporarily pause the placement of outbound calls. Calls already in progress will not be affected. This command does not accept additional parameters.
RESUME	Resume the placement of outbound calls. This command does not accept additional parameters.
CANCEL, [Telephone]	Cancel pending calls to a specific telephone number. This command accepts the target telephone number as an additional parameter. The telephone number parameter is required, and is separated from the command by a single comma.
ABORT	Cancel all pending calls. This command does not accept additional parameters. Initiation of outbound calls will be paused while this command is processed.

# Telephone Administration

## Telephone User Interface Script

The telephone user interface (TUI) script can be used to initiate notifications to user lists, make recordings and perform system task commands from a remote location using a touch-tone telephone.

Administrators are configured using the application configuration utility (see the Administrators section), and are tied to MiCollab AM subscriber mailboxes for security.

The TUI script is accessed from a call processor mailbox as described in the Launching the Telephone User Interface section.

Upon accessing the script, callers are prompted to enter an ID number and security code. The ID number entered must match a configured administrator, and must also match a corresponding MiCollab AM subscriber mailbox. The caller must enter the security code configured for the subscriber mailbox in order to gain access to the TUI script.

After successful sign-in, the menu options presented to the caller will depend on the permissions assigned to the configured administrator. At all menu levels, pressing the star key will return the caller to the previous menu.

## Initiate Notifications

If the administrator has been granted the Initiate Notifications permission, this menu choice will be available.

Administrators may be able to specify zero or more of the below configuration elements in the order shown. The elements available for selection depend upon the data fields included in the import file fields list and the permissions granted to the administrator. Data and settings for elements not included or available will be derived from the applicable control set. When all available elements have been configured, the resulting configuration will be spoken to the administrator for confirmation.

### Control Set

If the Control Set field is included in the import file, and the administrator is configured for access to all control sets, the administrator will be prompted to enter a control set ID. Control sets available for selection from the telephone must have an ID that consists of all numeric digits.

Administrators will not be prompted to specify a control set if the administrator is configured for access to a specific control set, or if the Control Set field is not included in the import file.

The default control set will be used if the Control Set field is not included in the import file.

### User List

Unless the administrator is configured for access to a specific user list, the administrator will be prompted to enter a list ID number. Notifications will be scheduled for all users contained in the list.

## **PIN**

If the PIN field is included in the import file the administrator will be prompted to specify whether users should be required to enter a PIN prior to hearing the notification message.

When requiring PINs, users PINs that are specified in the selected user list will be included in the resulting call import file. Users for which a PIN has not been specified in the user list will not be required to enter a PIN.

## **Message**

If the Message field is included in the import file the administrator will be prompted to enter a message ID number. Administrators may also choose to use the default message if a default message is specified in the control set.

The default message as configured in the control set will be used if the Message field is not included in the import file. In this scenario, an error message will be played to the administrator if the default message is not configured.

## **Machine Message**

If the Machine Message field is included in the import file the administrator will be prompted through the process of specifying a machine message. The Leave Message setting in the control set affects the machine message options available to the administrator.

When the Leave Message option is activated, the administrator can choose to specify an alternate machine message or play the same message to recipients and answering machines. Regardless, a message must be specified.

When the Leave Message option is not activated, the administrator can choose whether messages should be left if an answering machine is detected. If a machine message is not specified, a message will not be left.

When choosing a machine message the administrator will be prompted to enter a message ID number. Administrators may also choose to use the default machine message if a default machine message is specified in the control set.

If the Machine Message field is not included in the import file, the behavior will be determined by the control set configuration. Refer to the [Machine Detection](#) section for additional information.

## **Start Date**

If the Start Date or Start DateTime field is included in the import file the administrator will be prompted to enter the date on which notifications should begin. Date entries must be six digits in length and consist of the two-digit month, two-digit day, and two-digit year. Dates earlier than the current date are not allowed.

The current date will be used if neither the Start Date nor Start DateTime field is included in the import file.

## **End Date**

If the End Date or End DateTime field is included in the import file the administrator will be prompted to enter the date on which notifications should end. Date entries must be six digits in length and consist of the two-digit month, two-digit day, and two-digit year. Dates earlier than the start date are not allowed.

The start date will be used if neither the End Date nor End DateTime field is included in the import file.



## Start Time

If the Start Time or Start DateTime field is included in the import file the administrator will be prompted to enter the time at which notifications should begin. Time entries must be four digits in length and consist of the two-digit hour and two-digit minute. 24-hour time format entries are supported, and the administrator will be prompted to specify AM or PM as appropriate.

The default start time as configured in the control set will be used if neither the Start Date nor Start DateTime field is included in the import file.

## End Time

If the End Time or End DateTime field is included in the import file the administrator will be prompted to enter the time at which notifications should end. Time entries must be four digits in length and consist of the two-digit hour and two-digit minute. 24-hour time format entries are supported, and the administrator will be prompted to specify AM or PM as appropriate.

The default start time as configured in the control set will be used if neither the End Date nor End DateTime field is included in the import file.

# Manage Recordings

If the administrator has been granted the Manage Recordings permission, this menu choice will be available. This menu choice is contained in the Administrative Options sub-menu.

Administrators that have been granted permission to access all control sets will be prompted to enter the control set ID to use for recording. The control set specifies the speech folder in which recorded messages will be contained.

The application will prompt the administrator to enter a message ID number. If the message exists, it will be played and the administrator will be given the option to delete or rerecord the message. If the message does not exist, the administrator will be given the opportunity to create it.

After the message has been recorded, the following options are available:

Save	Save the message as described in <a href="#">Telephone-Recorded Phrase Files</a> .
Review	Listen to the message.
Rerecord	Discard the message contents and start recording again from the beginning.
Append	Add additional recorded speech to the end of the message.
Quit	Cancel message recording.

# Perform Tasks

If the administrator has been granted the Perform Tasks permission, this menu choice will be available. This menu choice is contained in the Administrative Options sub-menu. The available tasks correspond to buttons on the Tasks tab of the application configuration utility.

The following system tasks can be performed:

Pause	Temporarily pause notification processing. Notifications already in progress will not be affected.
Resume	Resume notification processing after it has been paused.
Cancel Specific	Cancel notifications to a specific destination.
Cancel All	Cancel all pending notifications.

## Call Import Files

After the administrator has confirmed the campaign configuration, the application will create a call import file. The call import file will contain a record for each user in the selected user list. Each record will contain data fields as specified in the import file fields list.

The call import file is created in the same folder as the Call Import File setting on the Settings tab of the application configuration utility, and is named OBTUlyymmddhhnnssxxx.csv, where yymmdd is the current date, hhnnss is the current time, and xxx is the MiCollab AM line number used by the administrator when initiating the campaign.

Refer to [Call Import File](#) for additional information about import file processing.

## User List Files

The application uses precompiled user list files, also referred to as recipient list files, to support the initiation of notification campaigns through the application TUI. Administrators can be limited to a specific list file, or can be allowed to select from all available list files during campaign initiation.

The list files must be located in the folder specified by the User Lists Folder setting on the Settings tab of the application configuration utility. The files must be named LIST####.csv, where #### is the list number.

**Example:** LIST1234.csv

List numbers can range from one to four digits in length, and can consist of alphabetic characters or numeric digits. However, in order for administrators to select the list using the TUI the list number must consist of numeric digits only.

Each file is an ASCII text file with a single line of text for each user. Each line of text, or record, consists of a series of comma-separated data fields. As noted below, supplying data in the PIN field is optional.

## Data Fields

Recipient ID	ID number.
Telephone	Telephone number.
PIN	PIN number (optional).

## Telephone-Recorded Phrase Files

Notification messages recorded by administrators through the application TUI are stored in the speech folder configured for the control set in use during the recording session.

The message files are named MSG####.wav, where #### is the message ID number specified by the administrator. Message ID numbers can range from one to four digits in length.

**Example:** MSG1234.wav

Administrators select the message to use during a notification campaign by entering this message ID number. Any pre-recorded message, whether it's recorded through the TUI or not, is available for selection if this naming convention is followed.

**NOTE** Messages recorded through the TUI are stored in the audio format specified as the default recording format for messages in MiCollab AM. This format must match the Automated Agent prompt format. Refer to [Recording Format](#) for details.

# Call Results File

The IVR application generates call results files as output. These files contain an entry for each outbound call attempt. Multiple entries will exist for a single call in cases where the dialed telephone number was busy, not answered, or otherwise could not be completed during the call attempt.

A new file is created each day. The files are stored in the folder specified by the Call Results Folder setting on the Settings tab of the application configuration utility. The files are named OByymmdd.csv, where yymmdd is the year, month and day the file was created.

Historical call results files are not automatically deleted by the application. Files can be manually moved or deleted as desired.

The current day call result file should not be opened in-place in a separate application. This could lock the file and prevent the application from writing additional data to the file. To review the current day file, place a copy of the file in another location and open the copy.

Each file is an ASCII text file with a single line of text for each call attempt. Each line of text, or record, consists of a series of comma-separated data fields.

## Data Fields

DateTime	Date and time of the attempt result record.
Recipient ID	Recipient ID number provided in the call import file.
Telephone	Telephone number called.
Line Number	MiCollab AM line on which call occurred.
Length	Call length in seconds, including the time required to dial the telephone number and determine call progress.
Result	Call attempt result (see below).
Rescheduled	Indicates whether the call will be attempted again (1=yes, 0=no).
TTS Result	Text-to-speech usage result. Value is a summation of all TTS elements attempted during the call. Thus, a failure result indicates that at least one attempt to speak an element using TTS failed.  Possible values:  0      Not requested or not enabled.  1      Text successfully spoken.  2      Failed due to wait timeout.  3      Failed due to error.

## Call Results

### Completed Call Results (Not Rescheduled)

COMPLETE	Call was connected, and message playback was completed.
DO_NOT_CALL	Call was connected, and call recipient asked to be removed from the calling list.
HANGUP	Call was connected, and was disconnected prior to the completion of message playback. Disconnect may have occurred during message playback or recipient PIN processing.
HANGUP_MSG	Answering machine was detected, but the call was disconnected before message playback was completed.
INTERRUPT	Call was connected, and the call recipient interrupted message playback by pressing a key. Message playback was not completed.
MESSAGE	Answering machine was detected, and a message was successfully left.
PIN_INVALID	Call was connected, but call recipient was unable to enter a valid PIN within the number of attempts dictated by the PIN Input Retries setting.
REJECTED	Call was connected, but call recipient elected to reject the call during presence verification.
TIMEOUT	Call was connected, but the call recipient did not respond to a prompt for PIN or options menu input. Result indicates that no DTMF input was received at any time during the call.
TRANSFER	Call was completed and a call transfer was initiated.

### Incomplete Call Results (Possibly Rescheduled)

BUSY_LINE	Call was not connected because the telephone number was busy.
DIALTONE	Call was not connected because dial tone was detected after the telephone number was dialed.
FAST_BUSY	Call was not connected because a reorder, or fast-busy, tone was detected after the telephone number was dialed.
MAX_GREETING	Call was connected, but the maximum greeting length of 30 seconds was exceeded. The greeting length is defined as the amount of continuous noise detected after the call was connected. This value is only possible when answering machine detection is enabled.
LINE_ERROR	Problem with the MiCollab AM outbound line allocated for the call.
NO_ANSWER	Call was not answered, or an answering machine was detected and the script was instructed not to leave a message.
NO_LINE	No MiCollab AM outbound line available for the call.

NOT_PRESENT	Call was connected, but recipient presence was not verified. The call was either disconnected during presence verification, or a valid response to the presence prompt was not received within the number of attempts dictated by the Presence Input Retries setting.
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## Incomplete Call Results (Not Rescheduled)

CANCELED	Call was canceled by the administrator.
ERROR	Unexpected error occurred during the call.
EXPIRED	Call was removed from the database before completion because the end of the calling period was exceeded.

## Import Status Results

IMPORT_ERROR	Call record was not imported due to a data error.
IMPORTED	Call record was imported and scheduled.

# Call Results Reports

The call results files are text files that contain raw data records. The files can be viewed using a text editor, but the records are formatted as comma-separated data fields for the purpose of being imported into an external database or spreadsheet program. By importing the data records into an external database or program, the data records can be sorted and queries can be developed to produce useful summary data and reports.

A sample reports utility titled is provided with the application, and is copied to the following folder during application installation.

*C:\Program Files\MiCollab AM Notify\Reports*

The reports utility is a Microsoft Access database that is provided as an example of what can be accomplished using the data in the call results files, but is also a functional tool that can be used as-is to generate reports and export sub-sets of data records.

Call results files generated by the application are imported into a database table contained within the utility. Users can then view the data in various forms and generate over twenty reports from the imported data.

Rather than running the utility on the System Server, the database file containing the utility is copied to a workstation that has Microsoft Access 2000 or later installed. This allows the utility to remain independent of the System Server, and also provides access to local printing resources. In addition, data and reports can be exported to other Microsoft Office programs residing on the workstation.

The reports utility can be customized by persons familiar with Microsoft Access queries and reports, and can also be used as a guide for creating a customized reporting tool using preferred third-party programs and databases.

## Using the Reports Utility

### To use the reports utility:

- 1 Copy the reports utility file, OBReports.mdb, to a workstation with Microsoft Access 2000 or later installed.
- 2 Copy the results files from the System Server to a working folder on the workstation.
- 3 Open the OBReports.mdb file on the workstation to start the utility.
- 4 Import one or more call results files from the working folder using the Import Results File action contained in the Database Actions menu.
- 5 Use the other items in the utility menus to view reports and data records, and perform additional database maintenance actions.
- 6 Use Microsoft Access functionality to print, publish or export the reports or data records.

## Compacting the Reports Utility Database

During normal use the reports utility database will retain data records that have been deleted and are no longer accessible. To permanently erase the deleted records, the database should be periodically compacted. There are two methods by which the recommended database compaction can be accomplished.

### Method 1: Using the Command Line

- 1 Open a command prompt in the folder containing the OBReports.mdb file.
- 2 Type the following command on the command line and press Enter.  
`C:\Program Files\Microsoft Office\Office\msaccess.exe OBReports.mdb /compact`

**NOTE** In the above command, substitute the correct path to the local copy of the Microsoft Access executable file, msaccess.exe, on the workstation.

### Method 2: Using Microsoft Access

- 1 While holding down the Shift key, open the OBReports.mdb file in Microsoft Access. This has the effect of bypassing the utility startup.
- 2 Click on the **Tools > Database Utilities > Compact and Repair Database** menu item.



# Application Phrase Listing

This section contains a listing of the pre-recorded phrases supplied with the application. The phrases are supplied as examples, and can be re-recorded as needed. The phrase files are named as shown below and have a file extension of .wav.

Phrase Name	Phrase Contents
DefaultClosingPhrase	Thank you. Goodbye.
DefaultMachineMessage	This is your outbound notification message. If you believe that you are not the intended recipient of this call we apologize and you may ignore this message.
DefaultMenu	To repeat this information, press 1. To end this call, press the star key.
DefaultMenuDNC	To repeat this information, press 1. To be removed from our calling list, press 2. To end this call, press the star key.
DefaultMessage	This is your outbound notification message. If you believe that you are not the intended recipient of this call we apologize and you may disconnect at any time.
DefaultTransferMenu	To repeat this information, press 1. To speak with a customer service representative, press 2. To end this call, press the star key.
DefaultTransferMenuDNC	To repeat this information, press 1. To speak with a customer service representative, press 2. To be removed from our calling list, press 3. To end this call, press the star key.
DefaultTransferPhrase	One moment please.
InvalidChoice	That is not a valid choice.
MakeSelection	You may make your selection at any time.
OutboundChime	Musical chime.
PauseShort	0.5 seconds of silence.
PINPrompt	You are receiving a secure notification message. Please enter your password, followed by the pound sign.
PINInvalid	The password you entered is not correct.
PresenceMenu	This is a notification call. To accept the call, press 1.
PresenceMenuDNC	This is a notification call. To accept the call, press 1. To be removed from our calling list, press 2.
PresenceMenuReject	This is a notification call. To accept the call, press 1. To reject the call, press 2.
PresenceMenuRejectDNC	This is a notification call. To accept the call, press 1. To reject the call, press 2. To be removed from our calling list, press 3.

# Implementing New Phrases

## Application Phrases

Automated Agent or UCCONNECT IVR phrases exist on the MiCollab AM System Server as individual files. Audio formats supported include Linear PCM, G.711 MU-LAW, and G.711 A-LAW. All of the supported formats are uncompressed RIFF WAV files with a sample rate of 8.00 KHz, a sample size of 8 bits, and a single audio channel (Mono).

The audio format in use can be identified using the Automated Agent or UCCONNECT Control Panel applet on the MiCollab AM System Server.

IVR phrase files are recorded using a PC equipped with a sound card and microphone. Numerous sound recording utilities, including Microsoft Sound Recorder, are available and may be used as long as the required audio format is supported.

New phrase files must be copied to the MiCollab AM System Server while the IVR service is running. The default incoming speech folder for the IVR script is one of the following depending on the MiCollab AM version installed:

```
D:\CX\AUTOAGNT\INCOMING\SPEECH\OBOUT
- OR -
D:\CX\UCCONNECT\INCOMING\SPEECH\OBOUT
```

When a new phrase is copied to the incoming speech folder, Automated Agent will move the phrase into the production speech folder when it is safe to do so.

The default production speech folder is one of the following depending on the MiCollab AM version installed:

```
D:\CX\AUTOAGNT\SPEECH\OBOUT
- OR -
D:\CX\UCCONNECT\SPEECH\OBOUT
```

Phrase files should not be copied directly to this folder when the IVR service is running.

**NOTE** In the above path specifications, the default MiCollab AM installation folder, D:\CX, is shown. If MiCollab AM is installed in a different folder, the actual installation folder should be used.

**NOTE** The above path specifications show the default script speech folder, OBOUT, as the final element in the paths. It is possible to configure the application to use alternate script speech folders. See Implementing New Phrase Folders below for more information.

## System Phrases

Automated Agent and UCConnect include a set of recorded system phrases that consists of numbers, letters, month names, day names, and other common phrases. These phrases are typically used to speak values (e.g. numbers, dates, dollar amounts) that are read from a database.

In some cases, it may be desirable to override the standard system phrases. This can be accomplished by implementing a phrase in the IVR application speech folder with the same file name as the system phrase.

System phrase file names and contents can be determined by reviewing the files located in the system speech folder:

```
D:\CX\AUTOAGNT\SPEECH\SYSTEM  
- OR -  
D:\CX\UCCONNECT\SPEECH\SYSTEM
```

It is recommended that the files in this folder not be replaced, but rather overridden as needed. IVR scripts first look in the IVR application speech folder for the phrase file. If the file is not found the script then proceeds to look in the system speech folder.

For example, to override the system phrase January a phrase file named January.wav would be recorded and implemented in the IVR application speech folder.

# Implementing New Phrase Folders

The application supports the ability to create and use alternate speech folders to contain the pre-recorded phrases spoken during notification calls. The speech folder to be used is specified in the control set applicable to the calls.

Alternate speech folders are created using standard Windows methods. Instructions for creating and preparing an alternate speech folder for use are shown below.

**NOTE** In the below instructions, the default MiCollab AM installation folder, D:\CX, is shown. If MiCollab AM is installed in a different folder, the actual installation folder should be used.

## Create the Required Folders

In this step, both the production and incoming speech folders are created.

**NOTE** References to the AutoAgnt folder below should be replaced with UCConnect if running on MiCollab AM version 5.0 or above.

### To create the required folders:

- 1 Open Windows Explorer.
- 2 Navigate to the *D:\CX\AutoAgnt\Speech* folder.
- 3 In the folder, click the right mouse button and select **New > Folder**.
- 4 Type a name for the new speech folder.
- 5 Navigate to the *D:\CX\AutoAgnt\Incoming\Speech* folder.
- 6 In the folder, click the right mouse button and select **New > Folder**.
- 7 Type the exact same name that was specified for the new speech folder above.

## Copy Existing Phrases

In this step, all required application phrases and user-recorded phrase are copied to the new incoming speech folder.

### To copy existing phrases:

- 1 Navigate to the folder containing all of the application phrases listed in [Application Phrase Listing](#). This can be the folder in which the application was initially installed or another production speech folder used by the application.

- 2** Select the files for all of the phrases listed in [Application Phrase Listing](#).
- 3** While pointing at one of the selected files, click the right mouse button and select Copy.
- 4** Navigate to the new incoming speech folder.
- 5** In the new incoming speech folder, click the right mouse button and select Paste. The phrases will be moved from the incoming speech folder to the production speech folder automatically.
- 6** Navigate to the folder containing the desired user-recorded phrases.
- 7** Select the files for the desired user-recorded phrases.
- 8** While pointing at one of the selected files, click the right mouse button and select Copy.
- 9** Navigate to the new incoming speech folder.
- 10** In the new incoming speech folder, click the right mouse button and select Paste. The phrases will be moved from the incoming speech folder to the production speech folder automatically.

# IP Integration Limitations

When placing outbound calls, MiCollab AM Notify relies on the ability of MiCollab AM to detect call progress. MiCollab AM determines the call progress and passes the information to MiCollab AM Notify. In IP-based integrations the telephone system performs the call progress detection and may or may not pass noise-detection or silence-detection information to MiCollab AM. Whether this information is interpreted is also a function of the MiCollab AM software version.

In affected configurations, MiCollab AM features that rely on noise and silence detection do not function properly. Such features include the following: detection of fax tone; analog networking; IVR applications (including MiCollab AM Notify) that control sequences of events by monitoring noise and silence intervals; and call handling actions such as transfers and callouts to external telephone numbers.

In cases where outbound calls are placed from an IP-integrated system that does not provide noise and silence detection, the telephone switch informs MiCollab AM, and thus MiCollab AM Notify, that the call is connected when an outbound trunk is seized for the call instead of when the call is actually answered.

Because of this, MiCollab AM Notify is unable to synchronize the beginning of the call dialog with the call being answered, and cannot distinguish between an answering machine and a human answer.

Two application settings are provided to accommodate this scenario. These are the Pause After Connect and Establish Presence settings.

The Pause After Connect setting is used to delay the beginning of the call dialog for a period of time after the telephone switch has indicated that a connection has been made.

The Establish Presence setting is used to synchronize the remainder of the call dialog with a positive indication that a person has answered the call. Because the presence prompt may begin playing before a person answers the call, the presence verification Input Retries setting should be set higher than it would be set for a non-IP implementation.

# Application Shutdown Procedure

If there is a need to restart the MiCollab AM System Server, the Automated Agent or UCCconnect IVR service, or the IVR Application Services service while outbound calls are being processed the following procedure should be executed to properly shut down the MiCollab AM Notify application. Failing to properly shut down the MiCollab AM Notify application in a controlled manner may result in call result file inconsistencies and other unexpected consequences.

## To properly shutdown the application:

- 1** Pause outbound call processing using the application configuration utility or by issuing the PAUSE command in a call import file.
- 2** Monitor the status of the MiCollab AM lines, waiting for all outbound calls to complete. Outbound calls generated by the application will display Desktop in the MiCollab AM Line Status application.
- 3** Shut down the Automated Agent or UCCconnect service using the corresponding control panel applet.

The MiCollab AM System Server or IVR Application Services service can then be safely shut down and restarted.

To restart just the MiCollab AM Notify application, as opposed to the entire server platform, after a proper shutdown as described above, restart the Automated Agent or UCCconnect service and then resume outbound call processing using the application configuration utility or by issuing the RESUME command in a call import file.

# Monitoring and Troubleshooting

This section describes application monitoring and troubleshooting techniques and tools.

## Call Result Files

The application-maintained call result files can be used to monitor the application. Each call attempt generates an entry in the call result file containing the call result. Call result values of DIALTONE, ERROR, FAST\_BUSY, IMPORT\_ERROR, LINE\_ERROR and NO\_LINE can indicate that there is a problem. Refer to the [Call Results File](#) section for more information.

**NOTE** The current day call result file should not be opened in-place in a separate application. This could lock the file and prevent the application from writing additional data to the file. To review the current day file, place a copy of the file in another location and open the copy.

## Placing Test Calls

Scheduling one or more test calls can aid in verifying application behavior, and in troubleshooting potential issues. Test calls can be scheduled in two ways:

- 1 Using the Schedule Call button on the Tasks tab of the application configuration utility.
- 2 Supplying a properly formatted call import file containing one or more call records.

When scheduling a test call, make sure that the call start and end times are configured or specified such that the test call will be placed at the expected time.

## Application Trace Files

Application trace files are the repository for application generated error messages, and can also be used to monitor call events and activity. Low-level debugging information can be collected to aid in issue diagnosis.

Trace files are controlled by the IVR Application Services Windows service. The IVR Application Services applet in the Windows Control Panel contains settings related to trace files (refer to [Figure 1. IVR Application Services](#)).

### **Trace File Settings:**

File Path	Full path to the folder in which the daily trace files are stored. Default is the C:\Program Files\IVR Application Services\Trace Files folder.
Retention	Number of days that trace files are retained before being purged. Default is 10 days.



Level	Level of information maintained in the trace files. Default is Event level.
Clear	Clicking this button will clear the trace file for the current day.

**NOTE** Debug level tracing should not be enabled unless required. Enabling Debug level tracing may adversely affect system performance.

#### ***Trace File Format:***

A new trace file is automatically created each day. Trace files are named tryymmdd.txt, where yymmdd is the year, month and day during which the data was recorded. Each application entry in the trace file consists of the following data:

Event Date, Event Time, Telephone Line Number, Process ID, Event Message

The event message will include the name of the process that generated the event, along with event specific information. The event message may also include a label of ERROR or WARNING. Special attention should be paid to messages with either of these labels.

## **Problem Scenarios**

**NOTE** References to Automated Agent below should be replaced with UCConnect if running on MiCollab AM version 5.0 or above.

#### ***Call import file is not being processed.***

- Verify that the correct file name and location is specified in the Call Import File setting on the Settings tab of the application configuration utility.
- Ensure that the startup script OBINIT is specified in the Automated Agent control panel applet. If the startup script is not configured properly, browse for the script or type the script name and then restart Automated Agent.
- If Automated Agent scripts are executing on a remote platform, verify that the system clock on the remote platform is synchronized with the system clock on the MiCollab AM System Server. Both Automated Agent services must be restarted after synchronizing the clocks.
- Review the application trace file for error messages pertaining to the OBMON script. If necessary, enable debug level tracing and recreate the problem.

#### ***Errors are generated during call import file processing.***

- Verify that the call import file contains all fields expected by the application, and that the fields are in the correct order. The expected fields are specified by clicking the Specify Fields button on the Settings tab of the application configuration utility.
- Review the application trace file for error messages pertaining to the OBMON script. If necessary, enable debug level tracing and recreate the problem.

#### ***Line errors are occurring on outbound calls.***

- Verify that there are sufficient MiCollab AM lines enabled for callouts. The number of lines enabled for callouts must be equal to or greater than the number of OBCallSessions resource pool items configured.
- Check the MiCollab AM integration Switch Sections configuration for restrictions on the number of simultaneous callouts.
- Check the Originating Mailbox setting for the control set applicable to the outbound calls. If a mailbox is specified, ensure that a call processor mailbox with the corresponding mailbox number exists and that the switch section specified in the call processor mailbox has lines enabled for callouts.
- Check the physical lines connected to the MiCollab AM system from the switch. Ensure that dial tone can be obtained, and that calls can be manually placed from a telephone handset connected to the lines.
- Review the application trace file for error messages pertaining to the OBOU script. If necessary, enable debug level tracing and recreate the problem.

***Calls are being placed on fewer simultaneous ports than expected***

- Check the Max Call Sessions setting on the Settings tab of the application configuration utility.
- Verify that the OBCallSessions resource pool is configured for a number of items equivalent to the number of application ports licensed.
- Verify that there are sufficient MiCollab AM lines enabled for callouts. The number of lines enabled for callouts must be equal to or greater than the number of OBCallSessions resource pool items configured.
- Check the MiCollab AM integration Switch Sections configuration for restrictions on the number of simultaneous callouts.

***Outbound calls are not being completed.***

- If the Use MiCollab AM Dial Plan option is enabled for the control set applicable to the calls, check the MiCollab AM dialing instructions configuration.
- Check the External Call Dialing Template for the MiCollab AM integration.
- Check the Dial Prefix setting for the control set applicable to the outbound calls. Ensure that this does not duplicate the External Call Dialing Template configured in MiCollab AM.
- Ensure that an outbound call can be manually placed from a telephone handset connected directly to the MiCollab AM callout-enabled lines.
- Review the application trace file for status messages pertaining to the OBOU script. If necessary, enable debug level tracing and recreate the problem.

***Call transfers are not working.***

- If the Use MiCollab AM Dial Plan option is enabled for the control set applicable to the calls, check the MiCollab AM dialing instructions configuration to ensure that the destination extension will be processed properly.
- Check the PBX Internal Dialing Template for the MiCollab AM integration.
- Verify that MiCollab AM can perform a blind or monitored transfer to the destination extension.

- Verify that the Transfer Type setting on the Control tab of the Control Set dialog is properly configured.
- Verify that the Transfer Hangup Delay setting on the Control tab of the Control Set dialog is properly configured.
- Review the application trace file for status messages pertaining to the OBOUT script. If necessary, enable debug level tracing and recreate the problem.

***Connections and busy signals are not being detected properly.***

- Review, test and adjust the MiCollab AM call progress settings for outbound calls. The application relies on MiCollab AM for call progress detection.
- Review the application trace file for status messages pertaining to the OBOUT script. If necessary, enable debug level tracing and recreate the problem.
- If an IP-based integration is in use, audio call progress is not supported. Refer to [IP Integration Limitations](#).

***Messages recorded by administrators using a telephone are not playing properly.***

- Check to ensure that the default recording format for messages on the MiCollab AM System Server is set to the same audio format as the prompt format specified in the Automated Agent control panel applet.
- If the message phrase names are being spelled (or spoken using text-to-speech) during the notification call, check to ensure that the control set used by the administrator when creating the recordings specifies the same speech folder as the control set used during the notification calls.