

# MiCollab Advanced Messaging Nokia Rapport SIP Integration Technical Note

For version 6.1 and above

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# Preface

This Integration Technical Note (ITN) is written for dealers who are experienced with MiCollab Advanced Messaging (MiCollab AM) and are familiar with its procedures and terminology. This document also assumes that you are familiar with the features and programming of the Nokia Rapport telephone system.

This document describes how to integrate MiCollab AM with a Nokia Rapport telephone system, using the Session Initiation Protocol (SIP) integration. This integration operates exclusively over a TCP/IP-based network; it uses no analog or digital voice telephony ports, but passes voice communication and signaling information over the network.

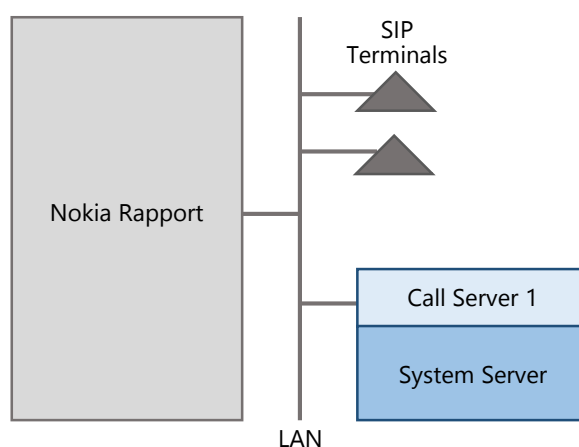


Figure 1. Nokia Rapport Integration

The Nokia Rapport integration is a SIP trunk integration, MiCollab AM registers itself as a single voice mail pilot number at the telephone system's SIP proxy. The proxy routes all incoming calls for MiCollab AM to that pilot number, and MiCollab AM assigns them to lines as needed. MiCollab AM also sends outbound calls and MWI messages to the pilot number so that the proxy can act on them.

This ITN documents the procedure for setting up the integration. The process consists of programming the Nokia Rapport SIP and configuring MiCollab AM. Critical application considerations are also documented.

Use this document in conjunction with *System Installation Guide*, *System Administration Guide* and with the MiCollab AM online help system.

## References

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

## Documentation

The technical documentation is produced in the PDF format and requires the PDF reader to view it. The 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 the latest/updated 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.

## Features Supported by this Integration

The following tables list the features supported using the Nokia Rapport SIP integration.

Table 1. Call forward to personal greeting support for these common call types

Divert to MiCollab AM on	Supported
No Answer	Yes
Busy	Yes
Forward All	Yes
Reject Call	Yes

Table 2. Integration features supported for Nokia Rapport SIP station set

Feature	Supported	Notes
Automatic subscriber logon	Yes	
ANI/CLI	Yes	
Announce Busy greeting on forwarded calls	Yes	
Call screening	Yes	Note 1
Caller queuing	Yes	Note 2
DNIS	Yes	
End-to-end DTMF, attendant console	Yes	
End-to-end DTMF, proprietary telephones	Yes	
Fax Detection	Yes	
Internal calling party ID for reply	Yes	
Live record, integrated	Yes	
Live reply to sender	Yes	
Message notification callouts	Yes	
MWI, set/clear	Yes	
MWI, inband/outband	Outband	
Networking, analog	Yes	
Overflow from MiCollab AM to attendant	Yes	
Overflow to MiCollab AM from attendant	Yes	
PBX-provided disconnect signaling	Yes	
Revert to operator	Yes	
SRTP	No	Note 3
TLS	No	Note 3
Transfers, blind	Yes	

Transfers, confirmed	Yes	
Transfers, fully supervised	Yes	
Transfers, monitored	Yes	
Trunk ID for call routing	No	
Multiple Integrations	Yes	Note 4

## NOTES

1. Only available when using supervised transfers.
2. Caller Queuing is specific to each local Call Server. Call Servers within the system are unaware of queued calls to the same subscriber on other Call Servers. For more information, refer to the [Critical Application Considerations](#).
3. MiCollab AM supports negotiation for SRTP media streams using the Secure RTP profile defined in RFC 3711 with the offer/answer model defined in RFC 3264. To enable SRTP, RTP, or both, see integration configuration options documentation for the switch. The default setting is RTP. Please note that MiCollab AM doesn't support RFC 5939 which is an extension of RFC 3264. Also, please note that SRTP has not been qualified for this integration, and no switch programming is available for setting up SRTP on the switch side. However SRTP may be enabled as described above, and technical support will be available on a best effort basis.
4. Refer to the [Critical Application Considerations](#) section.



# Critical Application Considerations

Known limitations or conditions within the telephone system and MiCollab AM that affect the integration performance are listed here. General recommendations are provided when ways to avoid these limitations exist.

- If your MiCollab AM server platform is a component of two or more local or wide area networks (LANs or WANs), you must make sure that this integration does not interfere with the normal network operation of the server. By default, MiCollab AM uses the primary (public) network interface card (NIC) in the platform, the first NIC in the network binding order. If you want MiCollab AM to use a NIC other than the first one, you must make several required configuration changes. It is much easier to configure the Integration to use another NIC by simply setting the integration parameter Local IP Address to bind on to the address of the NIC card connected to the PBX. For more information, refer to the section, [Changing the Network Binding Order on the MiCollab AM Platform](#).
- MiCollab AM supports G.729a with support for annex b on the incoming audio stream only. MiCollab AM does not transmit annex b packets.
- When codec negotiation takes place between MiCollab AM and the PBX, MiCollab AM always offers the G.729a audio format as an option. You may configure G.729a as the preferred codec in MiCollab AM; however, the decision whether to use G.729a is always made by the PBX.
- The Call Queuing feature does not transcend the Call Server. Calls may be queued on multiple Call Servers for the same subscriber but Call Servers do not have knowledge of calls in the queue on other Call Servers within the system. Callers may be prompted with specific information about their place in the queue; however, the information pertains to the specific Call Server on which their call is queued.
- You must configure the Hunt Group Access Code in the Switch Section Options dialog box and must match the Voice Mail Dir. No. configured in the Configure the Voicemail Settings section.
- MiCollab AM supports up to 10 integration types (i.e. licensed integrations) in total per system. However, the following limitations apply to each Call Server:
- MiCollab AM 6.1 and above:
  - Limited to 3 integration types per Call Server
  - The 3 integration types can be any mix of TDM and SIP (e/g/ 1 TDM and 2 SIP)
  - Limited to 1 Mitel MiTAI or 1 Cisco UCM SCCP IP integration. Can be mixed with TDM, but not with SIP.
  - Connect up to 10 telephone systems total per Call Server (e.g. 2 Avaya Communication Manager systems using SIP + 5 Avaya IP Office systems using SIP + 3 Siemens HiPath 4000 systems using Station Set Emulation)
  - SIP timers for Aastra EETS integrations are incompatible with other SIP integrations. Thus, it is not possible to have an EETS integration with any other SIP integration on the Call Server.

# Installation Requirements

Review the following information before performing any of the procedures in this document. To successfully install this integration, you must meet the installation requirements for both the telephone system and MiCollab AM.

## MiCollab AM Requirements

- MiCollab AM version 6.1
- Mitel software key and feature file with the Nokia Rapport SIP integration enabled and one RADVISION® SIP and RTP license enabled for each port involved in the integration
- One 100 Mbps or 1000 Mbps (1 Gbps) network interface card

# Configuring the Nokia Rapport SIP

Please refer to Nokia Rapport SIP documentation for details on how to properly configure the switch for use with MiCollab AM.

# Configuring MiCollab AM

Once the telephone system is programmed, you must configure MiCollab AM for the integration. There are two ways you can configure MiCollab AM: (1) Configuring MiCollab AM for the telephone system integration when you are installing MiCollab AM for the first time, or (2) Configuring the existing MiCollab AM with the new telephone system integration.

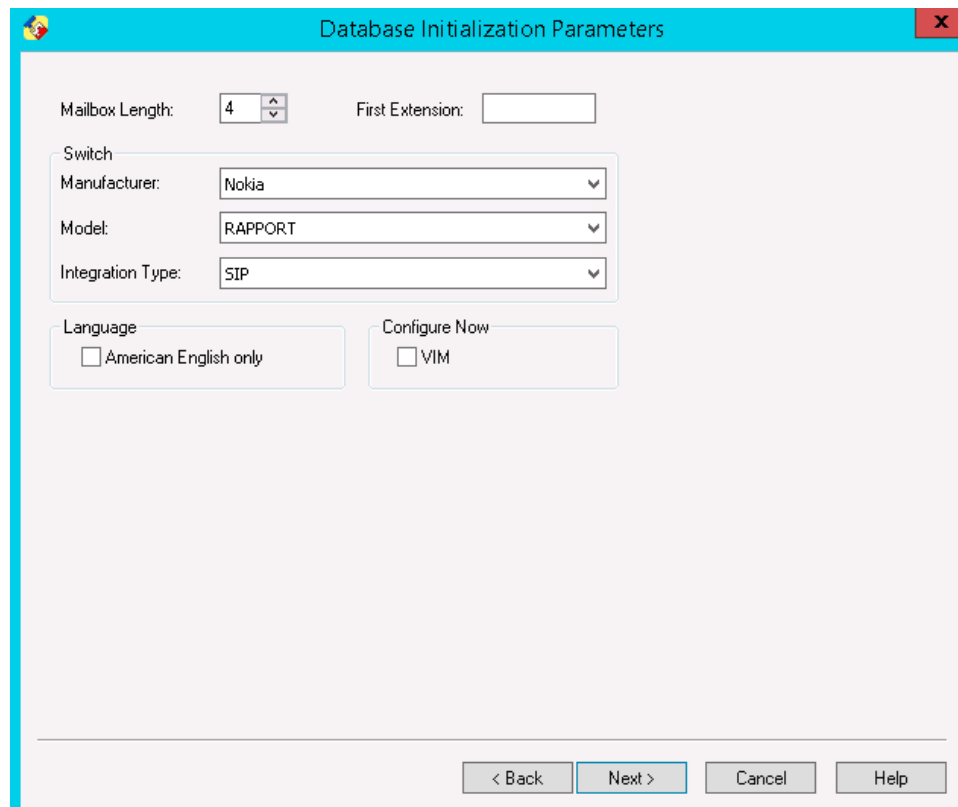
Click the appropriate steps that your system requires from below and follow the steps:

- [Configuring MiCollab AM for the Integration During Initial Installation](#): Integrate the telephone system while you install MiCollab AM for the first time.
- [Configuring Existing MiCollab AM for the Integration](#): Integrate a new telephone system on your existing MiCollab AM system.

## Configuring MiCollab AM for the Integration During Initial Installation

To configure MiCollab AM for the integration during the initial installation:

- 1 In the **Database Initialization Parameters** dialog box, configure the following options:



The screenshot shows the 'Database Initialization Parameters' dialog box. It has a title bar with a standard Windows icon and a close button. The dialog contains several configuration options:

- Mailbox Length:** A numeric spinner box set to 4.
- First Extension:** An empty text input field.
- Switch:** A section containing three dropdown menus:
  - Manufacturer:** Set to 'Nokia'.
  - Model:** Set to 'RAPPORT'.
  - Integration Type:** Set to 'SIP'.
- Language:** A checkbox labeled 'American English only' which is currently unchecked.
- Configure Now:** A checkbox labeled 'VIM' which is currently unchecked.

At the bottom of the dialog, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- a In the **Mailbox Length** box, enter the mailbox length in digits.
  - b In the **First Extension** box, enter first extension number for the first line. You can also leave the **First Extension** box empty.
  - c From the **Manufacturer** dropdown list, select **Nokia**.
  - d From the **Model** dropdown list, select **RAPPORT**.
  - e From the **Integration Type** dropdown list, select **SIP**.
- 2 Click **Next**. The **Board Options** dialog box displays for the virtual board configuration.

- a From the **Manufacturer** dropdown list, select **RadVision**.
  - b From the **Model** dropdown list, select **SIP STACK**.
  - c From the **Protocol** dropdown list, select **SIP IP RTP**.
  - d In the **Number of Lines** field, enter the number of lines this board uses. The total number of lines is limited by the capacity of the board and the number of Available Line Licenses.
- 4 Click **OK**. The **Switch Options** dialog box displays.

**NOTE** The settings related to the telephone system in the **Switch Options** dialog box are filled in automatically when you select the correct telephone system during setup.

Name	Type	Member
Incoming 1	Inter-Switch Incoming Uniform Numbering Plan	<input type="checkbox"/>
Incoming 2	Inter-Switch Incoming Uniform Numbering Plan	<input type="checkbox"/>
Outgoing 1	Inter-Switch Outgoing Uniform Numbering Plan	<input type="checkbox"/>
Outgoing 2	Inter-Switch Outgoing Uniform Numbering Plan	<input type="checkbox"/>

- 5 If necessary, make any changes to the default settings your site requires in the **Switch Options** dialog box.

**NOTE** If you need to customize settings on the **Switch Options** dialog box to meet requirements specific to your site, refer to the documentation accompanying the telephone system, the online help, and the guide, *System Installation Guide*.

- 6 Click **OK**. The **Integration Options** dialog box displays.
- 7 In the **Integration Options** dialog box, configure the values if necessary.

- a In the **Local Integration Settings** section, select the **Required Parameters** view, and configure the following options.

Table 3. Required Parameters Settings

Field	Value
SIP Server Address	Enter the TCP/IP address or an FQDN.  <div> <b>For example:</b>  The IP address 123.45.6.789 or Machine Name-Host as configured on the Review/Modify SIP Gateway screen. </div> <div> <b>IMPORTANT</b> This value must match the configuration of the SIP Gateway. </div>
SIP Server Port	The port on which MiCollab AM listens for incoming SIP messages. The default is 5060.  <div> <b>IMPORTANT</b> This value must match the configuration of the SIP proxy. </div>

SIP Domain Name	The domain name as configured on the switch.  <b>IMPORTANT</b> This value is case-sensitive and must match the Machine Name–Host configured on the Review/Modify screen of the SIP Gateway. For example, nokia-oxe.
Transport for outgoing SIP Messages	A default value of UDP is already selected, but you can select TCP, depending on your configuration.
SIP Device Name	The voice mail pilot number as configured on the switch. This value matches the hunt group number configured in the Nokia Switch Section of MiCollab AM.  <b>IMPORTANT</b> The SIP device name must match the Voice Mail Dir. No. configured on the <b>Create: External Voice Mail</b> screen.  <b>NOTE</b> The external voicemail directory number in the <b>MiCollab AM Configuration</b> under <b>SIP Device Name8</b> is also the MiCollab AM hunt group access code.

- 8 Click **OK**. The **Switch Section Options** dialog box displays.

Switch Section Options

Local Switch: Nokia RAPPORT

System Switch Section: - Create New -

System Switch Section Settings

Name: Nokia RAPPORT Section

Node Code:

Location Code:

Location: Seattle

MWI Integration: Nokia RAPPORT SIP

Local Switch Section Settings

View: Required Parameters

Set Defaults

Name	Value
Incoming Hunt Mode	Terminal
Hunt Group Access Code	5000

Buttons: OK, Apply, Cancel, Help

- 9 In the **Switch Section Settings** dialog box, configure the following options:
- a In the **Local Switch Section Settings** section, select the **Required Parameters** view.
  - b In the **Incoming Hunt Mode** field, select the mode appropriate for your configuration.

**NOTE** This integration only supports terminal, circular, reverse terminal, and reverse circular hunt modes.

- c** In the **Hunt Group Access Code** field, type the pilot number or destination code that users dial to reach MiCollab AM.
- d** Click **OK**.
- 10** Continue through and complete the configuration. At the end of the configuration, a confirmation dialog box displays. Click **OK**.
- 11** If **MiCollab AM Configuration** does not open automatically after the configuration completes, open **MiCollab AM Configuration**, and select the **Lines** tab.
- 12** In the table from the **Lines** tab, configure callouts for the application. For information on configuring callout settings, see the topic *Configuring Callout Settings*, in the online help system.
- 13** Click **OK** to save all changes.

## Completing the Integration

Now you are ready to finish installing MiCollab AM. See *System Installation Guide, System Administration Guide* or refer to the *MiCollab AM online help system*, for instructions. For general information on integrations, you may also wish to consult *Integrating MiCollab AM with the Telephone System*, in the *System Installation Guide*, and the topic *Integrate the System Server with the telephone system*, in the online help system.

## Configuring Existing MiCollab AM for the Integration

To configure exiting MiCollab AM for the telephone integration:

- 1** Open **MiCollab AM Configuration**, and go to the **Main** tab.
- 2** In the **Main** tab, click **Shutdown** to stop the system. Wait until the **Current Status** shows **Stopped**.

**NOTE** If you have not configured the virtual board with your MiCollab AM system yet, complete **Step 3**. If your MiCollab AM already has the virtual board configured, skip to **Step 4**.

- 3 [Optional]** Select the **Board** tab, and then click the **Add** button. The **Board** dialog box displays.

The screenshot shows a 'Board Options' dialog box. It has a title bar with the text 'Board Options' and a red close button. The dialog contains the following fields and controls:

- Manufacturer:** A dropdown menu with 'RadVision' selected.
- Model:** A dropdown menu with 'SIP STACK (Radvision)' selected.
- Name:** A text field containing 'RadVision SIP STACK (Radvision)'.
- Protocol:** A dropdown menu with 'SIP IP RTP' selected.
- Number of Lines:** A numeric field with '96' and up/down arrow buttons.
- Available Lines (Licenses):** A numeric field with '96'.
- Buttons:** On the right side, there are four buttons: 'OK', 'Apply', 'Cancel', and 'Help'.



- a From the **Manufacturer** dropdown list, select **RadVision**.
  - b From the **Model** dropdown list, select **SIP STACK**.
  - c In the **Name** field, the name for this board is automatically generated. Enter a new name if necessary.
  - d From the **Protocol** dropdown list, select **SIP IP RTP**.
  - e In the **Number of Lines** field, enter the number of lines this board uses. The total number of lines is limited by the capacity of the board and the number of **Available Line Licenses**.
  - f Click **OK**.
- 4 Select the **Switch** tab and click the **Add** button. The **Switch Integration Data Setup** dialog box displays.
    - a From the **Manufacturer** dropdown list, select **Nokia**.
    - b From the **Model** dropdown list, select **RAPPORT**.
    - c From the **Integration Type** dropdown list, select **SIP**.
  - 5 Click **OK**. The **Switch Options** dialog box displays.

**NOTE** The settings related to the telephone system in the **Switch Options** dialog box are filled in automatically when you select the correct telephone system during setup.

Switch Options

Manufacturer: Nokia

Model: RAPPORT

System Switch: - Create New -

OK

Apply

Cancel

Help

System Switch Settings

Switch Name: Nokia RAPPORT

Transfer Support: ☒ Extension to Extension ☒ Trunk to Extension  
☐ Extension to Trunk ☐ Trunk to Trunk

MWI Settings

Refresh Trigger: None

Refresh Type: Set

Refresh Interval: 14400

Initialize Mode: None

Refresh Time of Day: 12:00 AM

Set Preference: First

Inter-Switch Connectivity Group Assignments

Name	Type	Member
Incoming 1	Inter-Switch Incoming Uniform Numbering Plan	<input type="checkbox"/>
Incoming 2	Inter-Switch Incoming Uniform Numbering Plan	<input type="checkbox"/>
Outgoing 1	Inter-Switch Outgoing Uniform Numbering Plan	<input type="checkbox"/>
Outgoing 2	Inter-Switch Outgoing Uniform Numbering Plan	<input type="checkbox"/>

- 6 If necessary, make any changes to the default settings your site requires in the **Switch Options** dialog box.

**NOTE** If you need to customize settings on the **Switch Options** dialog box to meet requirements specific to your site, refer to the documentation accompanying the telephone system, the online help, and the guide, *System Installation Guide*.

- 7 Click **OK**. The **Integration Options** dialog box displays.
- 8 In the **Integration Options** dialog box, configure the values if necessary.

- a In the **Local Integration Settings** section, select the **Required Parameters** view, and configure the following options.

Table 4. Required Parameters Settings

Field	Value
SIP Server Address	<p>Enter the TCP/IP address or an FQDN.</p> <p><b>For example:</b> The IP address 123.45.6.789 or Machine Name-Host as configured on the Review/Modify SIP Gateway screen.</p> <p><b>IMPORTANT</b> This value must match the configuration of the SIP Gateway.</p>
SIP Server Port	<p>The port on which MiCollab AM listens for incoming SIP messages. The default is 5060.</p> <p><b>IMPORTANT</b> This value must match the configuration of the SIP proxy.</p>
SIP Domain Name	<p>The domain name as configured on the switch.</p> <p><b>IMPORTANT</b> This value is case-sensitive and must match the Machine Name-Host configured on the</p>

	Review/Modify screen of the SIP Gateway. For example, nokia-oxe.
Transport for outgoing SIP Messages	A default value of UDP is already selected, but you can select TCP, depending on your configuration.
SIP Device Name	The voice mail pilot number as configured on the switch. This value matches the hunt group number configured in the Nokia Switch Section of MiCollab AM.
<p><b>IMPORTANT</b> The SIP device name must match the Voice Mail Dir. No. configured on the <b>Create: External Voice Mail</b> screen.</p>	
<p><b>NOTE</b> The external voicemail directory number in the <b>MiCollab AM Configuration</b> under <b>SIP Device Name8</b> is also the MiCollab AM hunt group access code.</p>	

- 9 Click **OK**. The **Switch Section Options** dialog box displays.

**Switch Section Options**

Local Switch: Nokia RAPPORT

System Switch Section: - Create New -

System Switch Section Settings

Name: Nokia RAPPORT Section

Node Code:

Location Code:

Location: Seattle

MWI Integration: Nokia RAPPORT SIP

Local Switch Section Settings

View: Required Parameters

Set Defaults

Name	Value
Incoming Hunt Mode	Terminal
Hunt Group Access Code	5000

- 10 In the **Switch Section Settings** dialog box, configure the following options:
- a In the **Local Switch Section Settings** section, select the **Required Parameters** view.
  - b In the **Incoming Hunt Mode** field, select the mode appropriate for your configuration.

**NOTE** This integration only supports terminal, circular, reverse terminal, and reverse circular hunt modes.

- c** In the **Hunt Group Access Code** field, type the pilot number or destination code that users dial to reach MiCollab AM.
- d** Click **OK**.
- 11** In **MiCollab AM Configuration**, verify that the telephone system is properly added and configured in the **Switches**, **Switch Sections**, and **Integrations** tabs.
- 12** Select the **Lines** tab.
- 13** In the table from the **Lines** tab, enter the extension number of each integrated line on the Call Server.
- 14** Click **OK** to save all changes.

## Configuring MiCollab AM for SIP Failover

MiCollab AM can be configured for automatic failover to the secondary SIP server in the event of the primary/host SIP server failure. Use the instructions provided in this section to add or remove secondary SIP server(s) for failover.

### To add a SIP failover server:

- 1** From **MiCollab AM Configuration**, click the **Integrations** tab.
- 2** From the **Integrations** list, select your integration, and then click **Edit**.
- 3** In the **Integration Options** dialog box, go to the **Local Integration Settings** section.
- 4** From the **View** dropdown list, select **Failover Server Settings**.
- 5** Click the **Add Failover Server** button. Two new rows are added to configure the secondary SIP server.
- 6** In the **Secondary SIP Server Address** and **Secondary SIP Server Port** rows, enter the appropriate value as follows:

Table 5. Secondary SIP Server Address and the Secondary SIP Server Port example

Field	Value
Secondary SIP Server Address	Enter the TCP/IP address or an FQDN of the secondary node.  <b>For example:</b> The IP address 123.45.6.789 as displayed on the Review/Modify SIP Gateway screen.

**NOTE** This integration requires the machine name to be a fully qualified domain name. Therefore, use the Machine

Name field as displayed on the Review/Modify SIP Gateway screen during the integration process.

**IMPORTANT** This value must match the configuration on the Gateway of the secondary node.

Secondary SIP Server Port Enter the port number of the secondary node. The default value is **5060**.

**7** From the **View** dropdown list, select **Integration Specific Parameters**. The **Integration Specific Parameters** view displays.

**8** In the **Integration Specific Parameters** list, enter the information as shown in the following table:

**NOTE** The parameters in the following table is listed in alphabetical order. The actual Integration Specific Parameters on your system may not be listed in the same order presented in the table below.

Table 6. Integration Specific Parameters

Field	Value
Enable SIP server failover	Select this check box to allow for failover and to enable the failover server setting changes.
Delay (in ms) between Failover attempts	The delay in milliseconds before MiCollab AM attempts to register its port with the SIP server. The default is <b>1000</b> ms.
Incoming off hook delay	800
Outgoing off hook delay	0
On hook delay	300
Type of Call Progress to use for External Calls	How this should be set depends on the gateway used for the integration. <ul style="list-style-type: none"><li>• If the gateway supports call progress through to the endpoint, set to <b>Digital</b>.</li><li>• If the gateway reports early that the call is connected, such as before the phone rings or while the phone is ringing, set to <b>Media</b>.</li></ul>

**9** Click **Apply** to save the changes.

**10** To add another failover server repeat **Steps 4-9**.

**11** Click **OK** to close the **Integration Options** dialog box.

## To remove a SIP Failover Server:

- 1 From **MiCollab AM Configuration**, click the **Integrations** tab.
- 2 From the **Integrations** list, select your integration, and then click **Edit**.
- 3 In the **Integration Options** dialog box, go to the **Local Integration Settings** section.
- 4 From the **View** dropdown list, select **Failover Server Settings**.
- 5 In the **Failover Server Settings** view, click the **Remove Failover Server** button.
- 6 At the confirmation prompt, click **Yes** to confirm the deletion.

**NOTE** If multiple servers are listed, the last server address and port pair on the list is deleted first.

- 7 Click **Apply** to save the changes, and then click **OK** to close the **Integration Options** dialog box.

# Changing the Network Binding Order on the MiCollab AM Platform

If your MiCollab AM server platform is a component of two or more local or wide area networks (LANs or WANs), you must make sure that this integration does not interfere with the normal network operation of the server. By default, MiCollab AM uses the primary (public) network interface card (NIC) in the platform, the first NIC in the network binding order. If you want MiCollab AM to use a NIC other than the first one, you must make several required configuration changes. It is much easier to configure the Integration to use another NIC by simply setting the integration parameter Local IP Address to bind on to the address of the NIC card connected to the PBX.

**NOTE** The operating system gives precedence to the first network connection in the list followed by the remaining connections based on their position in the list.

The instructions in this section ensure that the binding order is correct when you set up the integration. However, if you replace a NIC on the MiCollab AM server platform later, the platform's operating system registers the new adapter at the bottom of its binding order. Restoring the original binding order should correct any problems caused by the change.

**IMPORTANT** The following procedure shifts the binding order of the network interface cards. To determine which NIC is associated with a specific network connection, right-click the connection in the Network Connections window, and then select **Properties**.

## Windows Server 2008 R2 with Service Pack 1

To change the binding order of multiple NICs:

- 1 From the taskbar, click **Start > Control Panel**.
- 2 In the **Control Panel**, click **Network and Sharing Center**.
- 3 On the left pane, select **Change Adapter Settings**.
- 4 Press **Alt** to display the menu bar.
- 5 On the menu bar, select **Advanced**, and then click **Advanced Settings**.
- 6 On the **Adapters and Bindings** tab of **Advanced Settings**, click the network connection that serves MiCollab AM.
- 7 Click the up arrow button to the right of the **Connections** list as many times as needed to move the connection to the top of the list.
- 8 Click **OK**, and then close the **Network Connections** window and the **Control Panel**.

## Windows Server 2012 R2

To change the binding order of multiple NICs:

- 1 From the taskbar, click **Start > Control Panel**.
- 2 In the **Control Panel**, click **Network and Sharing Center**.
- 3 On the left pane, select **Change Adapter Settings**.
- 4 Press **Alt** to display the menu bar.
- 5 On the menu bar, select **Advanced**, and then click **Advanced Settings**.
- 6 On the **Adapters and Bindings** tab of **Advanced Settings**, click the network connection that serves MiCollab AM.
- 7 Click the up arrow button to the right of the **Connections** list as many times as needed to move the connection to the top of the list.
- 8 Click **OK**, and then close the **Network Connections** window and the **Control Panel**.



# Configuring Quality of Service (QoS)

As of version 6.0, MiCollab AM has no internal support for QoS. QoS must now be implemented externally via group policies as Policy-Based QoS. Refer to your operating system's documentation for details.

Table 7. QoS Configuration

Field	Setting
Application Name	At_TelephonyServer.exe
Protocol	Match the setting used for the integration UDP or TCP
Source Port	<p>MiCollab AM requires a range of ports for audio support. The MiCollab AM audio ports start at the Local Media Base UDP Port configured in the Server tab. Each MiCollab AM line reserves 10 ports. Hence, the port range starts from the number configured there, and goes to the last port of the last line. The formula for calculating the highest port number in the range is as follows:</p> $\text{BasePortNumber} + (\text{NumberOfCXPorts} * 10) - 1.$ <p>Hence, if the base port is 10000, and MiCollab AM has 8 lines, then the port range to use would be:</p> <p>10000:10079</p>
DSCP Value	46