MiCollab Platform Integration Guide

- MiVoice Business
- MiVoice Office 250
- MiVoice 5000
- MiVoice MX-ONE

RELEASE 7.0
CHAPTER 1: INTRODUCTION

Purpose of this Guide ................................................................. 3

Supported MiCollab Applications .............................................. 3
  MiVoice Business Communication Platforms ........................ 3
  MiVoice 5000, and MiVoice MX-ONE Platforms ................. 3

Client Station Support .............................................................. 4

CHAPTER 2: MIVOICE BUSINESS INTEGRATION

Introduction ................................................................................. 6

Identify the Network Elements for MiVB systems ....................... 6

NuPoint Unified Messaging ......................................................... 7
  Mitel MiVoice Business Programming ................................. 7
    Program Voicemail Ports .................................................. 7
    Program Voicemail Hunt Group and Ports ....................... 8
    Program Record-a-Call Hunt Group ................................. 9
    Program Speech Auto Attendant Hunt Group and Ports ......... 9
    Program Message Waiting Indication .............................. 10

MiCollab Programming for NuPoint Unified Messaging ............... 11
  Create Voice Mail Line Group ............................................ 11
  Create Speech Auto Attendant Line Group ......................... 13
  Configure Speech Auto Attendant User Data Source .............. 14
  Firewall Requirements ......................................................... 14

MiVoice Border Gateway ......................................................... 14

Teleworker Service .................................................................. 14

SIP Trunking .............................................................................. 15

Secure Recording Connector .................................................... 15

MiCollab AWV ........................................................................ 16

Install MiCollab AWV Conferencing Client for all Users (as administrator) .............................................................. 16

Configure Communications Platform for AWV ......................... 16
  Configure MiVoice Business for AWV ............................... 16
    Configure SIP Device Capabilities .................................. 17
    Configure SIP Peer Profiles .......................................... 17
    Configure Extended Hunt Groups ................................. 17
    Configure Class of Service (COS) ................................. 17
  Create IP Devices ............................................................... 18
    Create a Hunt Group ..................................................... 18

MiCollab Client ........................................................................ 19
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MiCollab Client Integrated or Co-located Mode?</td>
<td>19</td>
</tr>
<tr>
<td>MiCollab Client Application Configuration</td>
<td>19</td>
</tr>
<tr>
<td>MiCollab Client User Provisioning</td>
<td>20</td>
</tr>
<tr>
<td>Firewall Requirements</td>
<td>20</td>
</tr>
<tr>
<td>Default Class of Service Settings</td>
<td>21</td>
</tr>
<tr>
<td>COS Settings for MiCollab Users</td>
<td>21</td>
</tr>
<tr>
<td>COS for Application Ports</td>
<td>22</td>
</tr>
<tr>
<td><strong>CHAPTER 2: MVOICE OFFICE 250 INTEGRATION</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>25</td>
</tr>
<tr>
<td>Identify the Network Elements for MiVO systems</td>
<td>25</td>
</tr>
<tr>
<td>NuPoint Unified Messaging</td>
<td>26</td>
</tr>
<tr>
<td>MiVoice Border Gateway</td>
<td>26</td>
</tr>
<tr>
<td>Teleworker Service</td>
<td>26</td>
</tr>
<tr>
<td>MiCollab AWV</td>
<td>27</td>
</tr>
<tr>
<td>Install MiCollab AWV Conferencing Client for all Users (as administrator)</td>
<td>27</td>
</tr>
<tr>
<td>Configure MiVoice Office 250 FOR AWV</td>
<td>27</td>
</tr>
<tr>
<td>Create IP Devices for 86xx Ports</td>
<td>28</td>
</tr>
<tr>
<td>Configure Phone Settings</td>
<td>28</td>
</tr>
<tr>
<td>Create a Hunt Group</td>
<td>28</td>
</tr>
<tr>
<td>Enable OAI Connection</td>
<td>29</td>
</tr>
<tr>
<td>MiCollab Client</td>
<td>29</td>
</tr>
<tr>
<td>MiCollab Client Application Configuration</td>
<td>29</td>
</tr>
<tr>
<td>MiCollab Client User Provisioning</td>
<td>29</td>
</tr>
<tr>
<td>Firewall Requirements</td>
<td>29</td>
</tr>
<tr>
<td><strong>CHAPTER 3: MVOICE 5000 INTEGRATION</strong></td>
<td></td>
</tr>
<tr>
<td>Overview</td>
<td>33</td>
</tr>
<tr>
<td>Requirements</td>
<td>35</td>
</tr>
<tr>
<td>Conditions and Limitations</td>
<td>35</td>
</tr>
<tr>
<td>Licensing</td>
<td>36</td>
</tr>
<tr>
<td>MiVoice 5000 Licensing</td>
<td>36</td>
</tr>
<tr>
<td>MiCollab Licensing</td>
<td>36</td>
</tr>
<tr>
<td>Integration Procedure</td>
<td>37</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>Install Platform</td>
<td></td>
</tr>
<tr>
<td>Install the BluStar server</td>
<td></td>
</tr>
<tr>
<td>Configure MiCollab Client Integration Mode</td>
<td></td>
</tr>
<tr>
<td>Create Network Elements</td>
<td></td>
</tr>
<tr>
<td>Configure &quot;micollab_api&quot; Password</td>
<td></td>
</tr>
<tr>
<td>Configure MiCollab System Application settings</td>
<td></td>
</tr>
<tr>
<td>Integrate NuPoint</td>
<td></td>
</tr>
<tr>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td></td>
</tr>
<tr>
<td>Configure NuPoint</td>
<td></td>
</tr>
<tr>
<td>Perform Required NuPoint Configuration on MiVOICE 5000</td>
<td></td>
</tr>
<tr>
<td>Test NuPoint Voice Mail Operation</td>
<td></td>
</tr>
<tr>
<td>Integrate Audio, Web and Video</td>
<td></td>
</tr>
<tr>
<td>Install MiCollab AWV Conferencing Client for all Users</td>
<td></td>
</tr>
<tr>
<td>Configure MiVoice 5000 to Communicate with AWV</td>
<td></td>
</tr>
<tr>
<td>Configure SIP Server Settings in MiCollab AWV</td>
<td></td>
</tr>
<tr>
<td>Integrate MiVoice Border Gateway</td>
<td></td>
</tr>
<tr>
<td>Configure The ICPs in the Standalone MBG</td>
<td></td>
</tr>
<tr>
<td>Configure SIP Settings</td>
<td></td>
</tr>
<tr>
<td>Integrate MiCollab Client</td>
<td></td>
</tr>
<tr>
<td>MiCollab Client Configuration</td>
<td></td>
</tr>
<tr>
<td>MiCollab Client (Next Gen) Mobile Client Deployment</td>
<td></td>
</tr>
<tr>
<td>Configure CSTA Link</td>
<td></td>
</tr>
<tr>
<td>Configure MiCollab Client Deployment</td>
<td></td>
</tr>
<tr>
<td>Enable Remote Access to the Deployment Unit Interface</td>
<td></td>
</tr>
<tr>
<td>Create and Assign Deployment Profiles</td>
<td></td>
</tr>
<tr>
<td>Purchase and Import SSL Certificates to Servers</td>
<td></td>
</tr>
<tr>
<td>Synchronize from MiVoice 5000</td>
<td></td>
</tr>
<tr>
<td>Configure Integrated Directory Services (Optional)</td>
<td></td>
</tr>
<tr>
<td>Configure the Connection and Sync Databases</td>
<td></td>
</tr>
<tr>
<td>Perform User and Services Provisioning</td>
<td></td>
</tr>
<tr>
<td>Configure MiVoice 5000 with MBG IP Address</td>
<td></td>
</tr>
<tr>
<td>Migration Procedure for AWV</td>
<td></td>
</tr>
<tr>
<td>CHAPTER 4: MX-ONE INTEGRATION</td>
<td></td>
</tr>
<tr>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>Requirements</td>
<td></td>
</tr>
<tr>
<td>Conditions and Limitations</td>
<td></td>
</tr>
</tbody>
</table>
Table of Contents

Licensing ........................................ 77
  MiVoice MX-ONE Licensing .................... 77
  MiCollab Licensing ............................ 77

Integration Procedure .......................... 77
  Overview ...................................... 77
  Install Platform ................................ 78
  Install the BluStar server .................... 78
  Configure MiCollab Client Integration Mode  ........................................ 78
  Create Network Elements ....................... 78
  Configure "micollab_api" Password ............ 79
  Configure MiCollab System Application settings ........................................ 80

Integrate NUPOINT .................................. 81
  Overview ...................................... 81
  Preparation .................................... 82
  Configure Nupoint ............................. 82
  Configure MiVoice MX-ONE to Support NuPoint ........................................ 83
  Test NuPoint Voice Mail Operation .......... 100

Integrate Audio, Web and Video ................ 101
  Install MiCollab AWV Conferencing Client for all Users .................................... 101
  Configure MiVoice MX-ONE To Communicate with AWV .................................... 101
  Initiate the Hunt Group ....................... 102
  Initiate the Common Service Profile (CSP). ........................................ 105
  Initiate the SIP extension to be used as group members .................................... 112
  Configure SIP Server Settings in MiCollab AWV ........................................ 117

Integrate MiVoice Border Gateway ............... 117
  Configure ICP in MBG (Standalone MBG Only) ........................................ 118
  Configure SIP Trunks ........................... 118

Integrate MiCollab Client ........................ 118
  MiCollab Client Configuration ................. 118
  Deploy MiCollab Client (Next Gen) Mobile Clients ..................................... 119
  Configure CSTA Link ........................... 119
  Configure MiCollab Client Deployment .......... 119
  Purchase and Import SSL Certificates to Servers ........................................ 120

Configure Integrated Directory Services (Optional) ............ 120

Perform User and Services Provisioning .......... 120
  About the Provisioning Manager (PM) ........................................ 120
  Provisioning Users ................................ 121
    Provisioning Manager User Task ..................... 121
    Provisioning Manager Export Tool ............... 129
  Provisioning Manager with Active Directory integration ..................................... 133
  Server Set Up .................................... 133
CHAPTER 5: FEATURE SUPPORT

Introduction .................................................................................. 140

Types of Users ................................................................................. 140
  Users with MiCollab services ............................................................. 140
  Corporate contacts with monitoring ................................................. 140
  Corporate contacts without monitoring ............................................ 140
  Non-corporate contacts ................................................................. 140

NuPoint Unified Messaging ................................................................. 141
  Supported Features ....................................................................... 141
  MiVoice 5000 NP-UM Unsupported Features ............................... 141
  MiVoice MX-ONE NP-UM Unsupported Features ....................... 141

MiVoice Border Gateway ................................................................. 142
  Supported Features ....................................................................... 142
  Unsupported Features: MiVoice 5000 and MiVoice MX-ONE .......... 143

MiCollab Audio, Web and Video ...................................................... 143
  Supported Features ....................................................................... 144
  Supported Integrations ................................................................. 145
  Desktop Softphone, Web Portal, and Mobile Client Support .......... 146
  Unsupported Features: MiVoice 5000 and MiVoice MX-ONE .......... 146

APPENDIX A: AUDIO, WEB AND VIDEO CONFERENCING VOICE PROMPTS

Voice Prompts .................................................................................. 155
Table of Contents
Chapter 1

INTRODUCTION
PURPOSE OF THIS GUIDE

This guide provides instructions on how to configure the MiVoice Business, MiVoice 5000, and MiVoice MX-ONE communication platforms to support the MiCollab applications.

SUPPORTED MICOLLAB APPLICATIONS

The applications supported by a MiCollab installation are dependent on the following criteria:

• Communications platform
• Deployment configuration, and
• MiCollab platform

MIVOICE BUSINESS COMMUNICATION PLATFORMS

For the supported MiVoice Business communications platforms, the following MiCollab applications are supported:

• NuPoint Unified Messaging
• Speech Auto Attendant
• MiCollab Client in either integrated or co-located mode; see the MiCollab Installation and Maintenance Guide for a description of these modes.
• MiCollab Audio, Web, and Video (AWV) Conferencing.
• MiVoice Border Gateway (Teleworker, SIP Trunking, and Secure Recording Connector Services) with Web Proxy
• Vidyo

Note: The Speech Navigation option is only supported if NuPoint Unified Messaging is the only installed application. This restriction applies to both the MiCollab server and virtual MiCollab. Although all applications are installed in the vMiCollab OVA, if you only apply NuPoint licenses (à la carte) then it is considered a single application installation.

MIVOICE 5000, AND MIVOICE MX-ONE PLATFORMS

The following MiCollab applications are supported:

• NuPoint Unified Messaging
• MiCollab Client
• MiCollab Audio, Web and Video (AWV) Conferencing
• MiVoice Border Gateway (Teleworker Service only) with Web Proxy
• Vidyo

Note: The Speech Auto Attendant application is not supported on the MiVoice 5000 and MiVoice MX-ONE.
CLIENT STATION SUPPORT

MiCollab clients (for example, MiCollab End User portal, MiCollab System Administrator portal, MiCollab AWV clients, and so forth) are supported on various operating systems. Refer to the MiCollab Engineering Guidelines for details.
Chapter 2

MIVOICE BUSINESS INTEGRATION
INTRODUCTION

To manually configure the MiCollab and MiVoice Business application system resources:

1. “Identify the Network Elements for MiVB systems” on page 6.

2. Complete the basic application programming on the communications platform and on the MiCollab platform for the required applications as described in the following sections:
   - “NuPoint Unified Messaging” on page 7
   - “MiVoice Border Gateway” on page 14
   - “MiCollab AWV” on page 16
   - “MiCollab Client” on page 19.

3. Configure MiCollab Client mode. Refer to the MiCollab Installation and Maintenance Guide for instructions.

4. Configure the MiCollab system application settings (for example, NP-UM ICP, NP-UM Line Groups, AWV web conference SIP server, and so forth) manually through the application administration interfaces. Refer to the application online help for instructions.

5. Add any additional users and services including the NuPoint Unified Messaging mailboxes through the Users and Services application. Under Applications, click Users and Services. Follow the instructions provided in the online help to add users. After you add a user, the MiCollab system automatically starts the services (for example, NP-UM) that you assigned to that user.

6. After you have programmed the site configuration data, it is recommended that you make a backup of the MiCollab system database.

IDENTIFY THE NETWORK ELEMENTS FOR MIVB SYSTEMS

This procedure identifies the MiVoice Business network elements for all the installed applications for Flow Through Provisioning.

1. Log into the MiCollab server manager.

2. Under Applications, click Users and Services.

3. Click the Network Element tab.

4. Click Add.

5. Complete the MiVoice Business Network Element fields.
   - Refer to the help for field descriptions.
   - Check the Use NuPoint UM IP Integration Licenses if the Network Element will support the NuPoint UM application ports.

6. If the system includes the NP-UM application, complete the following:
   - Enter the "Call Reroute First Alternative Number".
   - Enter the "NP-UM voice mail hunt group number" in the "Call Forward Destination Directory Number" field.
7. Click **Save**.

8. If you are adding the first network element to the list, you are prompted to associate the element with the default UCC templates. If you select **Yes**, the network element field for the primary phone in the default templates is automatically set to the name of this network element. If you select **No**, you must create custom templates and associate them with this element.

9. After you save your changes to the Network Elements tab, if the network element supports the NP-UM application ports, you must activate the changes.
   - At the top of the screen, click the **NuPoint activation** link.
   - Click **OK**. Wait for the configuration to activate. This step takes the NP-UM application out of service.

10. Click **Return to Server Manager** in the left-hand menu.

### NUPOINT UNIFIED MESSAGING

#### MITEL MIVOICE BUSINESS PROGRAMMING

This integration uses the Mitel MiVoice Business system along with the MiTAI application. NuPoint Unified Messenger emulates virtual extensions on the MiVoice Business system. The MiVoice Business system and the NuPoint Unified Messaging server should be on the same virtual local area network.

The following sections describe the basic programming required on the MiVoice Business platform to support NP-UM. For detailed information about MiVoice Business programming, refer to the MiVoice Business System Administration Tool Help.

**Note:** If you are licensed for the Record A Call optional feature, your telephones must be registered as 5240 devices, except the lines that are used for MWI, which must always be registered as 5020 devices. If you are not licensed for Record A Call, your telephones must be registered as 5020 devices.

#### PROGRAM VOICEMAIL PORTS

1. Log into the MiVoice Business System Administration Tool.

2. In the **Class of Service Options** form, program COS 82 for the voicemail ports and the sets.

<table>
<thead>
<tr>
<th>COS OPTIONS FOR MESSAGE WAITING PORTS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCI/CTI/TAPI Call Control Allowed</td>
<td>Yes</td>
</tr>
<tr>
<td>HCI/CTI/TAPI Monitor Allowed</td>
<td>Yes</td>
</tr>
<tr>
<td>Public Network Access via DPNSS</td>
<td>Yes</td>
</tr>
<tr>
<td>COV/ONS/E&amp;M Voice Mail Port</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. In the **Class of Service Options** form, program COS 83 for the Record-A-Call ports.
4. Program COS number 84 with the following options for the MWI port(s).

<table>
<thead>
<tr>
<th>COS OPTIONS FOR MESSAGE WAITING PORTS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCI/CTI/TAPI Call Control Allowed</td>
<td>Yes</td>
</tr>
<tr>
<td>HCI/CTI/TAPI Monitor Allowed</td>
<td>Yes</td>
</tr>
<tr>
<td>Public Network Access via DPNSS</td>
<td>Yes</td>
</tr>
<tr>
<td>COV/ONS/E&amp;M Voice Mail Port</td>
<td>Yes</td>
</tr>
<tr>
<td>Do Not Disturb Permanent</td>
<td>Yes</td>
</tr>
</tbody>
</table>

5. Program COS number 85 with the following options for the Speech Auto Attendant port(s).

<table>
<thead>
<tr>
<th>COS OPTIONS FOR PORTS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calling Party Name Substitution</td>
<td>Yes</td>
</tr>
<tr>
<td>Display Dialed Digits during Outgoing Calls</td>
<td>Yes</td>
</tr>
<tr>
<td>Public Network Access via DPNSS</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6. In the Shared System Options form, program the system options.

   **Note:** The system option "DPNSS/QSIG Diversion Enabled" must be set to Yes in order for the called extension number to forward to voice mail across an E1 DPNSS integration.

7. In the System Options form, program the Set Registration Access Code value (for example: ***) and the Set Replacement Access Code value (for example: ###).

8. In the Feature Access Codes form, program the Message Waiting Activate code (for example, *33) and the Message Waiting Deactivate code (for example, #33).

PROGRAM VOICEMAIL HUNT GROUP AND PORTS

1. In the Hunt Group form, program a voicemail hunt group with the following parameters:
   - **Hunt Group:** Enter a unique directory number for the hunt group pilot number (default applied by MiCW = 7000)
   - **Hunt Group Mode:** Circular
   - **Hunt Group Priority:** Set a hunt group priority (Default 64)
   - **Hunt Group Type:** Voicemail

2. In the Telephone Directory form, assign the name "NuPoint Voicemail" to the Hunt Group directory number.

3. In the User and Services Configuration form, create virtual voicemail ports. For each port:
- **Number**: Enter a unique directory number
- **Device Type**: Enter 5020 IP for devices with voicemail only; enter 5240 IP for devices with voicemail and record-a-call functionality. (To obtain record-a-call functionality you must purchase the Record-a-Call option for your NP-UM licenses).
- **Hot Desk User**: No
- **Voice Mail**: No
- **Class of Service Day**: COS (Day) (Night 1) (Night 2) = Enter COS 82 for voicemail only; enter COS 83 for voicemail ports with record-a-call functionality
- **Class of Restriction Day**: COR (Day) (Night 1) (Night 2) = 1.

4. In the **Hunt Group** form, add all the directory numbers of the voicemail ports to the "NuPoint Voicemail" hunt group (default applied by MiCW is four members starting at extension number 6001).

**PROGRAM RECORD-A-CALL HUNT GROUP**

(Only required if you have purchased Record-a-Call option for your NP-UM licenses.)

1. In the **Hunt Group** form, program a Record A Call hunt group and enter the following parameters:
   - **Hunt Group**: Enter a unique directory number for the hunt group pilot number (default applied by MiCW = 6500)
   - **Hunt Group Mode**: Circular
   - **Hunt Group Priority**: Set a hunt group priority (Default 64)
   - **Hunt Group Type**: Recorder

2. In the **Telephone Directory** form, assign the name "Record A Call" to the **Hunt Group** directory number.

3. In the **Hunt Group** form, add the directory numbers of the voicemail ports to the "Record A Call" hunt group (that is, add the same members that you added to the "NuPoint Voicemail" hunt group).

**PROGRAM SPEECH AUTO ATTENDANT HUNT GROUP AND PORTS**

1. In the **Hunt Group** form, program a Speech Auto Attendant hunt group and enter the following parameters:
   - **Hunt Group**: Enter a unique directory number for the hunt group pilot number (default applied by MiCW = 6800)
   - **Hunt Group Mode**: Circular
   - **Hunt Group Priority**: Set a hunt group priority (Default 64)
   - **Hunt Group Type**: Voice

2. In the **Telephone Directory** form, assign the name "Speech Auto Attendant" to the **Hunt Group** directory number.

3. In the **User and Services Configuration** form, assign virtual ports to support speech auto attendant functionality. For each virtual port:
   - **Number**: Enter a unique directory number
   - **Device Type**: 5020 IP
- **Hot Desk User**: No
- **Voice Mail**: No
- **Class of Service Day**: COS (Day) (Night 1) (Night 2) = COS 85
- **Class of Restriction Day**: COR (Day) (Night 1) (Night 2) = 1.

4. In the **Hunt Group** form, add the directory numbers of the voicemail ports to the "Speech Auto Attendant" hunt group (default applied by MiCW is four members starting at extension number 6001).

**PROGRAM MESSAGE WAITING INDICATION**

You can program Message Waiting Indication to flash a lamp on a user's phone when the user has a voice mail message waiting in their mailbox. There are two possible configurations:

- You can configure the system to use DTMF signaling to send the message waiting indication to the voicemail port. This configuration supports multiple MiVoice Business network elements in a cluster, but requires an additional voicemail port.
- OR
- You can configure an HCI Reroute phantom hunt group to route the message waiting signals to the user voice mailboxes. This configuration is only supported for one MiVoice Business system, but it doesn't use a voicemail port.

To program MWI indication using DTMF signaling:

1. In the **User and Services Configuration** form, create a virtual port:
   - **Number**: Enter a unique directory number
   - **Device Type**: 5020 IP
   - **Hot Desk User**: No
   - **Voice Mail**: No
   - **Class of Service Day**: COS (Day) (Night 1) (Night 2) = COS 84

2. In the **Hunt Group Assignment** form, add the directory number to the NuPoint MWI Hunt Group as the last member of the Voicemail hunt group.

To support MWI indication using HCI Reroute:

1. In the **Hunt Group** form, program a HCI Reroute Phantom hunt group and enter the following parameters:
   - **Hunt Group**: Enter a unique directory number for the hunt group pilot number
   - **Hunt Group Mode**: Circular
   - **Hunt Group Priority**: Set a hunt group priority (Default 64)
   - **Hunt Group Type**: HCIReroute

2. In the **Telephone Directory** form, assign the name "HCI Reroute" to the **Hunt Group** directory number.

3. In the Call Rerouting Assignment forms, program the system to route the message waiting signals to the user voicemail boxes. Refer to the MiVoice Business System Administration Tool for instructions on how to configure call rerouting.
MICOLLAB PROGRAMMING FOR NUPOINT UNIFIED MESSAGING

1. Log into the MiCollab Administration portal.
3. Click Edit Offline Configuration.
4. Click Duplicate to copy the current Active Configuration (1) to the Offline Configuration.

CREATE VOICE MAIL LINE GROUP

5. Click Line Groups and then click Add.
6. Create a line group for the standard voice mail ports. This line group will correspond to the voicemail hunt group that you programmed on the MiVoice Business system.
   - Click the Lines tab
   - Enter a line group number or click Next Available to select the next available line group number.
   - Enter "Voice Mail" in the Name field
   - Set the Application field to "NuPoint Voice".

7. Click Dialing Plan.
   - Select Standard Mode
   - Set the dialing plan to v,v,v,v,v,v,v,v,3 as show in the following graphic:
8. Leave the **Voicemail** and **Digit Strings** tabs at the default settings.

9. Add the lines to the group and map them to the MiVoice Business voice mail hunt group extensions:
   - Under **Lines**, click **Add**
   - Enter a line number or click **Next Available** to select the next available line number.
   - Enter the number of lines that you want to add. This number should equal the number of MiVoice Business voice mail hunt group extensions.
   - Select the name of the PBX.
   - In the Mapping field enter the first extension number from the MiVoice Business voice mail hunt group. After you click **Add** the specified number of extensions will be added consecutively. If the hunt group extension numbers are not consecutive, add each extension number individually.
   - Click **Add**.

10. Click **Save**.

11. After you save your changes to the Network Elements tab, if the network element supports the NP-UM application ports, you must activate the changes.
   - At the top of the screen, click the **NuPoint activation** link.
   - Click **OK**. Wait for the configuration to activate. This step takes the NP-UM application out of service.

12. Click **Return to Server Manager** in the left-hand menu.
CREATE SPEECH AUTO ATTENDANT LINE GROUP

13. Click **Line Groups** and then click **Add**.

14. Create a line group for the speech auto attendant ports. This line group will correspond to the speech auto attendant hunt group that you programmed on the MiVoice Business system.
   - Click the **Lines** tab
   - Enter a line group number or click **Next Available** to select the next available line group number.
   - Enter "Speech AA" in the Name field
   - Set the Application field to "Speech Recognition".

15. Add the lines to the group and map them to the MiVoice Business voice mail hunt group extensions:
   - Under **Lines**, click **Add**
   - Enter a line number or click **Next Available** to select the next available line number.
   - Enter the number of lines that you want to add. This number should equal the number of MiVoice Business speech auto attendant group extensions.
   - Select the name of the PBX.
   - In the Mapping field enter the first extension number from the MiVoice Business speech auto attendant hunt group. After you click **Add** the specified number of extensions will be added consecutively. If the extension numbers are not consecutive, add each extension number individually.
   - Click **Add**.

16. Leave the **Speech Recognition** tab settings at the defaults.

17. Click **Save**.
CONFIGURE SPEECH AUTO ATTENDANT USER DATA SOURCE

If your system requires the Speech Auto Attendant functionality, set the User Data Source to "MiCollab" through the MiCollab administration portal. SAA must connect and interact with the MiCollab system to obtain the list of system users.

To set the User Data Source:
1. Log into the MiCollab administration portal.
4. Click Data Source. The User Data Source window appears.
5. Click Edit. The User Data Source fields become enabled.
6. Set the data source type field to MiCollab.
7. Click Save. A confirmation dialog appears.
8. Click OK to confirm the changes.

The Speech Auto Attendant user data source is refreshed upon saving the modifications.

FIREWALL REQUIREMENTS

Refer to the MiCollab Engineering Guidelines for NP-UM firewall requirements.

MIVOICE BORDER GATEWAY

MiVoice Border Gateway (Teleworker Services, SIP Trunking, and Secure Call Recording) is supported with MiVoice Business.

TELEWORKER SERVICE

There is no additional programming required on the communication platform to support teleworkers.
1. Log into the MiCollab Administration portal.
2. Under Applications, click MiVoice Border Gateway.
3. On the Status-Dashboard and Configuration - Setting tabs, ensure that the following parameters are programmed:

<table>
<thead>
<tr>
<th>WEB PAGE TAB</th>
<th>SETTINGS</th>
<th>PROGRAMMING STEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dashboard</td>
<td>MBG Status</td>
<td>Enabled.</td>
</tr>
<tr>
<td></td>
<td>Courtesy down?</td>
<td>Enabled (Checked)</td>
</tr>
<tr>
<td>Configuration</td>
<td>G.729 Transcoding</td>
<td>Set to False.</td>
</tr>
<tr>
<td></td>
<td>Local Streaming</td>
<td>Set to True.</td>
</tr>
</tbody>
</table>
4. The **MiVoice Border Gateway** allows the MiCollab server in LAN mode to manage MBG services that are running on a single MiVoice Border Gateway (MBG) server located in the DMZ. To support this configuration, you must create a cluster on the MBG server with the MiCollab server and MBG server as the only members of the cluster.

**Note:** Refer to the [MiCollab Engineering Guidelines](#) for MBG firewall requirements.

### SIP TRUNKING

1. Log into the MiCollab Administration portal.
2. Under **Applications**, click **MiVoice Border Gateway**.
3. Click the **Configuration** tab.
4. Edit the default SIP settings and enable SIP trunk support and from this tab. Refer to the **MiVoice Border Gateway** online help and the **MBG Installation and Maintenance** guide for instructions.

### SECURE RECORDING CONNECTOR

1. Log into the MiCollab Administration portal.
2. Under **Applications**, click **MiVoice Border Gateway**.
3. Refer to the **MiVoice Border Gateway** online help and the **MBG Installation and Maintenance** guide for instructions on how to configure sets with secure call recording.
MICOLLAB AWV

MiCollab AWV application is supported on MiCollab for MiVoice Business. You must configure these systems to support the MiCollab Audio, Web and Video Conferencing application that is installed on the MiCollab server.

Refer to the MiCollab AWV Administrator’s Online Help on the Mitel Customer Documentation site for instructions. Refer to the MiCollab Engineering Guidelines for MBG firewall requirements.

INSTALL MICOLLAB AWV CONFERENCING CLIENT FOR ALL USERS (AS ADMINISTRATOR)

If you are running in a networked environment, you can (as the administrator of the computers) install MiCollab Audio, Web and Video Conferencing Client for all users. This is usually done in a Terminal server or Citrix environment.

If you wish to do this, download the executable file from http://<MiCollab Audio, Web and Video Conferencing server FQDN>/wd/MiCollab Audio, Web and Video ConferencingClient-admin.exe and follow the instructions.

Note: You must have Administrator privileges to install MiCollab Audio, Web and Video Conferencing Client for all users. The software must be placed in a location that all users can access. If a user on the system already has the MiCollab Audio, Web and Video Conferencing Client installed on their machine locally, that version takes precedence over the administrator-installed version.

CONFIGURE COMMUNICATIONS PLATFORM FOR AWV

CONFIGURE MIVOICE BUSINESS FOR AWV

When the system platform you are using is the MiVoice Business, configure it first before you enter the SIP Server Configuration information in MiCollab Audio, Web and Video Conferencing. This allows the MiVoice Business to communicate and operate with the MiCollab Audio, Web and Video Conferencing product installed on the MiCollab server.

Configure the MiVoice Business as follows:

• “Configure SIP Device Capabilities” on page 17, below
• “Configure SIP Peer Profiles” on page 17
• “Configure Extended Hunt Groups” on page 17
• “Configure Class of Service (COS)” on page 17
• “Create IP Devices” on page 18
• “Create a Hunt Group” on page 18
Configure SIP Device Capabilities

MiCollab Audio, Web and Video Conferencing is configured as a SIP extension on the MiVoice Business and allows the two to communicate. If the SIP Session Timer times-out before the system establishes a session with MiCollab Audio, Web and Video Conferencing, the session is torn down and the call does not complete. Configure the SIP device to prevent a scenario where attendees may be inadvertently dropped when an outgoing call is place during a conference.

Configure SIP Device Capabilities and set the following:

- **Replace System based with Device based In-Call Features**: Set to Yes.
- **Session Timer**: Set value to 0.
- **SDP Options/Allow Device To Use Multiple Active M-lines**: Set to Yes

To ensure proper Caller ID is displayed, set the following in SIP Device Capabilities:

- **Allow Display Update**: Set to Yes
- **Use P-Asserted Identity Header**: Set to Yes

Configure SIP Peer Profiles

When using SIP trunks, also ensure that SIP Peer Profile for both ends of the SIP trunk are set to the following:

- **Allow Display Update**: Set to Yes
- **Use P-Asserted Identity Header**: Set to Yes

Configure Extended Hunt Groups

It is only necessary to configure Extended Hunt Groups when more than 65 MiCollab Audio, Web and Video Conferencing User Licenses are purchased. Configure the MiVoice Business for Extended Hunt Groups to allow you to program a hunt group with more than 64 members.

**Note**: When selecting Extended Hunt Groups, the Hunt Group capacity of the system changes from 176 hunt groups with a maximum of 64 members each, to 16 hunt groups with a maximum of 240 members each. Although you can program more, only one 240-member hunt group is recommended per system.

Configure License and Option Selection, and then set **Extended Hunt Group** to Yes.

Configure Class of Service (COS)

Create a new COS for MiCollab Audio, Web and Video Conferencing SIP ports by modifying the default COS configuration. This COS is assigned to the hunt group you create for MiCollab Audio, Web and Video Conferencing, see “Create a Hunt Group” on page 18.

Configure Class of Service Options/Assignment for COS you will use for MiCollab Audio, Web and Video Conferencing ports, and then set **Suppress Simulated CCM after ISDN Progress** to Yes.
Create IP Devices

Create IP devices on the system for conferencing extensions on MiCollab Audio, Web and Video Conferencing.

Add a new device and configure the Multiline IP Set Configuration. Complete the following information for the multiline IP set range:

- **Enter the number of records to add**: The number of IP devices that you are creating. Typically, the value entered equals the number of MiCollab Audio, Web and Video Conferencing User Licenses purchased.
- **Device Type**: Select **Generic SIP Phone** from the list.
- **Number**: Type the starting extension number. If the extension numbers are consecutive (recommended) increment by 1.
- **Interconnect Number**: Type 1.

Create a Hunt Group

Program a hunt group for dialing into a conference using the IP devices you created.

Configure the Hunt Group Assignment. Complete the following information for the hunt group range:

- **Enter the number of records to add**: Type 1 (typical) for the number of hunt groups you are creating.
- **Hunt Group**: Type an extension number for the hunt group.
- **Class of Service Day**: Type the number of the COS you created earlier, see “Configure Class of Service (COS)” on page 17. Default is 1.
- **Class of Service – Night1**: Type the number entered for Class of Service Day. Default is 1.
- **Class of Service – Night2**: Type the number entered for Class of Service Day. Default is 1.
- **Hunt Group Priority**: Leave as the default value, which is 64.
- **Hunt Group Type**: Select **Voice** from the list.

Add a member to the Hunt Group Assignment, and then complete the following information for the hunt group member range:

- **Enter the number of records to add**: This is the number of IP devices that you added previously, see “Create IP Devices” on page 18.
- **Number**: Type the starting extension number. If the extension numbers are consecutive (recommended), increment by 1.
MICOLLAB CLIENT

The MiCollab Client application is supported on MiCollab for MiVoice Business systems. You must configure these systems to support the MiCollab Client clients (MiCollab Client deskphones or MiCollab Client softphone users).

MICOLLAB CLIENT INTEGRATED OR CO-LOCATED MODE?

If your site includes the MiCollab Client application, either

• integrate the MiCollab Client database with the MiCollab database by running the MiCollab Client Integration wizard, or

• leave the MiCollab Client database co-located with the MiCollab database.

Refer to the MiCollab Installation and Maintenance Guide to determine if you should run the MiCollab Client Integration Wizard and use MiCollab Client integrated mode or remain in co-located mode.

MICOLLAB CLIENT APPLICATION CONFIGURATION

Refer to the following sections in the MiCollab Client Administrator Guide for configuration information:

- Configure the PBX
- Configure Integrated Applications
- Access the MiCollab Client Administration Page
- Provision MiCollab Client
- Install Desktop Client
- Install Mobile Client

Note that you must enable the following Nupoint UM FCOS options to allow the MiCollab Client Desktop client to control voice mail calls:

• FCOS 289 Enable UM-SMTP
• FCOS 290 Enable UM-Web
• FCOS 295 Enable UM Pro

For simplified MiCollab Client Deployment instructions, refer to the MiCollab server manager help.

Note: To enable remote client station to log in and to enable MiCollab Mobile Client users to establish connections, you must install an SSL Certificate on the MiCollab and MBG servers. Refer to the online help associated with the Web Server Certificates page for instructions.
MICOLLAB CLIENT USER PROVISIONING

If your system is in MiCollab Client integrated mode, you provision MiCollab Client services from the USP application. If your system is MiCollab Client co-located mode you must provision MiCollab Client services separately from the UC Server application interface.

FIREWALL REQUIREMENTS

Refer to the MiCollab Engineering Guidelines for MBG firewall requirements.
DEFAULT CLASS OF SERVICE SETTINGS

The following tables list the COS settings that the Mitel Configuration Wizard applies to the MiVoice Business system and the MiCollab application services (where applicable).

If you manually configure the MiVoice Business system and MiCollab applications, then you must program these Class of Service Option settings into the MiVoice Business system through the System Administration Tool. The corresponding COS option number must also be programmed into the Network Elements page of the Users and Services application. If you choose to manually program these COSs, it is recommended that you use the default COS numbers that are applied by the Mitel Configuration Wizard.

For simplicity, only the deltas from the default Class of Service settings are listed. Therefore, to manually create a required COS, select the COS number and then apply the settings specified below. On an existing MiVoice Business system, if a COS number (for example COS 11) is already in use, you will need to modify your COS programming to free up the required COS. Note that you can use the Copy button in the Class of Service Assignment form to copy existing settings to a different COS number. You can also use the Copy button to copy the default settings from a blank COS to one of the required COS numbers if the COS has been modified.

COS SETTINGS FOR MICOLLAB USERS

If you use the Mitel Configuration Wizard to configure a MiVoice Business system with the MiCollab applications, the wizard automatically creates COS 11 and COS 13 with the required settings for Hot Desk users on the MiVoice Business system. However, you must manually configure COS 11 and COS 13 into the MiCollab user templates.

<table>
<thead>
<tr>
<th>OPTION</th>
<th>HOT DESK USER COS’S (DEFAULT)</th>
<th>VM USER WITH RAC (COS 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USER (COS 11)</td>
<td>VM USER WITH RAC (COS 13)</td>
</tr>
<tr>
<td>ACD Silent Monitor Accept</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ACD Silent Monitor Allowed</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ACD Silent Monitor Notification</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Group Presence Control</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Group Presence Third-Party Control</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hot Desk External User Answer</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Confirmation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot Desk External User Permanent Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hot Desk Login Accept</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hot Desk Remote Logout Enabled</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Record a Call - Active</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>SMDR Internal</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Work Timer</td>
<td>20 s</td>
<td>20 s</td>
</tr>
</tbody>
</table>
COS FOR APPLICATION PORTS

The wizard creates COS 82, 84, and 85 for the NuPoint Unified Messaging application and the Speech Auto Attendant application with the required settings for the ports:

**DEFAULT NUPOINT UNIFIED MESSAGING PORTS COS’S**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>NP PORTS COS (DEFAULT)</th>
<th>NP MWI PORTS COS (DEFAULT)</th>
<th>SPEECH AA PORTS COS (DEFAULT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calling Party Name Substitution</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>COV/ONS/E&amp;M Voice Mail Port</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Dialed Night Service</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Display Dialed Digits during Outgoing Calls</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do Not Disturb Permanent</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>HCI/CTI/TAPI Call Control Allowed</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>HCI/CTI/TAPI Monitor Allowed</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Public Network Access via DPNSS</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The wizard creates COS 86 with the required settings for the MiCollab AWV ports:

**DEFAULT AWV PORTS COS**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>AWV PORTS COS (DEFAULT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppress Simulated CCM after ISDN Progress</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Chapter 2

MIVoice Office 250 Integration
INTRODUCTION

To manually configure the MiCollab and MiVoice Business application system resources:

1. “Identify the Network Elements for MiVO systems” on page 25.

2. Complete the basic application programming on the communications platform and on the MiCollab platform for the required applications as described in the following sections:
   - “NuPoint Unified Messaging” on page 26
   - “MiVoice Border Gateway” on page 26
   - “MiCollab AWV” on page 27
   - "MiCollab Client" on page 29.

3. Configure MiCollab Client mode. Refer to the MiCollab Installation and Maintenance Guide for instructions.

4. Configure the MiCollab system application settings (for example, NP-UM ICP, NP-UM Line Groups, AWV web conference SIP server, and so forth) manually through the application administration interfaces. Refer to the application online help for instructions.

5. Add any additional users and services including the NuPoint Unified Messaging mailboxes through the Users and Services application. Under Applications, click Users and Services. Follow the instructions provided in the online help to add users. After you add a user, the MiCollab system automatically starts the services (for example, NP-UM) that you assigned to that user.

6. After you have programmed the site configuration data, it is recommended that you make a backup of the MiCollab system database.

IDENTIFY THE NETWORK ELEMENTS FOR MIVO SYSTEMS

This procedure identifies the MiVoice Office 250 network elements for all the installed applications for Flow Through Provisioning. Flow Through Provisioning is not supported for the MiVoice Office 250, so you do not need to configure them in the Network Element tab.

1. Log into the MiCollab server manager.

2. Under Applications, click Users and Services.

3. Click the Network Element tab.

4. Click Add.

5. Complete the MiVoice Office Network Element fields.
   - Refer to the help for field descriptions.
   - Check the Use NuPoint UM IP Integration Licenses if the Network Element will support the NuPoint UM application ports.

6. If the system includes the NP-UM application, complete the following:
   - Enter the "Call Reroute First Alternative Number".
   - Enter the "NP-UM voice mail hunt group number" in the "Call Forward Destination".
Directory Number” field.
- Enter the hunt group number for the HCI Reroute Hunt Group. (This hunt group is used to enable MWI lamp on stations with mailboxes via the MiTAI application interface.)

7. Click **Save**.

8. If you are adding the first network element to the list, you are prompted to associate the element with the default UCC templates. If you select **Yes**, the network element field for the primary phone in the default templates is automatically set to the name of this network element. If you select **No**, you must create custom templates and associate them with this element.

9. After you save your changes to the Network Elements tab, if the network element supports the NP-UM application ports, you must activate the changes.
- At the top of the screen, click the NuPoint activation link.
- Click **OK**. Wait for the configuration to activate. This step takes the NP-UM application out of service.

10. Click **Return to Server Manager** in the left-hand menu.

**NUPOINT UNIFIED MESSAGING**

For instructions on how to integrate the MiVoice Office 250 with the NuPoint Unified Messaging application, refer to the Mitel NuPoint Unified Messaging (UM) administration help.

**MIVOICE BORDER GATEWAY**

MiVoice Border Gateway (Teleworker Services only) is supported with MiVoice Office 250.

**TELEWORKER SERVICE**

There is no additional programming required on the communication platform to support teleworkers.

1. Log into the MiCollab Administration portal.

2. Under **Applications**, click **MiVoice Border Gateway**.

3. On the **Status-Dashboard** and **Configuration - Setting** tabs, ensure that the following parameters are programmed:

<table>
<thead>
<tr>
<th>WEB PAGE TAB</th>
<th>SETTINGS</th>
<th>PROGRAMMING STEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dashboard</td>
<td>MBG Status</td>
<td>Enabled.</td>
</tr>
<tr>
<td></td>
<td>Courtesy down?</td>
<td>Enabled (Checked)</td>
</tr>
<tr>
<td>Configuration</td>
<td>G.729 Transcoding</td>
<td>Set to False.</td>
</tr>
<tr>
<td></td>
<td>Local Streaming</td>
<td>Set to True.</td>
</tr>
</tbody>
</table>

4. The **MiVoice Border Gateway** allows the MiCollab server in LAN mode to manage MBG services that are running on a single MiVoice Border Gateway (MBG) server located in the
DMZ. To support this configuration, you must create a cluster on the MBG server with the MiCollab server and MBG server as the only members of the cluster.

**Note:** Refer to the [MiCollab Engineering Guidelines](#) for MBG firewall requirements.

### MICOLLAB AWV

MiCollab AWV application is supported on MiVoice Office 250 systems. You must configure these systems to support the MiCollab Audio, Web and Video Conferencing application that is installed on the MiCollab server.

Refer to the [MiCollab AWV Administrator’s Online Help](#) on the Mitel Customer Documentation site for instructions. Refer to the [MiCollab Engineering Guidelines](#) for MBG firewall requirements.

### INSTALL MICOLLAB AWV CONFERENCING CLIENT FOR ALL USERS (AS ADMINISTRATOR)

If you are running in a networked environment, you can (as the administrator of the computers) install MiCollab Audio, Web and Video Conferencing Client for all users. This is usually done in a Terminal server or Citrix environment.

If you wish to do this, download the executable file from http://<MiCollab Audio, Web and Video Conferencing server FQDN>/wd/MiCollab Audio, Web and Video ConferencingClient-admin.exe and follow the instructions.

**Note:** You must have Administrator privileges to install MiCollab Audio, Web and Video Conferencing Client for all users. The software must be placed in a location that all users can access. If a user on the system already has the MiCollab Audio, Web and Video Conferencing Client installed on their machine locally, that version takes precedence over the administrator-installed version.

### CONFIGURE MIVOICE OFFICE 250 FOR AWV

When the system platform you are using is the MiVoice Office 250 (formerly Mitel 5000 Communications Platform (CP)), configure it first before you enter the Server Configuration information in MiCollab Audio, Web and Video Conferencing. Configure extensions in the MiVoice Office 250 Database Programming as 86xx ports, and then set the communication link to allow the system to communicate and operate with the MiCollab Audio, Web and Video Conferencing product installed on the MiCollab server. For additional Database Programming information, refer to the [MiVoice Office 250 Features and Programming Guide](#), part number 580.8006.

Configure the MiVoice Office 250 as follows:

- “Create IP Devices for 86xx Ports” on page 28, below
- “Configure Phone Settings” on page 28, below
- “Create a Hunt Group” on page 28, below
Create IP Devices for 86xx Ports

Create IP devices (phones) on the MiVoice Office 250 to allow communication between the system and MiCollab Audio, Web and Video Conferencing. These IP devices are configured as 86xx conference ports.

Create IP devices and configure them as follows:

- Type the starting extension number, and then choose the number of devices to create. The number of devices you create is equal to the number of MiCollab Audio, Web and Video Conferencing ports licensed.
- For each extension, set the MAC address to FF:FF:FX:XX:XX, FF:FF:FF:XX:XX, or FF:FF:FF:FX:XX where X represents the digits of the extension number.

Configure Phone Settings

After the IP devices are created for the conferencing extensions, the settings for each device (phone) must be configured on the MiVoice Office 250. Create a call configuration for the MiCollab Audio, Web and Video Conferencing devices, and then configure the settings.

Create a new call configuration for the conference extensions (see “Create IP Devices for 86xx Ports” on page 28), and then set DTMF Encoding Setting to RFC 2833. For an installation in the United Kingdom (UK), set Speech Encoding Setting to G 7.11 Mu-Law.

Note: MiCollab Audio, Web and Video Conferencing only accepts RFC 2833 encoding.

Configure the phone settings (Flags) as follows for each of the conference extensions you created:

- Handsfree On/Off: set to No.
- Ring Intercom Always On/Off: Set to Yes.
- Headset On/Off. Set to Yes
- Transfer to Connect Allowed. Set to Yes.

Create a Hunt Group

After the IP devices are created and configured to communicate with MiCollab Audio, Web and Video Conferencing, you need to create a hunt group and add the IP phone extensions to it. The hunt group extension is the number you enter for the dial-in number in System Options.

Create a hunt group, and then add members. The members of this hunt group are the extensions you created previously for the conference extensions; see “Create IP Devices for 86xx Ports” on page 28. Do the following:

- Create a hunt group extension number. Leave the Number of Extensions as 1 (default).
- Type a description for the extension, for example, MiCollab Audio, Web and Video Conferencing1. Descriptions can contain up to 20 characters and hunt group user names can
MiVoice Office 250 Integration

content up to 10 characters. Do not use slash (/), backslash (\), vertical slash ( | ), or tilde (~) characters in user names. Do not use Control characters in descriptions or user names.

Enable OAI Connection

The MiVoice Office 250 and MiCollab Audio, Web and Video Conferencing communicate using Open Architecture Interface (OAI). You must set the OAI connection in Database Programming to allow the systems to communicate. Under Sockets, set System OAI Level 2 to Yes.

MICOLLAB CLIENT

The MiCollab Client application is supported on MiVoice Office 250 systems. You must configure the system to support the MiCollab Client clients (MiCollab Client deskphones or MiCollab Client softphone users).

MICOLLAB CLIENT APPLICATION CONFIGURATION

Refer to the following sections in the MiCollab Client Administrator Guide for configuration information:
- Configure the PBX
- Configure Integrated Applications
- Access the MiCollab Client Administration Page
- Provision MiCollab Client
- Install Desktop Client
- Install Mobile Client

Note that you must enable the following Nupoint UM FCOS options to allow the MiCollab Client Desktop client to control voice mail calls:
• FCOS 289 Enable UM-SMTP
• FCOS 290 Enable UM-Web
• FCOS 295 Enable UM Pro

For simplified MiCollab Client Deployment instructions, refer to the MiCollab server manager help.

MICOLLAB CLIENT USER PROVISIONING

If your system is in MiCollab Client integrated mode, you provision MiCollab Client services from the USP application. If your system is MiCollab Client co-located mode you must provision MiCollab Client services separately from the UC Server application interface.

FIREWALL REQUIREMENTS

Refer to the MiCollab Engineering Guidelines for MBG firewall requirements.
Chapter 3

MIVOICE 5000 INTEGRATION
OVERVIEW

You can integrate a MiCollab system with a MiVoice 5000 platform to provide MiCollab applications, such as NuPoint voice mail, MiCollab Client, Teleworker, and Audio, Video, and Web to users who are hosted on the MiVoice 5000 platform.

- For MiCollab integrations with the MiVoice 5000, the administrator performs user provisioning from the MiVoice 5000 Management Portal (MMP) or the MiVoice 5000 Manager.
- Roles and templates are used to define the MiCollab services for the users.

The administrator creates roles and templates in the User and Services application on the MiCollab system, and then performs a manual synchronization to update the MiVoice 5000 communication platform with the roles that are defined on MiCollab.

The administrator then assigns roles to the primary directory number of the user on the MiVoice 5000. The roles on the communications platform correspond to roles on the MiCollab system. The UCC roles map to MiCollab USP templates that define the required application services for the user type. When an administrator adds, edits or deletes a user from the platform management interface, the user’s services are updated on MiCollab based on the assigned template on the next manual immediate synchronization or during the next scheduled database synchronization.

Non-Corporate contacts that appear in the MiCollab Client corporate directory are obtained via MiCollab IDS from an Active Directory server or from the LDAP database located on the MiVoice 5000.

A typical integration consists of the components shown in Figure 4:

- **Communications Platform**: The MiVoice 5000 can be integrated with a single MiCollab system.

- **MiCollab Server**: Provides application services (NuPoint voice mail, AWV, MBG, and MiCollab Client) to the MiVoice 5000 users and supports MiCollab Client softphones for external users over the Internet.
  - NuPoint Unified Messaging integrates with the MiVoice 5000 via SIP trunking.
  - Audio, Web and Video integrates with the MiVoice 5000 using SIP subscriptions.
  - MiCollab Client softphones are integrated with the MiVoice 5000 via SIP subscriptions. Computer Telephony Integration (CTI) is achieved via a BluStar server.
  - MiVoice Border Gateway solution provides a secure communications path for remote MiCollab Client SIP softphones to the MiCollab Client Service. The MBG provides support for MiCollab Client SIP softphones through the implementation of proprietary SIP headers, SIP feature enhancements, line enhancements, and security enhancements, along with administrator interface changes for its management.
  - A standalone vMBG server can be installed in the Demilitarized Zone (DMZ) of a customer's existing firewall. In this case, the MiCollab MBG application must be clustered with the standalone vMBG.

- **BluStar Server**: Provides Computer Telephony Integration (CTI) between the MiVoice 5000 and MiCollab Client to support telephony features such as "Click-to-Call" and presence. The MiVoice 5000 communicates with the BluStar Server using CSTA II protocol. Data is
transferred between the BluStar Server and MiCollab Client application via an MBUS connection.

- **Firewall**: Protects corporate LAN from Internet.
- **Redirect Server**: Provides the configuration data to MiCollab mobile clients. This is a Mitel server located on the Internet. It sends MiCollab mobile client users a configuration e-mail that allows the users to download and install the required configuration files from the redirect server.
- **SIP Trunking**: The NuPoint Voicemail application is supported via SIP trunking.
- **SIP Subscriptions/Extensions**: The Audio, Web and Conferencing application is supported via SIP subscriptions on the MiVoice 5000.
- **Administration Interface**: User provisioning is performed from the communication platform management platform.
- **Directory Server**: An optional Active Directory server can be used to support the synchronization of MiCollab Client contacts to the MiCollab Client Corporate Directory and to support Active Directory Authentication of MiCollab users.

MiCollab Client contacts can also be synchronized to the MiCollab Client Corporate Directory from the MiVoice 5000 directory service or the MiVoice 5000 Manager directory service.

Figure 4: MiVoice 5000 Integration
REQUIREMENTS

- Integration with MiCollab 7.0 or higher is supported with MiVoice 5000 version 6.1 SP2 or higher and MiVoice 5000 Manager version 3.1 or higher.
- MiCollab Integrated Directory Services integration is limited to Active Directory 2008, 2008 R2, and 2012; the MiVoice 5000 management station; or the MiVoice 5000 Manager.
- MiCollab Client service must be configured in Integrated Mode.
- A BluStar server 7.0.0.11 or later is required to support the MiCollab Client application.

CONDITIONS AND LIMITATIONS

- A single MiCollab server can provide applications services to the users on one MiVoice 5000 system in the same enterprise.
- The integration of multiple MiCollab systems to MiVoice 5000 platforms is not supported.
- Connection of a MiCollab server to a mix of different network elements (for example, MiVoice 5000) is not supported. All network element types must be of the same type on a single MiCollab. It is not possible to switch the communications server that is connected to the MiCollab system. The MiCollab system must be reinstalled and reconfigured to support a different type of communication server.
- User and services provisioning is performed from the MiVoice 5000 management interface. The Add, and Quick Add functions are not supported from the Users and Services Application if MiCollab is integrated with a MiVoice 5000.
- The MiVoice 5000 supports a maximum of four terminals/devices per user. Although the MiVoice 5000 supports users with multiple devices, only the users’ primary directory numbers appear in MiCollab. MiCollab services are applied to the primary directory number of the user.
- A MiVoice 5000 can have up to 64 lines associated with a user. MiCollab only supports the user’s primary number.
- NuPoint Unified Messaging Speech Auto Attendant is not a supported application for MiVoice 5000 integrations.
- MiCollab Integrated Directory Services is not supported for managing user entries. Only non-corporate entries (contacts) are synchronized from the directory services database to the MiCollab Client corporate directory.
- Functions and fields in the USP application that are not applicable to MiVoice 5000 are disabled (or hidden). They are disabled after a MiVoice 5000 type network element is assigned in the USP application. The administrator adds application services by assigning a role with the required server level. The administrator removes the role to remove the services. To remove only the NuPoint voice mailbox from a user, the administrator must create a role without a mailbox and assign it to the user.
• The MiCollab system supports a maximum of 5000 users and up to 20000 contacts in the MiCollab Client corporate directory for a multi-application deployment. The MiVoice 5000 has much higher user capacities.
  - MiVoice 5000 supports up to 20000 users and 20000 contacts
  - MiVoice 5000 Manager supports up to 400000 users and 20000 contacts
• LDAP authentication is supported for users who have been created from the MV5000 with authentication enabled. An “authentication only” IDS connection is required to allow MiCollab to validate the end-user password against the Active Directory password. Users can then log into their end-user interfaces by entering their Active Directory password.
• The Mitel Integration Configuration Wizard configures MiCollab with MiVoice Business platforms only. It is NOT supported for integrations with MiVoice 5000
• The MiCollab End User Portal is supported for MiVoice 5000 users. It provides them with access to their user portal, voice mail, and AWV settings. However, a user’s MiVoice 5000 phones are not displayed in the portal interface.
• The MiVoice 5000 can operate in a multi-company management mode where the PBX resources are shared between different companies. Currently, MiCollab does not support multi-company management mode.
• You cannot perform phone number updates and network element updates from the MiCollab USP application. A delete operation followed by an add operation is required to update a network element on MiCollab.
• ORIA does not support provisioning of MiVoice 5000 platforms.
• The Speech Auto Attendant application is NOT supported for MiVoice 5000.
• MiCollab does not provide the ability to configure the phone types for each MiVoice 5000 subscriber. Note that the MiCollab Client and MBG applications function as SIP phone integrations. MBG creates a SIP device account and UCA allows a soft phone because the user has a SIP account.
• User pictures are not imported into MiCollab Client.
• The integration of MiVoice 5000 systems to the MiCollab Server Appliance is not supported. The MiCollab Server Appliance is a small-business capacity MiCollab system that is shipped from Mitel Network to the customer pre-installed on an industry standard server.

**LICENSING**

**MIVOCICE 5000 LICENSING**

License the MiVoice 5000 system from the Aastra Keycode Order Placement (AKOP) licensing server. The AKOP server provides licenses according to a System ID on the MiVoice 5000. Only MiVoice 5000 certified technicians should apply licenses to the MiVoice 5000.

**MICOLLAB LICENSING**

You license the MiCollab system using the Application Management Center (AMC) licensing server. The AMC is not used to assign licenses that are required on the MiVoice 5000.
1. Log into AMC.
2. Create a customer account.
3. Register (purchase) products and licenses and assign them to the customer account.
4. Create Application Record IDs for the MiCollab and optional MiVoice Business Gateway.
5. Assign base software licenses to the system ARIDs.
6. Create a ULM using the MiCollab ARID.
7. If a standalone MBG system is required, add its server ARID.
8. Assign UCC user licenses to the ULM. The UCC user licenses will provide the communication platform users with entitlement to the MiCollab applications.
9. Purchase and activate any additional “a-la-carte” feature, port, or language licenses for the MiCollab system applications.

**Note:** Refer to the AMC online help for detailed licensing steps.

**INTEGRATION PROCEDURE**

The following procedure describes the steps required to integrate a new MiCollab system with a new or existing MiVoice 5000.

**OVERVIEW**

- Install MiCollab platform
- Install MiVoice 5000 platform
- Install BluStar Server (required for MiCollab Client support)
- Configure MiCollab into MiCollab Client Integrated Mode
- Create network elements
- Configure a password for the “micollab_api” account
- Configure MiCollab system application settings
- Integrate the applications with the MiVoice 5000:
  - Integrate NuPoint Unified Messaging
  - Integrate Audio, Web and Video
  - Integrate MiVoice Border Gateway
  - Integrate MiCollab Client
- Configure Integrated Directory Services (optional)
- Configure the connection and sync databases
- Perform user adds, edits, and deletes.
INSTALL PLATFORM

1. Install, license, configure, and provision the MiVoice 5000 (refer to the MiVoice 5000 Installation and Maintenance Guide).

2. Install the MiCollab platform. Do not run the Mitel Initial Configuration Wizard. The MiCW is not supported for MiCollab systems that will be integrated with the MiVoice 5000.

3. Log into MiCollab server manager. Under ServiceLink, click Install Applications and then click the Install Applications tab. Set the ICP type to “call manager”.

4. Collect the following information for the integration:
   - MiCollab IP address
   - MiVoice 5000 IP address.

INSTALL THE BLUSTAR SERVER

The BluStar server supports the call control messaging between MiCollab platform and the MiVoice 5000 platforms to support MiCollab Client features such as “Click-to-Call”.

**Note:** To log into the Blustar Server administration interface for the first time, use the following default username and password:

Username: admin
Password: Mitel123

Refer to BluStar Installation and Configuration Guide. The BluStar server is a windows-based server that integrates MiCollab with a MiVoice 5000 using CSTA II protocols. It can be installed on a Microsoft Windows Server (64-bit) server or in a VMware vSphere virtual environment with the required resources. (Refer to Mitel Virtual Deployment Solution Guide for resource requirements). Note that Hyper-V virtual environments are not supported.

CONFIGURE MICOLLAB CLIENT INTEGRATION MODE

Configure MiCollab in MiCollab Client Integration Mode. Refer to the MiCollab Installation and Maintenance Guide for instructions.

CREATE NETWORK ELEMENTS

Create the network elements for the communication platform(s):

1. Log into the MiCollab server manager.
2. Under Applications, click Users and Services.
3. Click the Network Element tab.
4. Click Add.
5. In the Type field select the system type: “MiVoice 5000”.
6. Enter the IP address of the MiVoice 5000. The MiCollab can support multiple MiVoice 5000 network elements.
7. Enter the MiCollab Client Outgoing Dialing Prefix.
8. Enter the NuPoint voice mail number to be used by MiCollab Client into the Call Forward Destination Directory Number field.

9. After you save your updates to the Network Element page, you are prompted to associate the element with the templates. If you select Yes, the network element field for the primary phone in all templates will be automatically set to the name of this network element. If you select No, you must create custom templates and associate them with this network element.

10. **Configure** the MiVoice 5000 network element
   - as a SIP GATEWAY within the NuPoint Unified Messenger application, and
   - add the line groups to the SIP GATEWAY (ports).

11. **Configure** the MiVoice 5000 as a SIP Server in the MiCollab Audio, Web and Video application.

### Configure "micollab_api" Password

You must configure a password for the "micollab_api" account. The MiVoice 5000 uses this account to synchronize data with the MiCollab system. You must configure the same password for the account on the MiVoice 5000. If you change the password on either system, you must also change it on the other.

1. Log into the MiCollab server manager.
2. Under **Administration**, click **System users**.
3. Next to the "micollab_api" account, click **Modify** and add any required account info.
4. Click **Reset password** and enter a password for the account.
5. Enter a new password and verify it.
6. Click **Save**.
7. Log into the MiVoice 5000 management interface.
8. Access the **Telephony Service > Subscribers > Terminals and Applications > MiCollab > Connections** page.
9. For the "micollab_api" account, add any required account info.
10. Enter the same password that you entered on the MiCollab system.
CONFIGURE MICOLLAB SYSTEM APPLICATION SETTINGS

Configure the MiCollab system application settings manually through the application administration interfaces in the MiCollab server manager. Refer to the application online help for instructions.

INTEGRATE NUPOINT

OVERVIEW

NuPoint Unified Messaging (NuPoint UM) supports Session Initiation Protocol (SIP) integration with the MiVoice 5000. The maximum number of NuPoint ports is 120. Speech Auto Attendant is NOT supported.

One or more SIP trunks can link NuPoint UM to the MiVoice 5000. NuPoint Unified Messaging receives and sends SIP messages over these trunks. Each SIP trunk consists of one or multiple SIP ports.

Figure 5 illustrates the SIP trunk integration:

Every SIP trunk is assigned a Pilot Number. To call into NuPoint UM, the MiVoice 5000 provides a pilot number for the endpoint users to dial. When NuPoint UM makes a trunk call to the communications platform, it identifies itself using a pilot number. Therefore, when NuPoint UM receives an incoming call, the pilot number is used as the Called ID. When NuPoint UM makes an outgoing call, in the case of MWI, the pilot number is used as the Calling ID.

A SIP session is established through connection to a SIP port in real-time. Each SIP port handles one call connection to NuPoint UM, thus the number of ports grouped in a SIP trunk determines
the number of parallel-connections this trunk can handle at the same time. For example, if four callers on the communications platform simultaneously dial the pilot number 2500 (shown in the figure above), only three of these callers can be connected to NuPoint UM. This principle is applied to every voice mail call connection, whether it is inbound and outbound.

The pilot numbers on NuPoint UM are mapped to applications on the communications platform. For example, pilot number 2500 for NuPoint UM Voice is mapped to extension 2500 for the Voice Mail application programmed on the communications platform. In the configuration where the application is configured as a mailbox, you must associate an extension to an application as well as the pilot number that is used to access the application. NuPoint can be used in MiVoice 5000 multi-site configurations if more than one SIP trunk is configured.

All calls arriving to NuPoint UM on a SIP trunk are accepted at the fixed and predefined SIP port. This port is not configurable. The call is redirected based on the pilot number (which is the called ID in the case of an incoming trunk).

All SIP trunk calls generated by NuPoint UM include a pre-configured SIP port and a pilot number (which is the calling ID in the case of an outgoing trunk).

PREPARATION

Gather the following information in preparation for this voice mail integration:

- customer’s desired voice mail call flows, features, applications, users, and extensions.
- network information including IP addresses, Subnet Mask, Gateway IP address, primary domain name, and Fully Qualified Domain Name (FQDN) information.

CONFIGURE NUPOINT

1. Ensure that the MiVoice 5000 is running and correctly configured.

   The communications platform provides NuPoint UM with the SIP Gateway IP address, port data, and line mapping details that are used to accept calls from the communications platform and redirects them to available NuPoint lines. SIP endpoints are able to call a Pilot Number that route to an available NuPoint UM line and hear a greeting prompt, such as "Welcome to the message center. Please enter a mailbox number or wait."

2. If you haven’t done so already, add the MiVoice 5000 as a SIP GATEWAY network element to the NuPoint UM application. This is necessary to set up network mappings for SIP calls. Refer to Add a Network Element for instructions on how to configure a SIP Gateway.

3. Modify the MiCollab server security settings to allow full telephony communication to be established between the communications platform and the NuPoint application.
   - Log into the MiCollab server console.
   - Under Configuration, click Configure Networks
   - Click Add a new trusted network.
   - In the Network Address field, enter the IP address of the network to designate as "local".
   - In the Subnet mask or network prefix length field, enter the dot-decimal subnet mask or CIDR network prefix to apply to the Network Address. If this field is left blank, the system assigns a network prefix length of /24.
- In the **Router** field, enter the IP address of the router you will use to access the newly-added network.
- Click **Add**.

4. **Configure NuPoint UM Line Groups** and **Dialing Plan** for the SIP Gateway.

Each NuPoint UM line is dedicated to handle one call at a time. Therefore, the number of lines defined in NuPoint UM is the maximum number of simultaneous calls possible. NuPoint UM can have up to 120 lines. A Line Group is a collection of one or more NuPoint UM lines, each mapped to a cluster node. When lines are linked to a SIP Gateway cluster node, incoming SIP calls can be accepted and routed to available NuPoint UM lines for SIP.

5. **Configure system mailboxes** and **greetings**.

6. **Set up and initialize the Administrator mailbox**.

The Administrator mailbox is set up by default (under mailbox number 998) during the NuPoint UM application installation. It can be used to record System Message Prompts and program additional user mailboxes. See [Managing Mailboxes](#) for additional information.

7. **Direct callers to NuPoint UM mailboxes on Call No Answer**.

Call No Answer scenarios must be correctly configured through the SIP Gateway/SIP Endpoint Call Forwarding options. In general, when Call No Answer is detected at the SIP Endpoint, the call should be forwarded to the NuPoint UM Pilot Number (Extension) as "Call Forward Not Available." It is assumed that the Endpoint Extension forwarding the call matches a mailbox number programmed in NuPoint UM. If this is the case, when a forwarded call is received by NuPoint UM, a prompt will indicate that the recipient is not available and ask the caller to leave a message.

8. **Enable paging message notifications**.

Check that message notifications are set up at the mailbox level. Each mailbox may be set up for two notification types concurrently.

9. **Configure Distribution Lists**.

Distribution lists allow a mailbox user to send messages to multiple mailboxes in one step.

10. **Configure the following FCOS**:

- 263 - Store Caller Line Id as a phone or mailbox number
- 264 - Play outside caller user interface (with FCOS bit 280)
- 280 - Enable CLI outside caller interface (with FCOS bit 264).

**PERFORM REQUIRED NUPOINT CONFIGURATION ON MIVOICE 5000**

To allow the MiVoice 5000 to communicate with NuPoint UM and use it as its voice mail system, you must complete the following tasks:

- Add a new trunk group
- Define the trunk group for MiCollab NuPoint Voice Mail
• Provide access to the MiCollab NuPoint Voice Mail
• Configure the calling party in the « From » msg header of outgoing calls towards MiCollab NuPoint.
• Add the NuPoint IP Address in the Whitelist if the SIP security is enabled

Perform the following configuration from the MiVoice 5000 management interface
1. From a web browser on the LAN, log into the MiVoice 5000 Management Interface (MMI):
   https://(IP address of MiVoice 5000 server
   Username: admin (default)
   Password: admin (default)
2. Define trunk group for MiCollab NuPoint.

   ![Figure 6: Trunk Group for MiCollab NuPoint](image1)

3. Specify Private Direction name.

   ![Figure 7: Specify Private Direction Name](image2)

4. Select and display the route (4.2.2 and 4.2.3). The configuration interface only checks that call routing has been correctly defined
5. Enter an access code for direction (3.2.4).
6. Define an internal plan.

![Figure 11: Define Internal Plan](image)

7. Define trunk group characteristics.

![Figure 12: Trunk Group Characteristics](image)
Figure 13: Configure IP BOTHWAY

Figure 14: Configure IP BOTHWAY - Continued
8. Define voice mail

![Figure 15: Voice Mail Definition](image)

9. Set Broadcast priority

![Figure 16: Broadcast Priority](image)
10. Perform the SIP trunk configuration required to insert the calling party in the «From» msg header of outgoing call. The following configuration example uses data from the previous steps for MiCollab NuPoint.

![Figure 17: AID Handling - Composition of Plans](image1)

![Figure 18: AID Handling - Selection of Calling Party](image2)
MiVoice 5000 Integration

Figure 19: AID Handling - Outgoing for Internal

Figure 20: AID Handling - Display of Outgoing Handling

Figure 21: SIP Trunk Group - Voice Mail Direct Call
11. Add the MiCollab/NuPoint IP address in the Whitelist if the security is enabled.

TEST NUPOINT VOICE MAIL OPERATION

To test basic communication between the MiVoice 5000 and the NuPoint UM:

1. From any extension configured on the communications platform, call the NuPoint UM voice mail extension.
2. Verify you hear the voice mail system greeting: “Welcome to the message center.” This step establishes that you connected successfully to the NuPoint UM voice mail system.
3. Set up the test Mailbox Name and Greeting.

From the phone for which you created a test mailbox on NuPoint UM, dial the NuPoint UM voice mail extension.

1. Dial the mailbox passcode to access the voice mail system options for that mailbox.
2. Follow the voice mail prompts to set up the mailbox and create a greeting.
3. Dial Extension “xxxxx” and Leave a Voice Mail Message
• From any phone on the communications platform, dial the NuPoint UM voice mail extension.
• When prompted for an extension at the system greeting, dial the test mailbox created earlier.
• Leave a voice mail message and then follow the prompts to deliver the message.

4. Verify MWI and Retrieve Voice Message from Extension “xxxxx”
5. Verify that your voice mail message was recorded by accessing the voice mail system, providing the passcode, and then listening to the message.

INTEGRATE AUDIO, WEB AND VIDEO

To integrate the AWV application with the MiVoice 5000, you must configure the MiVoice 5000 system settings first, then configure the SIP server settings in the AWV application.

INSTALL MICOLLAB AWV CONFERENCING CLIENT FOR ALL USERS

If you are running in a networked environment, you can (as the administrator of the computers) install MiCollab Audio, Web and Video Conferencing Client for all users. This is usually done in a Terminal server or Citrix environment.

If you wish to do this, download the executable file from http://<MiCollab IP address>/wd/MCAClient-admin.exe and follow the instructions.

Note: You must have Administrator privileges to install MiCollab Audio, Web and Video Conferencing Client for all users. The software must be placed in a location that all users can access. If a user on the system already has the MiCollab Audio, Web and Video Conferencing Client installed on their machine locally, that version takes precedence over the administrator-installed version.

CONFIGURE MIVOICE 5000 TO COMMUNICATE WITH AWV

1. Define the Hunt Group for AWV with a cyclical hunt group head (1.2.1 and 1.3.1.2).
2. Add subscriptions used by MiCollab to Hunt Group (1.3.1.2, 1.4.3, 1.3.1.2, and 1.2.3)
   - Number of subscriptions to be included according to max participant number inside conference
   - Number max of subscriptions defined in Hunt Group is limited to 100
   - SIP MD5 password defined on MiCollab must be the same for all subscriptions belonging to Hunt Group
"Call waiting" feature to be defined as REFUSED for hunt group

Figure 27: Hunt Group Feature Class
Up to 100 extensions (subscribers) can be defined inside a hunt group. The extensions must be created before if not already existing.

Figure 28: Subscriptions to be included in Hunt Group
Figure 29: MD5 Password Must Match

3. Configure the supported codec and payload for the SIP phones. The duration of packets must be 20 ms for all codecs.

Note: for each extension that belong to the hunt group, the MD5 password must match the MD5 password that is defined on the micollab server (if defined)
4. Configure the DTMF Method and the Header Value.

Figure 30: Configure Codec

Figure 31: Configure the DTMF Method and the Header Value
CONFIGURE SIP SERVER SETTINGS IN MICOLLAB AWV

Configure the SIP Server settings in MiCollab Audio, Web and Video Conferencing using the account information from the MiVoice 5000 configuration:

1. Log into the MiCollab server manager interface.
3. From the MiCollab Audio, Web and Video Conferencing main page, click System Options on the navigation pane.
4. In System Options > Platform, select MiVoice 5000 as the system that is connected to MiCollab Audio, Web and Video Conferencing. Set DTMF Payload Type to 101.
5. Click Save
6. Click Ok at the prompt to restart the server.
7. Click Configure SIP Server on the navigation pane. The SIP Server Configuration page appears.
8. Enter the following information:
   - Extension First: Type the extension number of the first IP device in the hunt group used by the MiCollab Audio, Web and Video Conferencing server to register itself with the PBX.
   - Extension Last: Type the extension number of the last IP device in the hunt group used by the MiCollab Audio, Web and Video Conferencing server to register itself with the PBX.
   - Extension PIN: This PIN is used for SIP MD5 authentication. If authentication is activated on the MiVoice 5000, this field is mandatory and is equal to the SIP password for subscriber "Extension First" to "Extension Last".
   - SIP Domain: This can be the domain name, fully qualified domain name (FQDN), or the IP address of the PBX system used to register the MiCollab Audio, Web and Video Conferencing
   - SIP ports: If you do not know the domain name or FQDN, type the PBX system IP address.
   - IP Address: Type the IP address of the PBX system. Alternatively, type the FQDN. Note that when typing the FQDN, only the first IP Address value returned by the DNS lookup will be used.
9. Click Save.

INTEGRATE MIVOICE BORDER GATEWAY

MiVoice Border Gateway provides a secure communications path for remote MiCollab Client users to the MiCollab Client Service.

The MBG provides support for MiVoice 5000 SIP devices, including MiCollab Client softphones through the implementation of proprietary SIP headers.

**Note:** Secure Recording Connector service is not supported.
MiCollab Platform Integration Guide

CONFIGURE THE ICPS IN THE STANDALONE MBG

When you create the network elements in the MiCollab USP network element tab, the network elements are automatically added to the embedded MiVoice Border Gateway (MBG) application. However, if your deployment includes a standalone MBG system, you must manually configure the network elements as ICPs in the standalone MBG server manager interface.

![Note: The standalone MBG must be clustered with the embedded MBG application on the MiCollab server.]

To add a communications platform as an ICP:

1. Log into the standalone MBG server manager interface.
2. Under Applications, click MiVoice Border Gateway.
3. From Service Configuration, click ICP
4. From ICP Information, click +
5. Complete the ICP information. Refer to the online help for details. Select "MiVoice 5000" as the ICP type.
6. Click Save. You can now select the ICP type (MiVoice 5000) from any MBG device management page:

![Figure 32: Configure MiVoice 5000 as ICP on Standalone MBG]

CONFIGURE SIP SETTINGS

1. Set the MBG SIP Capabilities for the MiVoice 5000 ICP to UDP, TCP.

![Figure 33: Configure MBG SIP Capabilities]

2. Configure SIP settings.
3. Configure the "Network profile" according to the network configuration

4. Configure the "Application Integration".

5. Configure the Web Proxy (for the Standalone MBG clustered only) to allow the connection between applications on the LAN and clients (for example, AWV, MiCollab Client) on the Internet.
INTEGRATE MICOLLAB CLIENT

MICOLLAB CLIENT CONFIGURATION

Refer to the following sections in the MiCollab Client Administrator Guide for configuration information:

- Configure the PBX
- Configure Integrated Applications
- Access the MiCollab Client Administration Page
- Provision MiCollab Client
- Install Desktop Client
- Install Mobile Client

Note that you must enable the following Nupoint UM FCOS options to allow the MiCollab Client Desktop client to control voice mail calls:

- FCOS 289 Enable UM-SMTP
- FCOS 290 Enable UM-Web
- FCOS 295 Enable UM Pro

MICOLLAB CLIENT (NEXT GEN) MOBILE CLIENT DEPLOYMENT

MiVoice 5000 platforms support MiCollab Next Generation mobile clients. Only the Next Generation variants of the mobile clients are supported. After you configure a user with a mobile client in the MiCollab Client application, a deployment e-mail is sent to the user with simplified configuration instructions on how to set it up.

Configure CSTA Link

Configure the CSTA link between MiVoice 5000 and MiCollab Client Service. Define the configuration on BluStar server with the IP address of MiVoice 5000 and the CSTA port.
Configure MiCollab Client Deployment

1. Log into the MiCollab server manager interface.
2. Set up the connection to MBG for the internal MBG:
   - Under Applications click MiCollab Client Deployment.
   - Access the Configuration > Connections to MBGs panel.
   - Create a connection to the local MBG using the LAN (Server Only) or WAN (Server/Gateway) IP address of the MiVoice Business Gateway. See the MiCollab Client Deployment help for details.
   - Click the Save and send AuthRequest button.
3. Under Administration, click Web Services.

4. Click Approve.
5. The system generates a verifier code for the MiCollab Client deployment. Copy the "verifier code" that is generated by the system. You will need to enter it in a later step.

**Figure 39: Verifier Code**

6. Under **Applications**, click **MiCollab Client Deployment**.
7. Access the **Configuration > Connections to MBG** panel.
8. Modify the connection and enter the verifier code that you copied above.
9. Click **Save and send AuthRequest**.

**Enable Remote Access to the Deployment Unit Interface**

10. Log into the MBG server manager.
11. Under **Administration** click **Remote proxy services**.
12. Click the **LAN server proxy list** tab.
13. Click **Add new LAN server proxy** and add the MiCollab server.
14. Click **Modify** and configure the proxy settings.
15. Click **Save**.
Figure 40: Remote Proxy Services

Figure 41: Enable Access to Deploy Unit Interface
Create and Assign Deployment Profiles

17. Log into MiCollab server manager.


19. Click Deployment profiles. You can use the default deployment profile, create a new profile, or modify the existing ones. Deployment is supported for MiCollab Client users who are assigned with profiles.

20. Configure the General settings and Softphone settings. Refer to the online help for field descriptions.

- In the General settings configure the connection parameters:
  - **Config download host**: Enter the FQDN of the MiCollab Server
  - **MBG SIP host**: Enter the IP address of the MBG IP if client is connected in Teleworker mode
  - **PBX SIP host**: The IP address of the MiVoice 5000 if Teleworker is deactivated

- In the Softphone settings, configure if the client will register
  - to the MBG in Teleworker mode, or
  - to the MiVoice 5000, if Teleworker is deactivated

![Figure 42: General Settings](image)
21. Click the **Users** tab and assign the deployment profiles (templates/roles) to the MiCollab Client users.

**Purchase and Import SSL Certificates to Servers**

22. Log into the MiCollab server manager.

23. Under **Security**, click **Web Server Certificates**.

24. To enable remote client station to log in and to enable MiCollab Mobile Client users to establish connections, you must install an SSL Certificate on the MiCollab and MBG servers. Refer to the online help associated with the Web Server Certificates page for instructions.

**Synchronize from MiVoice 5000**

25. Launch the synchronization from the MiVoice 5000. The MiCollab Client Deployment application automatically deploys the clients for users who are assigned with a role that corresponds to a template with a deployment profile.

The system pushes the user configuration file to the redirect server which sends an email to the user clients. The users click a link in the email to download and install the configuration file on their mobile client.
CONFURE INTEGRATED DIRECTORY SERVICES (OPTIONAL)

Optionally, configure Integrated Directory Services to integrate the non-corporate contacts from a directory server or a MiVoice 5000 with the MiCollab Client Corporate Directory database. Note that only non-corporate entries (contacts) are supported via IDS. User entries are not synchronized and are not copied to the MiCollab USP database.

During an IDS synchronization event, the system imports the non-corporate entries. When users start up their MiCollab clients, the system updates the user's Contacts list. Users can then place calls to the non-corporate contacts using "Click-to-Call" functionality from their phone clients.

CONFURE THE CONNECTION AND SYNC DATABASES

1. Configure the connection to the MiCollab server. In the MiVoice 5000 Management Portal (MMP) or the MiVoice 5000 Manager, access the Telephony Service > Subscribers > Terminals and Applications > MiCollab > Connections menu, and enter the following parameters:
   - Label: Enter the system name of the MiCollab server
   - Main IP Address: Enter the IP Address of the MiCollab server
   - Login: Enter the MiCollab Server Manager "micollab_api" account username
   - Password: Enter the MiCollab Server Manager "micollab_api" account password
   - Daily Re-alignment: Set the time (HH:MM) for the daily synchronization to occur with the MiCollab server (default 02:59)
   - Check the MiCollab server synchronization box

2. Perform a manual synchronization with the MiCollab server to obtain the default and custom roles from MiCollab.
   - In the MiVoice 5000 Management Portal (MMP) or the MiVoice 5000 Manager, access the Telephony Service > Subscribers > Terminals and Applications > MiCollab > Connections menu.
   - If Windows login authentication is required for IDS integration, check the Windows Login for Authentication box.
   - Click Immediate realignment to launch an immediate synchronization. The roles are obtained from MiCollab.

3. Check that the roles are present on the communication platform:
   - In the MiVoice 5000 Management Portal (MMP) or MiVoice 5000 Manager, access the Telephony Service > Subscribers > Terminals and Applications > MiCollab >MiCollab Role menu.
   - Ensure that the desired roles are listed under the Label heading.

4. Assign the roles to users
   - Assign Entry, Standard, or Premium default roles or custom roles to users who require MiCollab applications services. Refer to the MiCollab Engineering Guidelines for the maximum number of Entry, Standard, or Premium users that can be configured on your MiCollab platform.
   - Assign the Basic role to users who require the MiCollab Client desktop and web client with Chat only.
- Ensure that subscribers are configured with an e-mail addresses.

5. Perform a manual synchronization from the MiVoice 5000 with MiCollab. The synchronization populates the MiCollab database with the MiVoice 5000 users and applies the application services that are defined in the associated roles and templates.
PERFORM USER AND SERVICES PROVISIONING

User and services provisioning is performed from the communications platform administration interfaces -- not from the MiCollab Users and Services application.

- To add or modify MiCollab services, assign a role to the user from the MiVoice 5000 management interface. For example, to add a NP-UM mailbox to a user, the administrator assigns a Role that contains a mailbox to the user. To delete a mailbox, the administrator assigns the user with a Role that does not include a mailbox.
- Most of the fields and buttons within the MiCollab Users and Services application are disabled since the administrator configures users from the communications platform administration interfaces.
- Assign a role to a new user to apply the associated MiCollab template and configure the user with the application services that are defined in the template. The MiVoice 5000 periodically performs an automatic synchronization to update the MiCollab database. After the synchronization, the application services are enabled for the user.
- If you remove a role from a user on the MiVoice 5000, the user is deleted from MiCollab after the next synchronization event.
- If you change a user’s role, the user’s application services are updated with the new service mix that is defined in the role’s template. For MiVoice 5000 integrations this occurs after the next synchronization.

CONFIGURE MIVOICE 5000 WITH MBG IP ADDRESS

If the SIP security is enabled on the MV5000, you must add the MBG IP address in the Whitelist.

MIGRATION PROCEDURE FOR AWV

MiCollab Release 6.0 supported the integration of the Audio, Web, and Video application with MiVoice 5000 platforms. The following paragraphs describe how to migrate an existing MiCollab Release 6.0 AWV site to MiCollab Release 7.0 support.

You can migrate systems where the AWV accounts were only created within the AWV application to MiCollab 7.0. These accounts do not lose their existing conferences during the migration.
1. Backup the database, install MiCollab 7.0, and then restore their database.

2. Integrate the MiCollab system with the MiVoice 5000 call manager. See “Integration Procedure” on page 37 for instructions.

3. After you integrate the MiCollab with the MiVoice 5000 call manager, use the call manager to assign roles to the users.

4. After the users are created on MiCollab, providing that the e-mail address is provided and it matches the existing AWV account e-mail address, the account is linked to the newly created user.

Systems where the AWV user accounts were created via USP or IDS and already have a MiCollab user assigned are not automatically paired. You must delete these users and recreate them after you install MiCollab Release 7.0 and integrate it with the MiVoice 5000. In this case, the users lose their existing conferences.
Chapter 4

MX-ONE INTEGRATION
You can integrate a MiCollab system with a MiVoice MX-ONE platform to provide MiCollab applications, such as NuPoint voice mail, MiCollab Client, Teleworker, and Audio, Web, and Video to users who are hosted on the MiVoice MX-ONE platform.

- For MiCollab integrations with the MX-ONE system, the administrator performs user provisioning from the MX-ONE Provisioning Manager interface.

- Roles and templates are used to define the MiCollab services for the users.

The administrator creates roles and templates in the User and Services application on the MiCollab system. The MX-ONE reads the roles from the MiCollab system whenever it needs to display them.

The administrator then assigns roles to the primary directory number of the user on the MiVoice MX-ONE. The roles on the communications platform correspond to roles on the MiCollab system. The UCC roles map to MiCollab USP templates that define the required application services for the user type. When an administrator adds, edits or deletes a user from the platform management interface, the user’s services are updated on MiCollab based on the assigned template on the next manual immediate synchronization or during the next scheduled database synchronization.

Non-Corporate contacts that appear in the MiCollab Client corporate directory can be obtained via MiCollab IDS from an Active Directory server.

A typical integration consists of the components shown in Figure 45:

- **Communications Platform**: The MiVoice MX-ONE can be integrated with a single MiCollab system.

- **MiCollab Server**: Provides application services (NuPoint voice mail, AWV, MBG, and MiCollab Client) to MiVoice MX-ONE users and supports MiCollab Client softphones for external users over the Internet.
  - NuPoint Unified Messaging integrates with the MiVoice MX-ONE via SIP trunking.
  - Audio, Web and Video integrates with the MiVoice MX-ONE using SIP extensions.
  - MiCollab Client softphones are integrated with the MiVoice MX-ONE via SIP extensions. Computer Telephony Integration (CTI) is achieved via a BluStar server.
  - MiVoice Border Gateway solution provides a secure communications path for remote MiCollab Client SIP softphones to the MiCollab Client Service. The MBG provides support for MiCollab Client SIP softphones through the implementation of proprietary SIP headers, SIP feature enhancements, line enhancements, and security enhancements, along with administrator interface changes for its management.
  - A standalone vMBG server can be installed in the Demilitarized Zone (DMZ) of a customer’s existing firewall. In this case, the MiCollab MBG application must be clustered with the standalone vMBG.

- **BluStar Server**: Provides Computer Telephony Integration (CTI) between the MiVoice MX-ONE and MiCollab Client to support telephony features such as "Click-to-Call" and presence. The MiVoice MX-ONE communicates with the BluStar Server using CSTA III protocol. Data is transferred between the BluStar Server and MiCollab Client application via an MBUS connection.
• **Firewall**: Protects corporate LAN from Internet.

• **Redirect Server**: Provides the configuration data to MiCollab mobile clients. This is a Mitel server located on the Internet. It sends MiCollab mobile client users a configuration e-mail that allows the users to download and install the required configuration files from the redirect server.

• **SIP Trunking**: The NuPoint Voicemail application is supported via SIP trunking.

• **SIP Extensions**: The Audio, Web and Conferencing application is supported via SIP extensions on the MiVoice MX-ONE.

• **Administration Interface**: User provisioning is performed from the Provisioning Manager (PM), the communication platform management tool.

• **Directory Server**: An optional Active Directory server can be used to support the synchronization of MiCollab Client contacts to the MiCollab Client Corporate Directory and to support Active Directory Authentication of MiCollab users.

![Figure 45: MiVoice MX-ONE Integration](image)

**REQUIREMENTS**

• Integration with MiCollab 7.0 or higher is supported with MiVoice MX-ONE 6.0 SP2 or higher.

• MiCollab Integrated Directory Services integration is limited to Active Directory 2008, 2008 R2, and 2012.

• MiCollab Client must be configured in Integrated Mode.

• A BluStar server 7.0.0.11 or later is required to support the MiCollab Client application.
CONDITIONS AND LIMITATIONS

- A single MiCollab server can provide applications services to the users on one MiVoice MX-ONE system in the same network.

- The integration of multiple MiCollab systems to MiVoice MX-ONE platforms is not supported.

- Connection of a MiCollab server to a mix of different network elements (for example, MiVoice 5000 and MiVoice MX-ONE) is not supported. All network element types must be of the same type on a single MiCollab. It is not possible to switch the communications server that is connected to the MiCollab system. The MiCollab system must be reinstalled and reconfigured to support a different type of communication server.

- User and services provisioning is performed from the MiVoice MX-ONE management interfaces. The Add, and Quick Add functions are not supported from the Users and Services Application if MiCollab is integrated with the MiVoice MX-ONE.

- The MiVoice MX-ONE supports a maximum of four terminals/devices per user. Although MX-ONE supports users with multiple devices, only the users’ primary directory numbers appear in MiCollab. MiCollab services are applied to the primary directory number of the user.

- NuPoint Unified Messaging Speech Auto Attendant is not a supported application for MX-ONE integrations.

- MiCollab Integrated Directory Services is not supported for managing user entries. Only non-corporate entries (contacts) are synchronized from the directory services database to the MiCollab Client corporate directory.

- Functions and fields in the USP application that are not applicable to MiVoice MX-ONE are disabled (or hidden). They are disabled after a MiVoice MX-ONE type network element is assigned in the USP application. The administrator adds application services by assigning a role with the required server level. The administrator removes the role to remove the services. To remove only the NuPoint voice mailbox from a user, the administrator must create a role without a mailbox and assign it to the user.

- The MiCollab system supports a maximum of 5000 users and up to 20000 contacts in the MiCollab Client corporate directory for a multi-application deployment. The MiVoice MX-ONE supports up to 500,000 users.

- If you are integrating an existing MiVoice MX-ONE with a new MiCollab system, you can export a CSV file of user entries from the MX-ONE Provisioning Manager interface. You can then import the user entries into the MiCollab system using the Bulk User Provisioning (BUP) tool in USP. Note that an import CSV file for the BUP tool can contain a maximum of 5000 users.
• LDAP authentication is supported for users who have been created from the MiVoice MX-ONE system with authentication enabled. An "authentication only" IDS connection is required to allow MiCollab to validate the end-user password against the Active Directory password. Users can then log into their end-user interfaces by entering their Active Directory password.

• The Mitel Integration Configuration Wizard configures MiCollab with MiVoice Business platforms only. It is not supported for integrations with MiVoice MX-ONE.

• The MiCollab End User Portal is supported for MiVoice MX-ONE users. It provides them with access to their user portal, voice mail, and AWV settings. However, a user’s MiVoice MX-ONE phones are not displayed in the portal interface.

• The MiVoice MX-ONE can operate in a multi-company management mode where the PBX resources are shared between different companies. Currently, MiCollab does not support multi-company management mode.

• You cannot perform phone number updates and network element updates from the MiCollab USP application. A delete operation followed by an add operation is required to update a network element on MiCollab.

• ORIA does not support provisioning of MiVoice MX-ONE systems.

• MiCollab does not provide the ability to configure the phone types for each MiVoice MX-ONE subscriber. Note that the MiCollab Client and MBG applications function as SIP phone integrations. MBG creates a SIP device account and UCA allows a soft phone because the user has a SIP account.

• User pictures are not imported into MiCollab Client.

• The integration of MiVoice MX-ONE systems to the MiCollab Server Appliance is not supported. The MiCollab Server Appliance is a small-business capacity MiCollab system that is shipped from Mitel Network to the customer pre-installed on an industry standard server.

• The Provisioning Manager supports configuration of only one MiCollab System.

• Users who are synchronized from the Provisioning Manager using Active Directory are sent to the Managed Detained Queue in MiCollab USP. If you perform multiple manual synchronizations from the Provisioning Manager, duplicate records will be created in the Managed Detained Queue each time a synchronization is performed.

• If you use AD to synchronize the MiVoice MX-ONE users with MiCollab, all AD users will be created in the MiCollab managed detained queue. So, there is no option to select which user shall be updated in the managed detained queue. MiCollab supports 5000 users in the current version, so it is not recommended to sync Active Directory with more than this supported limit.

• A MiCollab Export task exports all data in to a single file. You cannot select specific users and export them to multiple files based on user count per file.

• If you create Extensions during an AD sync from the Provisioning Manager, any users created with such Extensions cannot be promoted to Standard or Premium roles, because the current Extension template doesn’t support an Authorization code when initiating extensions.
LICENSING

MIVOICE MX-ONE LICENSING

License the MiVoice MX-ONE system from the Software License Server (SLS). Only MiVoice MX-ONE certified technicians should apply licenses to the MiVoice MX-ONE.

MICOLLAB LICENSING

You license the MiCollab system through the Application Management Center (AMC). The AMC is not used to assign licenses that are required on the MiVoice MX-ONE.

1. Log into AMC.
2. Create a customer account.
3. Register (purchase) products and licenses and assign them to the customer account.
4. Create Application Record IDs for the MiCollab and optional MiVoice Business Gateway.
5. Assign base software licenses to the system ARIDs.
6. Create a ULM using the MiCollab ARID.
7. If a standalone MBG system is required, add its server ARID.
8. Assign UCC user licenses to the ULM. The UCC user licenses will provide the communication platform users with entitlement to the MiCollab applications.
9. Purchase and activate any additional “a-la-carte” feature, port, or language licenses for the MiCollab system applications.

Note: Refer to the AMC online help for detailed licensing steps.

INTEGRATION PROCEDURE

OVERVIEW

The following procedures describes the steps required to integrate a new MiCollab system with a new or existing MiVoice MX-ONE platform.

- Install platforms
- Install BluStar Server (required for MiCollab Client support)
- Configure MiCollab into MiCollab Client Integrated Mode
- Create network elements
- Configure a password for the “micollab_api” account
- Configure MiCollab system application settings
- Integrate the applications with the MiVoice MX-ONE:
- Integrate NuPoint Unified Messaging
- Integrate Audio, Web and Video
- Integrate MiVoice Border Gateway
- Integrate MiCollab Client
  • Configure Integrated Directory Services (optional)
  • Configure the connection and sync databases
  • Perform user adds, edits, and deletes.

INSTALL PLATFORM

1. Install, license, configure, and provision the MiVoice MX-ONE.
   - Refer to the MiVoice MX-ONE Installation and Maintenance Guide.
2. Install the MiCollab platform. Do not run the Mitel Initial Configuration Wizard. The MiCW is not supported for MiCollab systems that will be integrated with the MiVoice MX-ONE.
3. Log into MiCollab server manager. Under ServiceLink, click Install Applications and then click the Install Applications tab. Set the ICP type to "call manager".
4. Collect the following information for the integration:
   - MiCollab IP Address
   - MiVoice MX-ONE IP Address.

INSTALL THE BLUSTAR SERVER

The BluStar server supports the call control messaging between MiCollab platform and the MX-ONE platforms to support MiCollab Client features such as "Click-to-Call".

Note: To log into the Blustar Server administration interface for the first time, use the following default username and password:

Username: admin
Password: Mitel123

Refer to BluStar Installation and Configuration Guide. The BluStar server is a windows-based sever that integrates MiCollab with a MiVoice MX-ONE using CSTA III protocols. It can be installed on Microsoft Windows Server (64-bit) - English (US) or in a virtual environment with the required resources. (Refer to the Mitel Virtual Deployment Solution Guide for resource requirements). Note that Hyper-V virtual environments are not supported.

CONFIGURE MICOLLAB CLIENT INTEGRATION MODE

Configure MiCollab in MiCollab Client Integration Mode. Refer to the MiCollab Installation and Maintenance Guide for instructions.

CREATE NETWORK ELEMENTS

Create the network elements for the communication platform(s):
1. Log into the MiCollab server manager.

2. Under Applications, click Users and Services.

3. Click the Network Element tab.

4. Click Add.

5. In the Type field select the system type: "MiVoice MX-ONE".

6. Enter the IP address of the MiVoice MX-ONE Service Node Manager. The MiCollab can support multiple MiVoice MX-ONE Service Node Managers.

7. Enter the NuPoint voice mail number to be used by MiCollab Client into the Call Forward Destination Directory Number field.

8. After you save your updates to the Network Element page, you are prompted to associate the element with the templates. If you select Yes, the network element field for the primary phone in all templates will be automatically set to the name of this network element. If you select No, you must create custom templates and associate them with this network element.

   Note: During MiCollab installation, the default UCC roles and associated template definitions were downloaded from the AMC. On initial download, the USP forms and templates support MiVoice Business settings. After you assign a MiVoice MX-ONE network element in the MiCollab Network Element page, the USP user interface and templates are updated to reflect the settings for the selected platform.

   - If required create custom roles and templates in the MiCollab USP application from the UCC default templates.

9. **Configure** the MiVoice MX-ONE network element
   - as a SIP GATEWAY within the NuPoint Unified Messenger application, and
   - add the line groups to the SIP GATEWAY (ports).

10. **Configure** the MiVoice MX-ONE as a SIP Server in the MiCollab Audio, Web and Video application.

**Configure "micollab_api" Password**

You must configure a password for the "micollab_api" account. The MiVoice MX-ONE uses this account to synchronize data with the MiCollab system. You must configure the same password for the account on the MiVoice MX-ONE. If you change the password on either system, you must also change it on the other.

1. Log into the MiCollab server manager.

2. Under Administration, click System users.

3. Next to the "micollab_api" account, click Modify and add any required account info.

4. Click Reset password and enter a password for the account.

5. Enter a new password and verify it.

6. Click Save.

7. Log into the MiVoice MX-ONE Provisioning Manager management interface.
8. Go to **System tab > Subsystem tab > Add** and enter the following parameters:
   - **Subsystem type**: Select MiCollab Server in the drop down list
   - **Subsystem Name**: Enter the system name of the MiCollab Server
   - **Version**: Select the MiCollab version (Current only 7.0)
   - **IP Address**: Enter the IP Address of the MiCollab Server
   - **User ID in Subsystem**: Enter the MiCollab Server “micollab_api” account user name
   - **Password in Subsystem**: Enter the MiCollab Server “micollab_api” account password
   - **Confirm Password in Subsystem**: Confirm the MiCollab Server “micollab_api” account password
   - **Location**: Select the location

![Figure 46: Subsystem - Add](image)

9. Click **Apply**.

**CONFIGURE MICOLLAB SYSTEM APPLICATION SETTINGS**

Configure the MiCollab system application settings manually through the application administration interfaces in the MiCollab server manager. Refer to the application online help for instructions.
INTEGRATE NUPOINT

OVERVIEW

NuPoint Unified Messaging (NuPoint UM) supports Session Initiation Protocol (SIP) integration with the MiVoice MX-ONE. The maximum number of NuPoint ports is 120. Speech Auto Attendant is not supported.

One or more SIP trunks can link NuPoint UM to the MiVoice MX-ONE. NuPoint Unified Messaging receives and sends SIP messages over these trunks. Each SIP trunk consists of one or multiple SIP ports.

Figure 47 illustrates the SIP trunk integration:

![Figure 47: NuPoint SIP Trunk Integration](image)

Every SIP trunk is assigned a Pilot Number. To call into NuPoint UM, the MiVoice MX-ONE provides a pilot number for the endpoint users to dial. When NuPoint UM makes a trunk call to the communications platform, it identifies itself using a pilot number. Therefore, when NuPoint UM receives an incoming call, the pilot number is used as the Called ID. When NuPoint UM makes an outgoing call, in the case of MWI, the pilot number is used as the Calling ID.

A SIP session is established through connection to a SIP port in real-time. Each SIP port handles one call connection to NuPoint UM, thus the number of ports grouped in a SIP trunk determines the number of parallel-connections this trunk can handle at the same time. For example, if four callers on the communications platform simultaneously dial the pilot number 2500 (shown in the figure above), only three of these callers can be connected to NuPoint UM. This principle is applied to every voice mail call connection, whether it is inbound and outbound.
The pilot numbers on NuPoint UM are mapped to applications on the communications platform. For example, pilot number 2500 for NuPoint UM Voice is mapped to extension 2500 for the Voice Mail application programmed on the communications platform. In the configuration where the application is configured as a mailbox, you must associate an extension to an application as well as the pilot number that is used to access the application.

All calls arriving to NuPoint UM on a SIP trunk are accepted at the fixed and predefined SIP port. This port is not configurable. The call is redirected based on the pilot number (which is the called ID in the case of an incoming trunk).

All SIP trunk calls generated by NuPoint UM include a pre-configured SIP port and a pilot number (which is the calling ID in the case of an outgoing trunk).

**PREPARATION**

Gather the following information in preparation for this voice mail integration:

- customer’s desired voice mail call flows, features, applications, users, and extensions.
- network information including IP addresses, Subnet Mask, Gateway IP address, primary domain name, and Fully Qualified Domain Name (FQDN) information.

**CONFIGURE NUPOINT**

1. Ensure that the MiVoice MX-ONE is running and correctly configured.

   The communications platform provides NuPoint UM with the SIP Gateway IP address, port data, and line mapping details that are used to accept calls from the communications platform and redirects them to available NuPoint lines. SIP endpoints are able to call a Pilot Number that route to an available NuPoint UM line and hear a greeting prompt, such as "Welcome to the message center. Please enter a mailbox number or wait."

2. If you haven’t done so already, add the MiVoice MX-ONE as a SIP GATEWAY network element to the NuPoint UM application. This is necessary to set up network mappings for SIP calls. Refer to Add a Network Element for instructions on how to configure a SIP Gateway.

3. Modify the MiCollab server security settings to allow full telephony communication to be established between the communications platform and the NuPoint application.
   - Log into the MiCollab server console.
   - Under Configuration, click Configure Networks
   - Click Add a new trusted network.
   - In the Network Address field, enter the IP address of the network to designate as "local".
   - In the Subnet mask or network prefix length field, enter the dot-decimal subnet mask or CIDR network prefix to apply to the Network Address. If this field is left blank, the system assigns a network prefix length of /24.
   - In the Router field, enter the IP address of the router you will use to access the newly-added network.
   - Click Add.

4. Configure NuPoint UM Line Groups for the SIP Gateway.
Each NuPoint UM line is dedicated to handle one call at a time. Therefore, the number of lines defined in NuPoint UM is the maximum number of simultaneous calls possible. NuPoint UM can have up to 120 lines. A Line Group is a collection of one or more NuPoint UM lines, each mapped to a cluster node. When lines are linked to a SIP Gateway cluster node, incoming SIP calls can be accepted and routed to available NuPoint UM lines for SIP.

5. Configure system mailboxes and greetings.

6. Set up and initialize the Administrator mailbox.

   The Administrator mailbox is set up by default (under mailbox number 998) during the NuPoint UM application installation. It can be used to record System Message Prompts and program additional user mailboxes. See Managing Mailboxes for additional information.

7. Direct callers to NuPoint UM mailboxes on Call No Answer.

   Call No Answer scenarios must be correctly configured through the SIP Gateway/SIP Endpoint Call Forwarding options. In general, when Call No Answer is detected at the SIP Endpoint, the call should be forwarded to the NuPoint UM Pilot Number (Extension) as “Call Forward Not Available.” It is assumed that the Endpoint Extension forwarding the call matches a mailbox number programmed in NuPoint UM. If this is the case, when a forwarded call is received by NuPoint UM, a prompt will indicate that the recipient is not available and ask the caller to leave a message.

8. Enable paging message notifications.

   Check that message notifications are set up at the mailbox level. Each mailbox may be set up for two notification types concurrently.


   Distribution lists allow a mailbox user to send messages to multiple mailboxes in one step.

10. Configure the following FCOS:

    • 263 - Store Caller Line Id as a phone or mailbox number
    • 264 - Play outside caller user interface (with FCOS bit 280)
    • 280 - Enable CLI outside caller interface (with FCOS bit 264).

CONFIGURE MIVOICE MX-ONE TO SUPPORT NUPOINT

This section details the configuration necessary on the MiVoice MX-ONE so it can communicate with and use NuPoint UM as the voice mail system.

1. Log into the Service Node Manager (MX-ONE management system).

2. Initiate the Voice Mail numbers.

3. Go to Number Analysis and then Number Plan, Number Series, and then click Add.
4. Select the **Number Series Type**, and enable the **External numbers** option.

5. Enter the Voice Mail numbers in the **External Destination** field.
6. Click **Apply**. The Service Node Manager shows the result of the operation.

7. Set the number length to the external number.

8. Click **Number Analysis**, **Number Plan**, and then select **External Number Length**.

9. Click **Add**.
10. Enter the External Number, Minimum Length and Maximum Length.

11. Click Apply. The Service Node Manager shows the operation result:
12. Configure a SIP trunk:
   - Click Telephony, click External Lines, and then select Route.
   - Click Add.

   Set the Type of Signaling to "IP Public, SIP"
   - Select “NuPoint” in the Profile Name List.
13. Enter the following NuPoint information:

- **Route Name**: Enter a meaningful name for the route
- **Route Number**: Select the next route number in the drop down list
- **Number of Trunks**: Enter the number of trunks dimensioned to the customer system
- **Remote Proxy IP**: Enter the MiCollab server FQDN or IP address
- **Remote Proxy Port**: 5058
- **Server Numbers**: Service Node number where the SIP trunk is configured.
- **Voice Number**: Enter the number that was used in Step 2.
14. Click **Apply**. The Service Node Manager shows the operation result.
### Add operation successful for:

- **Route Name**: Voice_Mail

<table>
<thead>
<tr>
<th><strong>General</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Name</strong></td>
<td>NuPoint</td>
</tr>
<tr>
<td><strong>Route Name</strong></td>
<td>Voice_Mail</td>
</tr>
<tr>
<td><strong>Route Number</strong></td>
<td>2</td>
</tr>
</tbody>
</table>

### SIP Route Specific Data

<table>
<thead>
<tr>
<th><strong>Outgoing Traffic</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remote Port</strong></td>
<td>5060</td>
</tr>
<tr>
<td><strong>Unknown Public Number</strong></td>
<td>sip:192.168.222.153</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Incoming Traffic</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Accepted Calls</strong></td>
<td>Remote IP</td>
</tr>
<tr>
<td><strong>Addresses or Numbers to Match Incoming Call</strong></td>
<td>192.168.222.153</td>
</tr>
<tr>
<td><strong>Priority for Incoming Calls</strong></td>
<td>255</td>
</tr>
<tr>
<td><strong>MWI Number</strong></td>
<td>6001</td>
</tr>
<tr>
<td><strong>Handle as Extension</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Incoming Invite Challenge</strong></td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Emergency Call Data</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Accepted Calls</strong></td>
<td>EMERGENCY</td>
</tr>
<tr>
<td><strong>Addresses or Numbers to Match Incoming Call</strong></td>
<td>192.168.222.153</td>
</tr>
<tr>
<td><strong>Priority for Incoming Calls</strong></td>
<td>255</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Third Party Registration</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supervise Time</strong></td>
<td>30</td>
</tr>
</tbody>
</table>

### Route Category

| **Transmission Category** | 4 |
| **Disturbance Level** | 0 |

### Route Selection Category

<table>
<thead>
<tr>
<th><strong>Incoming Traffic</strong></th>
<th>Open for Incoming Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Line Selection During Outgoing Traffic</strong></td>
<td>Sequential</td>
</tr>
<tr>
<td><strong>Route Characteristics Outgoing Traffic</strong></td>
<td>Normal route</td>
</tr>
<tr>
<td><strong>Allow Alternative Route Selection</strong></td>
<td>Permitted</td>
</tr>
<tr>
<td><strong>Customer Affiliation</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Allow Virtual Calls</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Allow Malicious Call Tracing</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Facilities Restriction Level</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Receive Traveling Class Mark Information</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Route to Telident Machine for Emergency Calls</strong></td>
<td>Normal</td>
</tr>
</tbody>
</table>

### Traffic Category

| **Abbreviated Dialing Traffic Class** | 3 |
| **Call Discrimination Group Night for Incoming External Lines** | 15 |
| **Call Discrimination Group Day for Incoming External Lines** | 15 |
| **Traffic Connection Class** | 15 |

### Service Category

| **Allow Initiation of Call Waiting Tone Transmission** | Yes |
| **Allow Reception of Call Waiting Tone and Intrusion** | Yes |
| **Automatic Call Back Characteristics** | Permitted |
| **Type of Route** | Tie line |
| **Allow Paging Over Speech Channel** | No |
| **Mobile Extension without R1 Number** | No |
| **Allow Bearer Capability Substitution** | No |
| **Allow High Level Compatibility Substitution** | No |
| **Allow Number Conversion** | Yes |

### Route Selection Category

<table>
<thead>
<tr>
<th><strong>Signaling Data</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dial Tone Characteristics after External Line Seizure</strong></td>
<td>User has path established</td>
</tr>
<tr>
<td><strong>Use of Digit Transmission for Transit Exchange</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Use Net Service Facilities</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Ringing Tone Transmission for Outgoing Traffic</strong></td>
<td>A-party receives ringing tone</td>
</tr>
<tr>
<td><strong>Ringing Tone Transmission for Outgoing Traffic</strong></td>
<td>After minimum number of digits</td>
</tr>
</tbody>
</table>

### Route Equipment

| **Trunk Line Number** | 1-15 |

---

*Figure 58: Add Route - Result*
15. Associate the route with the destination access code.

16. Click **Telephony** and then **External Lines**, select **Destination**, and click **Add**.

![Figure 59: External Lines - Destination](image)

17. Click **Destination**, set the Type of Destination to **Destination** and then click **Next**.

![Figure 60: Destination - Add - Step 1](image)

18. Select the **Destination Number** and the **Route Name** and then click **Next**.
Figure 61: Destination - Add - Step 2
19. Click **Advanced** and select:
   - Show Original A-Number
   - Enable Enhanced Sent A-Number Conversion.

![Figure 62: External Lines - Destination - Change](image)

20. Click **Apply**. The Service Node Manager shows the operation result.
21. Log into the Provisioning Manager (MiVoice MX-ONE management system) and set up a Personal Number List to an extension.

22. Complete the user configuration to forward to Mitel Voice Mail. Any third-party terminal registered in MiVoice MX-ONE can subscribe on Message Waiting Indicator (MWI) according to RFC 3842.

23. Click Services, and then click the Extension tab.
24. Select the extension to set up the Personal Number List.

25. Click edit 🖋️ in the Personal Number List.
Figure 65: Extension - Change - 8002
26. Click in the first pen to edit List Number 1.

![Figure 66: Extension - Personal Number List](image)

27. Make the changes in the Personal Number List and click **Continue**. The setup below enables a user to forward calls to Mitel Voice Mail. The example shows how calls will be forwarded to Mitel Voice Mail number 6001 if a call is made to extension 8002 on no answer:
Figure 67: Personal Number List - Change - 1
28. Click Continue.

Figure 68: Personal Number List - Extension - Change IP

29. Click Continue.
When the extension change task is presented, click **Apply** to complete the configuration.

**TEST NUPOINT VOICE MAIL OPERATION**

To test basic communication between the MiVoice MX-ONE and the NuPoint UM:

1. From any extension configured on the communications platform, call the NuPoint UM voice mail extension.

2. Verify you hear the voice mail system greeting: "Welcome to the message center." This step establishes that you connected successfully to the NuPoint UM voice mail system.
3. Set up the test Mailbox Name and Greeting.

From the phone for which you created a test mailbox on NuPoint UM, dial the NuPoint UM voice mail extension.

1. Dial the mailbox passcode to access the voice mail system options for that mailbox.

2. Follow the voice mail prompts to set up the mailbox and create a greeting.

3. Dial Extension “xxxxx” and Leave a Voice Mail Message
   - From any phone on the communications platform, dial the NuPoint UM voice mail extension.
   - When prompted for an extension at the system greeting, dial the test mailbox created earlier.
   - Leave a voice mail message and then follow the prompts to deliver the message.

4. Check MWI and Retrieve Voice Message from Extension “xxxxx”

5. Verify MWI on the phone that was left a voice mail message.

6. Access the voice mail system, provide the passcode, and then listen to the message.

INTEGRATE AUDIO, WEB AND VIDEO

To integrate the AWV application with the MiVoice MX-ONE, you must configure the MiVoice MX-ONE system settings first, then configure the SIP server settings in the AWV application.

INSTALL MICOllAB AWV CONFERENCING CLIENT FOR ALL USERS

If you are running in a networked environment, you can (as the administrator of the computers) install MiCollab Audio, Web and Video Conferencing Client for all users. This is usually done in a Terminal server or Citrix environment.

If you wish to do this, download the executable file from http://<MiCollab IP address>/wd/MCAClient-admin.exe and follow the instructions.

Note: You must have Administrator privileges to install MiCollab Audio, Web and Video Conferencing Client for all users. The software must be placed in a location that all users can access. If a user on the system already has the MiCollab Audio, Web and Video Conferencing Client installed on their machine locally, that version takes precedence over the administrator-installed version.

CONFIGURE MIVOICE MX-ONE TO COMMUNICATE WITH AWV

You connect the AWV application to MiVoice MX-ONE as an internal hunt group with SIP extensions. The workflow for initiating the SIP extensions and hunt group is as follows:

- Initiate an extension profile suitable for the MiCollab AWV extensions.
- Initiate generic extension numbers, in consecutive series.
- Initiate SIP extensions for the same numbers.
- Initiate a Hunt Group with appropriate service profile.
• Initiate the SIP extensions as hunt group members.
• Optionally initiate the Voice Mail function for the hunt group number and the member extensions (to get DTMF support).
• Configure MiCollab via its web GUI.

*Initiate the Hunt Group*

1. Log into the Service Node Manager (MX-ONE management system).
2. Go to Telephony and then Groups, select Hunt Group.

![Figure 70: Hunt Group](image)

3. Click Add.
4. In the Available Directory Number Intervals field, set the range of Directory Numbers that will be used as a pilot.
5. Click Next.

6. Select the Directory Number that will be used a pilot and configure the group parameters and click Apply. The recommended settings are shown below.
7. Click **Next**.
8. Enter a name for the group.
9. Click **Apply**. The Service Node Manager shows the operation result.

![Figure 74: Hunt - Group - Add - Result]

10. Click **Done**.

*Initiate the Common Service Profile (CSP)*

11. Click **Telephony**, click **Extensions**, then select **Common Service Profiles**. The Common Service Profile task is divided into six steps. The following is an example and the Traffic category and may vary depending the customer setup.
12. Click Add.

13. Enter a name for the common service profile and select the CSP number:

14. Click Next.
15. Define the Number Presentation Category.

![Figure 77: Common Service Profiles - Add - Step 2](image)

16. Click Next.

17. Define the Traffic Category.

![Figure 78: Common Service Profiles - Add - Step 3](image)

18. Click Next.

19. Define the Service Category.
20. Select the **Force Calls from or to IP terminal to be Gateway Calls** parameter.

**Note:** You must configure the **Force Calls from or to IP terminal to be Gateway Calls** parameter in the extension service profile, because AWV does not support DTMF in SIP INFO, and thus RFC 4733 must be used.

21. Click **Next**.
22. Define the Diversion Category.

23. Click Next.
24. Define the Routing Category.

25. Click Apply. The Service Node Manager shows the operation result.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Call Back Characteristics</td>
<td>Permitted</td>
</tr>
<tr>
<td>Allow Call Waiting Tone Initiation</td>
<td>No</td>
</tr>
<tr>
<td>Call Waiting Tone Reception (B-party)</td>
<td>Deactivated</td>
</tr>
<tr>
<td>Call Waiting Tone Reception (C-party)</td>
<td>No</td>
</tr>
<tr>
<td>Intrusion Capability Level</td>
<td>0</td>
</tr>
<tr>
<td>Intrusion Protection Level</td>
<td>3</td>
</tr>
<tr>
<td>Allow Malicious Call Tracing Category</td>
<td>No call tracing</td>
</tr>
<tr>
<td>Manual Message Waiting</td>
<td>Not allowed</td>
</tr>
<tr>
<td>Call Metering Category</td>
<td>Per route</td>
</tr>
<tr>
<td>Allow A-Number Request from MFC</td>
<td>No</td>
</tr>
<tr>
<td>Allow A-Subscriber Charged</td>
<td>Normal</td>
</tr>
<tr>
<td>Allow Individual Do Not Disturb</td>
<td>No</td>
</tr>
<tr>
<td>Hospitality Class of Extension</td>
<td>Normal extension</td>
</tr>
<tr>
<td>Accept Incoming Collect Calls</td>
<td>No</td>
</tr>
<tr>
<td>Force Calls from or to IP Terminal to Gateway Calls</td>
<td>Yes</td>
</tr>
<tr>
<td>Allow External Controlled Call Distribution</td>
<td>No</td>
</tr>
<tr>
<td>Offered Timer [s]</td>
<td>0</td>
</tr>
<tr>
<td>Enable Common Authorization Code</td>
<td>Enabled</td>
</tr>
<tr>
<td>Allow Free on Busy</td>
<td>Disabled</td>
</tr>
<tr>
<td>Extended services in Intrusion state</td>
<td>Extended services not permitted</td>
</tr>
<tr>
<td>Call List Deactivation Forbidden</td>
<td>Yes</td>
</tr>
<tr>
<td>Allow Activation/Deactivation of Group Do Not Disturb</td>
<td>No</td>
</tr>
<tr>
<td>Allow Automatic Answer</td>
<td>No</td>
</tr>
</tbody>
</table>

**Service License**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short message service</td>
<td>No</td>
</tr>
<tr>
<td>Free seating</td>
<td>No</td>
</tr>
<tr>
<td>Request Transfer Permission of Public Trunk</td>
<td>Not allowed</td>
</tr>
<tr>
<td>Transfer Reception</td>
<td>Not allowed</td>
</tr>
<tr>
<td>Permitted to transfer calls to intruded party</td>
<td>Not allowed</td>
</tr>
<tr>
<td>Forced Disconnect Timer [s]</td>
<td>0</td>
</tr>
<tr>
<td>Answer Handled By External Application</td>
<td>No</td>
</tr>
<tr>
<td>Log Off Restriction</td>
<td>LogOff allowed</td>
</tr>
</tbody>
</table>

**Call Diversion Category**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use External Follow Me</td>
<td>No</td>
</tr>
<tr>
<td>Allow Follow Me</td>
<td>No</td>
</tr>
<tr>
<td>Allow Diversion Bypass</td>
<td>No</td>
</tr>
<tr>
<td>Origin is an Internal Extension</td>
<td>Feature not allowed</td>
</tr>
<tr>
<td>Origin is a Private External Line</td>
<td>Feature not allowed</td>
</tr>
<tr>
<td>Origin is a Public External Line</td>
<td>Feature not allowed</td>
</tr>
<tr>
<td>Allow Auto Bypass of Follow Me for SMS</td>
<td>No</td>
</tr>
<tr>
<td>Allow Auto Bypass of External Follow Me for SMS</td>
<td>No</td>
</tr>
<tr>
<td>Allow Direct Diversion to</td>
<td>Only an individual divertee position</td>
</tr>
<tr>
<td>Allow Diversion on Busy</td>
<td>No</td>
</tr>
<tr>
<td>Allow Diversion on No Answer</td>
<td>No</td>
</tr>
<tr>
<td>Allow Multi Directory Diversion</td>
<td>No</td>
</tr>
<tr>
<td>Allow Remote Programming on Follow Me</td>
<td>No</td>
</tr>
<tr>
<td>Allow Remote Programming on ECF</td>
<td>No</td>
</tr>
<tr>
<td>Allow Remote Programming on No Reply</td>
<td>No</td>
</tr>
<tr>
<td>Allow Remote Programming on Busy</td>
<td>No</td>
</tr>
<tr>
<td>Allow Remote Programming on Direct Diversion</td>
<td>No</td>
</tr>
</tbody>
</table>

**Routing Category**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Restriction Level</td>
<td>0</td>
</tr>
<tr>
<td>Account Code Category</td>
<td>Least cost routing tables 1 or 2</td>
</tr>
<tr>
<td>Off-hook Queuing Level</td>
<td>0</td>
</tr>
<tr>
<td>Authorization Type for Route Selection</td>
<td>Normal extension</td>
</tr>
</tbody>
</table>

---

Figure 83: Common Service Profiles - Add - Result (Continued)
Initiate the SIP extension to be used as group members

26. Log into the Provisioning Manager (MX-ONE management system).

27. Click Services and then click Extension.

![Figure 84: Extension - Add](image)

28. Click Add.

29. In Step 1, set the Extension Type to IP.

![Figure 85: Extension - Add - Step 1](image)

30. Click Next.
31. In the step 2, at minimum select Server Number, Common Service Profile, Protocol SIP and under Hunt Group Number add the group number that you created (see Figure 72).

Figure 86: Extension - Add - Step2

32. Click Apply. The Performance Manager shows the operation result.
**Figure 87: Extension - Add - Result**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>Telephony System</td>
<td>MXONE-MICOLLAB</td>
</tr>
<tr>
<td>Extension Type</td>
<td>IP</td>
</tr>
<tr>
<td>Extension Number</td>
<td>8004</td>
</tr>
<tr>
<td>Server Number</td>
<td>1</td>
</tr>
<tr>
<td>Customer</td>
<td>None</td>
</tr>
<tr>
<td>Common Service Profile</td>
<td>3 - AVV Extensions (None)</td>
</tr>
<tr>
<td>Language</td>
<td>Default</td>
</tr>
<tr>
<td>Allow Security Exception</td>
<td>Yes</td>
</tr>
<tr>
<td>IP Address</td>
<td>NOT REGISTERED</td>
</tr>
<tr>
<td>Protocol</td>
<td>SIP</td>
</tr>
<tr>
<td>Allow CDN</td>
<td>No</td>
</tr>
<tr>
<td>Boss/Secretary</td>
<td>None</td>
</tr>
<tr>
<td>Blu Star Client Model</td>
<td>None</td>
</tr>
<tr>
<td>Allow Video Functionality</td>
<td>No</td>
</tr>
<tr>
<td>Allow Third Party SIP Client</td>
<td>No</td>
</tr>
<tr>
<td>Enable AMC Functionality</td>
<td>No</td>
</tr>
<tr>
<td><strong>Group Setup</strong></td>
<td></td>
</tr>
<tr>
<td>Hunt Group(s)</td>
<td>8003</td>
</tr>
<tr>
<td><strong>Personal Number List</strong></td>
<td></td>
</tr>
<tr>
<td>List Number</td>
<td>1</td>
</tr>
<tr>
<td>List Name</td>
<td>PROFILE1</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
</tr>
<tr>
<td><strong>Call Sequence 1</strong></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>8004</td>
</tr>
<tr>
<td>Ring Duration [s]</td>
<td>5</td>
</tr>
<tr>
<td>If Number Busy Go To</td>
<td>Busy tone</td>
</tr>
<tr>
<td>If DND Active Go To</td>
<td>No Progress</td>
</tr>
<tr>
<td>Use Once</td>
<td>No</td>
</tr>
<tr>
<td><strong>Accept Calls From</strong></td>
<td></td>
</tr>
<tr>
<td>Internal</td>
<td>Yes</td>
</tr>
<tr>
<td>Operator</td>
<td>Yes</td>
</tr>
<tr>
<td>External</td>
<td>Yes</td>
</tr>
<tr>
<td>Individual Repeated Distribution Bypass</td>
<td>Yes</td>
</tr>
<tr>
<td>Support SMS Messages</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Personal Number Category Information</strong></td>
<td></td>
</tr>
<tr>
<td>Personal Number After Diversion or Follow Me</td>
<td>No</td>
</tr>
<tr>
<td>Restrict First Ring Tone</td>
<td>No</td>
</tr>
<tr>
<td>Connected Party Display Information</td>
<td>Show both connected party call list and information</td>
</tr>
<tr>
<td>Idle Display Information</td>
<td>Do not show information on idle display</td>
</tr>
<tr>
<td>Personal Number</td>
<td>List1 is active</td>
</tr>
<tr>
<td>IP Phone Server</td>
<td></td>
</tr>
</tbody>
</table>
33. Click **Add From This** to initiate more SIP extensions with the same set of parameters.

34. In the **Shortcut** field, select Hunt Group.

![Extension - Change](image)

**Figure 88: Extension - Change**

35. Click **Go**. The Performance Manager opens the Service Node Manager – Hunt Group tab.

![Hunt Group](image)

**Figure 89: Hunt Group**

36. Select **Hunt Group Member**.

![Hunt Group Member](image)

**Figure 90: Hunt Group Member**

37. Review the Hunt Group Members.
You can also manage the Hunt Group Members using the **Change This...** function.
CONFIGURE SIP SERVER SETTINGS IN MICOllAB AWV

Configure the SIP Server settings in MiCollab Audio, Web and Video Conferencing using the account information from the MiVoice MX-ONE configuration:

1. Log into the MiCollab server manager interface.
3. From the MiCollab Audio, Web and Video Conferencing main page, click System Options on the navigation pane.
4. In System Options – Platform, select MiVoice MX-ONE as the system that is connected to MiCollab Audio, Web and Video Conferencing.
5. Click Save
6. Click Ok at the prompt to restart the server.
7. Click Configure SIP Server on the navigation pane. The SIP Server Configuration page appears.
8. Enter the following information:
   - Extension First: Type the extension number of the first IP device in the hunt group used by the MiCollab Audio, Web and Video Conferencing server to register itself with the PBX.
   - Extension Last: Type the extension number of the last IP device in the hunt group used by the MiCollab Audio, Web and Video Conferencing server to register itself with the PBX.
   - Extension PIN: This PIN is used for SIP MD5 authentication.
   - SIP Domain: This can be the domain name, fully qualified domain name (FQDN), or the IP address of the PBX system used to register the MiCollab Audio, Web and Video Conferencing
   - SIP ports: If you do not know the domain name or FQDN, type the PBX system IP address.
   - IP Address: Type the IP address of the PBX system. Alternatively, type the FQDN. Note that when typing the FQDN, only the first IP Address value returned by the DNS lookup will be used.
9. Click Save.

INTEGRATE MIVOICE BORDER GATEWAY

MiVoice Border Gateway provides a secure communications path for remote MiCollab Client users to the MiCollab Client Service.

The MBG provides support for MiVoice MX-ONE SIP devices, including MiCollab Client softphones through the implementation of proprietary SIP headers.

Note: Secure Recording Connector service is not supported.
CONFIGURE ICP IN MBG (STANDALONE MBG ONLY)

When you create the network elements in the MiCollab USP network element tab, the network elements are automatically added to the embedded MiVoice Border Gateway (MBG) application. However, if your deployment includes a standalone MBG system, you must manually configure the network elements as ICPs in the standalone MBG server manager interface.

To add a communications platform as an ICP:

1. Log into the standalone MBG server manager interface.
2. Under Applications, click MiVoice Border Gateway.
3. From Service Configuration, click ICP
4. From ICP Information, click +
5. Complete the ICP information. Refer to the online help for details. Select "MiVoice MX-ONE" as the ICP type.
6. Click Save. You can now select the ICP type (MiVoice MX-ONE) from any MBG device management page:

![Figure 93: Configure MiVoice MX-ONE as ICP on Standalone MBG](image)

CONFIGURE SIP TRUNKS

1. Configure the MiVoice MX-ONE with SIP trunks.
2. [Configure the SIP trunks on MBG](#)

INTEGRATE MICOLLAB CLIENT

MICOLLAB CLIENT CONFIGURATION

Refer to the following sections in the [MiCollab Client Administrator Guide](#) for configuration information:

- Configure the PBX
- Configure Integrated Applications
- Access the MiCollab Client Administration Page
- Provision MiCollab Client
- Install Desktop Clients
- Deploy Mobile Clients (see below)

Note that you must enable the following Nupoint UM FCOS options to allow the MiCollab Client Desktop client to control voice mail calls:

- FCOS 289 Enable UM-SMTP
- FCOS 290 Enable UM-Web
- FCOS 295 Enable UM Pro

DEPLOY MICOLLAB CLIENT (NEXT GEN) MOBILE CLIENTS

MiVoice MX-ONE platforms support MiCollab Next Generation mobile clients. Only the Next Generation variants of the mobile clients are supported. After you configure a user with a mobile client in the MiCollab Client application, a deployment e-mail is sent to the user with simplified configuration instructions on how to set it up.

Configure CSTA Link

Configure the CSTA link between MiVoice MX-ONE and MiCollab Client Service. Define the configuration on BluStar server with the IP address of MiVoice Business Gateway and the CSTA port.

Figure 94: MiCollab Client Integration

Configure MiCollab Client Deployment

1. Log into the MiCollab server manager interface.

2. Under Applications, click MiCollab Client Deployment. Refer to the application on-line help for instructions to configure client deployment.
Purchase and Import SSL Certificates to Servers

1. Log into the MiCollab server manager.
3. To enable remote client station to log in and to enable MiCollab Mobile Client users to establish connections, you must install an SSL Certificate on the MiCollab and MBG servers. Refer to the online help associated with the Web Server Certificates page for instructions.

CONFIGURE INTEGRATED DIRECTORY SERVICES (OPTIONAL)

Optionally, configure Integrated Directory Services to integrate the non-corporate contacts from a directory server or a MiVoice MX-ONE with the MiCollab Client Corporate Directory database. Note that only non-corporate entries (contacts) are supported via IDS. User entries are not synchronized and are not copied to the MiCollab USP database.

During an IDS synchronization event, the system imports the non-corporate entries. When users start up their MiCollab clients, the system updates the user's Contacts list. Users can then place calls to the non-corporate contacts using "Click-to-Call" functionality from their phone clients.

PERFORM USER AND SERVICES PROVISIONING

You perform all user add, change, and delete operations from the MiVoice MX-ONE administration interface.

• To add or modify MiCollab services, assign a role to a new user to apply the associated MiCollab template and configure the user with the application services that are defined in the template. MiVoice MX-ONE automatically applies the update to the MiCollab database (a periodic synchronization is not required)
• If you remove a role from a user on the MiVoice MX-ONE, a synchronization is not required. The deletion is applied automatically. The licenses associated with those services become available on MiCollab.
• If you change a user’s role, the user’s application services are updated with the new service mix that is defined in the role’s template. For MiVoice MX-ONE integrations, you must re-apply the role to the user manually because there is no automatic sync.

ABOUT THE PROVISIONING MANAGER (PM)

The MiVoice MX-ONE provisioning tool is called the Provisioning Manager (PM). It is used to perform user add/move/change in MiCollab.

There are three basic ways of adding users via Provisioning Manager in MiCollab and they are:
• Add task (single user)
• Export task (multiple users)
• Active Directory integration (multiple users)
PROVISIONING USERS

After the Subsystem setup is done and the roles are defined in MiCollab Server, users can be deployed into the system in the following way:

- Provisioning Manager User task or
- Provisioning Manager Export tool or
- Provisioning Manager Active Directory integration

Provisioning Manager User Task

Users can be added one by one or be imported from files extracted from other user management systems.

When MiCollab is integrated with MX-ONE and Provisioning Manager, the User task is used to add users into the system one by one in the same way as any user is added in the MiVoice MX-ONE. The only difference is that in the second step a MiCollab selection is required if the user will have MiCollab functionality.

To do that, follow the steps below:

1. Log in into Provisioning Manager via the appropriate credentials.
2. MiCollab users can be deployed via User Task in the following ways:
   - Add a new user (Go to Users tab > User tab > Add)
   - Change an existent user (Go to Users tab > User tab > Enter User name/User names or * (all)).

Add a New user:

1. Go to Users tab > User tab > Add and enter the following parameters in the step 1 of 3.
   - **First Name:** Enter end user first name
   - **Last Name:** Enter end user last name
   - **User Id:** Enter end user unique id
   - **Email Address:** Enter the end user email address
   - **Password:** Enter a password
   - **Confirm Password:** Enter a password
   - **Department(s):** Enter the department that the end user belongs
   - **Provisioning Manager Language:** Select the Provisioning Manager Language to that end user
2. Click **Next** and enter the following parameters in the step 2 of 3.

Associate the extension to the end user via:

- **Assign Existing Extension**
  - Type the extension number (MX-ONE Authorization Code is mandatory to roles that have Teleworker)
- **Add New Extension**.
  - Create a new extension filling out the required parameters in the extension task.

After the extension selection, check the MiCollab Extension check box. Note that this is step is required because in MX-ONE an end user can have several extensions in the same as well as in other MX-ONE system.
3. Under MiCollab Server, enter the following parameters:
   - **Telephony System**: Select the MX-ONE system from the drop down list. Note that this is used to fetch the MiCollab Roles for that specific system.
   - **MiCollab Roles**: Select the MiCollab Role to the end user.
   - **Prompt Language**: Select the Voice Mail Prompt Language.

4. Click **Apply** or go to the optional step 3.
5. Go to MiCollab Users and Service > Users and verify that the user is initiated there.
6. Check the user details.

![Edit User - Smithson, John](image1)

**Figure 99: Edit User**

Change an existing user:

1. Go to Users tab > User tab > Enter User name/User names or * (all).
2. Select change for end user that requires MiCollab service.

![Change End User Service](image2)

**Figure 100: Change End User Service**
3. The change user step 1 page opens. Change the fields in the User page as required

4. Select Service Summary and associate the extension to the end user via:
   - Assign Existing Extension
     - Type the extension number (MX-ONE Authorization Code is mandatory to roles that have Teleworker)
   - Add New Extension.
     - Create a new extension filling out the required parameters in the extension task.
Figure 102: User - Change

Figure 103: Check MiCollab Box
5. Under MiCollab Server, enter the following parameters:
   • **Telephony System**: Select the MX-ONE system from the drop down list. Note that this is used to fetch the MiCollab Roles for that specific system.
   • **MiCollab Roles**: Select the MiCollab Role to the end user.
   • **Prompt Language**: Select the Voice Mail Prompt Language.

6. Click **Apply** or go to the optimal step Scheduling.

7. Go to MiCollab Users and Service > Users and verify that the user is initiated there.

8. Check the user details.
Figure 105: Check User Details

Provisioning Manager Export Tool

Use this tool to export the current MiVoice MX-ONE users that are in the Provisioning Manager database via a CSV file. You can then import the CSV file into MiCollab using the Bulk User Provisioning tool. The Provisioning Manager Export Tool generates the CSV file according to MiCollab requirements.

To export MX-ONE users to MiCollab:

1. Go to System > Data Management > Export > Export and select MiCollab user data.
2. Export the file and open with Microsoft Office Excel.
3. Log into the MiCollab Server Manager
5. Click the Bulk User Provisioning tab
7. Browse to the CSV file and import it into MiCollab.

8. Use the Auto Fill function in the Bulk User Provisioning tool to assign the entries with a Role. Roles are associated with templates that apply the services to the entries.
9. After assign roles, select all the entries and click **Add**. The entries are imported.

10. Click the **Users** tab. Verify that the user entries have been imported and are assigned with the required services.

---

**Figure 110: Assign Roles**

**Figure 111: MiCollab Users with Services**
You can integrate the Provisioning Manager with Microsoft Active Directory to provision users in MX-ONE. The same functionality is available if the Provisioning Manager is integrated with MiCollab. Active Directory users that belong to specific Organization Units will be provisioning in both Provisioning Manager and MiCollab. After you synchronize the Active Directory in Provisioning Manager, users are inserted in the Provisioning Manager under user task and in MiCollab the users are displayed in the Bulk User Provisioning tool under manage detained queue.

The Bulk User Provisioning tool is used to assign users with the proper MiCollab Role.

To add Active Directory synchronization in Provisioning Manager, you must

- set up the server, and
- configure Domains

**Server Set Up**

Go to **System > Data Management > Active Directory > Add** and configure, at minimum, the following parameters:

- **IP address**: Enter the IP address or DNS Name that shall be used when connecting to the Active Directory.
- **Port**: Enter the port number of the Active Directory where the connection is opened for communication
- **User Name**: Enter a user name of the user in Active Directory with which Provisioning Manager shall access Active Directory with.
- **Password**: Enter the password that belongs to the user specified in the User Name field.
- **Confirm Password**: Confirm the password entered in the Password field.
- **Email Address**: Enter the email address to the recipient(s) of failure notices.
11. Check that the Active Directory system has the required users.

12. Log into the Provisioning Manager.


14. Go to Users > User and check to see if the users were added.
15. Go to MiCollab > Users and Services > Bulk User Provisioning. The users should be displayed in the Manage Detained Queue. Select the users and apply the role. In the example below, the Auto Fill Role was selected.

16. After you have applied the roles, click Save to add the entries to the MiCollab Users and Service Directory.
17. After the operations are all complete, click **Users** and check that the entries are present and have been assigned application services.
18. Return to the Provisioning Manager and edit one of the users that were added via AD synchronization.

19. Click Service Summary and verify that MiCollab role is shown properly.

![Service Summary for Role](image)

Figure 118: Check Service Summary for Role
Chapter 5
FEATURE SUPPORT
INTRODUCTION

This chapter describes MiCollab application feature support.

TYPES OF USERS

USERS WITH MICOLLAB SERVICES

These are users who are assigned MiCollab services.

**MiVoice Business**: Flow Through Provisioning is the recommended method of provisioning users and services for MiVoice Business platforms. You can also provision users using the Bulk User Provisioning tool or Integrated Directory Services.

**MiVoice 5000 and MiVoice MX-ONE**: User provisioning is performed from the MiVoice 5000 or MiVoice MX-ONE management interfaces. They have presence monitoring and the functionality provided by MiCollab Client. Typically, a UCC Entry, Standard, or Premium role would be applied during user creation. For this user class, external numbers are not sent to MiCollab Client. End users can provision them in their MiCollab Mobile or Desktop Client. Flow Through Provisioning is not supported for these communications platforms.

CORPORATE CONTACTS WITH MONITORING

Some users may require presence monitoring but not availability or any additional MiCollab services. Typically corporate contacts are created using the UCC Basic or Teamwork Mode role. For this user class, external numbers are not sent to MiCollab Client. End users can provision them in their MiCollab Mobile or Desktop Client.

CORPORATE CONTACTS WITHOUT MONITORING

Some Mitel communications platforms have a greater user capacity than a single MiCollab server. To support the MiCollab Client "Click-to-Call" feature to the other non-MiCollab users, the IDS connector from the MiCollab obtains the user accounts from the communications platform directory and adds them to the MiCollab Client directory as corporate contacts without monitoring.

These accounts are created as contacts from the MiVoice 5000 or MiVoice MX-ONE management interfaces. External numbers are sent to MiCollab Client for this user class.

NON-CORPORATE CONTACTS

External contacts are provisioned in MiCollab via a directory services synchronization initiated from MiCollab IDS to either the MiVoice 5000 Manager or Active Directory. For MiVoice MX-ONE the synchronization is done between MiCollab IDS and Active Directory. This synchronization polls the directory and creates, updates, or deletes contacts as needed in MiCollab Client Service. The external numbers for non-corporate contacts are sent from the directory server to the MiCollab Client Corporate Directory.
NUPOINT UNIFIED MESSAGING

SUPPORTED FEATURES

Refer to the NuPoint Unified Messaging General Information Guide for a description of the supported features. Refer to the following sections for a summary of the features that are not supported for the MiVoice 5000 or MiVoice Mx-ONE.

MIVOICE 5000 NP-UM UNSUPPORTED FEATURES

• **Voice Mail Soft keys**: The Voice Mail Soft keys feature allows users to control voice mail functions through context-sensitive keys on the telephone.

• **Record-A-Call**: an optional feature that allows mailbox subscribers to record both ends of a two-party external call in progress at their phone. Recorded conversations are delivered to the user’s voice mailbox. Unlike regular voice mail messages, Record-A-Call messages are stored immediately as saved messages, so they do not trigger Message Waiting Indicators on the user’s telephone.

• **Call Transfers**: Call Transfers in general are not supported. Call Director features that involve the transferring of calls are also not supported.

• **Call Director (transfers are not supported)**: an optional feature of the NuPoint Unified Messaging application. Call Director, allows users to create automated attendant applications (known as a call flows) to handle unanswered calls that are directed to their voice mailbox.

• **Speech Auto Attendant**: a speech recognition application that allows users to place calls to people quickly and efficiently by speaking names, department names or telephone numbers.

MIVOICE MX-ONE NP-UM UNSUPPORTED FEATURES

• **Voice Mail Soft keys**: The Voice Mail Soft keys feature allows users to control voice mail functions through context-sensitive keys on the telephone.

• **Record-A-Call**: an optional feature that allows mailbox subscribers to record both ends of a two-party external call in progress at their phone. Recorded conversations are delivered to the user’s voice mailbox. Unlike regular voice mail messages, Record-A-Call messages are stored immediately as saved messages, so they do not trigger Message Waiting Indicators on the user’s telephone.

• **Speech Auto Attendant**: a speech recognition application that allows users to place calls to people quickly and efficiently by speaking names, department names or telephone numbers.

• **Email Playback**: Users cannot play their emails through the NuPoint Unified Messaging telephone user interface. This functionality is supported on MiVoice Business platforms only.

• **Resilient Voicemail Services**: Only supported on MiVoice Business platforms.
MIVOICE BORDER GATEWAY

SUPPORTED FEATURES

The MiVoice Border Gateway (MBG) is a multi-service software solution that provides the following functionality. See page 143 for a summary of the features that are not supported for the MiVoice 5000 or MiVoice MX-ONE.

- **Web proxy blade**: provides a secure method for MiCollab end user web clients to connect with their LAN-based applications

- **Teleworker service**: connects remote office phones and SIP softphones to the corporate voice network providing full access to voice mail, collaboration tools, and all the other features of the office phone When configured for teleworker use, the remote IP Phone:
  - has a secure, encrypted, voice path between the IP Phone and the system across the Internet
  - has adaptive jitter buffering and other software enhancements to improve voice quality over the Internet
  - uses G.729 compression to reduce bandwidth requirements
  - operates in the same manner as any other phone connected to the network
  - operates over any broadband LAN connection that provides connectivity back to the corporate office where the MiCollab is visible from the Internet Mobility Solutions
  - directly accesses the corporate office phone system (for example, voice mail and collaboration tools)
  - supports SIP protocol for the MiCollab desktop and Mobile SIP soft phones

- **Web Proxy Service**: An MBG server with web proxy installed in the Demilitarized Zone (DMZ) protects the MiCollab server in the LAN from Internet exposure. In a DMZ configuration, the firewall is the gateway for all IP network traffic with the Internet. The Web Proxy blade provides
  - provides a secure method for remote web browser users, such as web conferencing users, to connect with a MiCollab server located on the corporate LAN.
  - provides Internet based clients (for example, clients) with access to a MiCollab system located on the LAN. Remote web browser users and clients connect to MiCollab in the LAN through the Web Proxy blade that is installed on a separate MBG server in the DMZ.
  - acts as a reverse proxy, providing a secure method for Mitel end user web clients to connect with their LAN-based applications on the MiCollab system. In the current release, the Web Proxy supports desktop and conferencing clients.
  - restricts access only to those Purls that belong to the end user web interfaces for the applications.
  - provides secure Internet access from an Internet-accessible server to an Internet-protected server on the LAN. The Web Proxy software should not be installed in the following cases:

- **SIP trunk proxy service**: You can use SIP trunks provided by an Internet Telephony Service Provider to connect your communications platform to the traditional PSTN network. Three components are required to successfully deploy SIP trunks:
  - a Mitel communications platform with SIP-enabled trunk side
- an Internet telephony or SIP Trunking service provider
- MiCollab with MBG SIP Trunk proxy service to connect the service provider to the ICP on the LAN. The MBG SIP Trunk Proxy service on MiCollab also serves as a SIP-aware firewall and eliminates the need for 3rd party firewalls, simplifying configuration and deployment. (Not Supported on MiVoice MX-ONE and MiVoice 5000 platforms).

- In MiCollab Release 7.0, the MBG supports, MiCollab Client softphones and Next Generation mobile clients for integrations with MiVoice 5000 or MiVoice MX-ONE. Teleworker service is supported.
- Remote Proxy services (web proxy to MiCollab) is supported.
- Mitel 673X, 675X, 686Xi phones are supported as remote devices. A Mitel Redirect Server supports initial deployment. After a user clicks a configuration link in the Welcome email, this server redirects the user’s phone to the MBG to obtain the required configuration files.

UNSUPPORTED FEATURES: MIVOICE 5000 AND MIVOICE MX-ONE

- **Secure remote SIP access** for IP phones on the communications platform and an outbound proxy for SIP trunking from the internal communication platform to external third-party SIP providers (Not supported on MiVoice MX-ONE and MiVoice 5000).
- **Secure Recording Connector**: facilitates the recording of Mitel-encrypted voice streams by third-party call recording equipment.

MICOLLAB AUDIO, WEB AND VIDEO

MiCollab Audio, Web and Video Conferencing allows users to schedule and create audio or web conferences. A web-based interface is used to schedule conferences, and to view conference calls. Conferencing configuration is performed from the MiCollab administrator portal. All interfaces are directly accessed through the secure HTTPS protocol. Authorization and authentication allows only valid users to access the services. Secure Sockets Layer (SSL) encryption for secured messages and server-side digital certificates are used to meet the highest security requirements.

MiCollab Audio, Web and Video Conferencing is integrated into the MiCollab End User portal and provides the following features:

- Instant, flexible calling: Initiate an instantaneous call or to create a conference call from a two-party call. A conference call can also be pre-scheduled.
- Complete call control and management: Add and drop other call participants as well as mute, hold, or transfer the call directly from the desktop. A call detail record (CDR) provides a log of all calls. The CDR includes the dates and times of all calls call duration of all calls for billing purposes. Conference accessibility via personal identification is also available for an even more secure experience.
- Cost-effective conferencing: Delivers the most cost-effective group calling, with ultimate flexibility to customize solutions to best meet individual needs.
- Web-based collaboration tools: Facilitate online meetings, training, and presentations with features designed for sharing your desktop or individual applications. Enhance conferences to increase participation and understanding by using interactive markup tools, user polling,
and video-conferencing. Use the file transfer utility to immediately share the outcome of online collaborative sessions by transmitting updated files and presentations to conference participants.

- Conference archiving: Create recordings of conference calls and collaborative sessions for playback later.

**MICOLLAB CLIENT**

**SUPPORTED FEATURES**

- **SIP-based Softphones**: Supports the use of Session Initiation Protocol (SIP) Next Generation softphones from remote PCs or laptops. Desktop clients utilizing SIP-based softphone can also take advantage of video calling functionality.

- **Web Portal**: Supports a web-based interface to a key subset of client features for remote users.

- **Simplified Call Management and Logging**: Provides users with the advanced call management features of the PBX from the desktop client. The server logs incoming calls for the MiCollab clients, even when the MiCollab client software is not running. When a MiCollab client is re-started, the server updates the client with all the cached call log information since the last session. It also stores frequently dialled phone numbers and allows users to call these numbers from a drop-down menu.

- **Dynamic Presence and Availability**: Informs you of a person’s availability whether they are on the phone, away from their desk, or available for secure instant chat or collaboration. With Desktop client you can also tag selected users so that you get a visual indication when they log into MiCollab Client.

- **Contact Grouping**: Combines Corporate, Personal, and Favorite contact groups into a single view. A Corporate directory group is visible with the flexibility to create additional groups. Personal contacts from Google® or Microsoft® Exchange® can also be integrated and imported into the MiCollab Client application.

- **Teamwork Mode**: Allows MiCollab clients to work without being associated with a PBX device. A subset of features such as contact grouping, presence, dynamic status and chat are supported in Teamwork Mode.

- **Corporate Secure Instant Messaging**: Facilitates secure instant messaging and file sharing. Initiate a single or multi-party chat at the click of a mouse and, at the same time, share documents by dragging and dropping files into the chat session.

- **Dynamic Status**: Allows users to forward their phones or put them in Do Not Disturb. Auto Answer is not supported. Note that the MiVoice 5000 and the MiVoice MX-ONE does not support the selective ringing of devices in the users’ ring groups.

- **Dynamic Location**: Allows Mobile Client users to define the GPS locations to associate with each Dynamic Status and automatically changes Dynamic Status based on GPS location, network / Bluetooth connection or by manual selection.

- **Plus Dialing Settings**: Allows the admin to configure dialing prefixes for
  - Country code:
- International access code:
- Long distance access code

When a user dials a telephone number from the client, MiCollab Client applies the pre-defined digit(s). The MiVoice 5000 and MX-ONE support Default E.164 dialling.

- **Integration with MiCollab Audio, Web and Video Conferencing:** AWV allows users to place a video call with the click of a button, and create or schedule collaboration sessions.

- **Voicemail Integration and Visual Voicemail:** Provides the user with an intuitive interface to view and listen to Mitel NuPoint Unified Messaging™ (UM) voice mail messages. Notifications are sent via CSTA so the MWI information is accessible also with integrated Voicemail systems besides NuPoint (no Visual Voicemail support). DTMF functions can be used from softphones to control any Voicemail system.

- **Client Only Software Delivery:** delivers Windows Desktop Client and mobile clients software without having to upgrade the MiCollab server version. Supported clients: Desktop, Android, BlackBerry, iPhone, Windows Mobile and Web clients.

- **Dialed Digits Processing Flexibility:** allows the admin to modify the dialed digit processing logic to suit their site specific needs. When a user dials a telephone number from the client, MiCollab Client can apply pre-defined digit modification rules (such as pre-pending the PBX outgoing prefix) before the number is dialed out.

**Supported Integrations**

- **Integration with Business Applications:** Integrates with popular communications and productivity tools such as Outlook and Microsoft Office. Users can dial from their Outlook contact list, integrate their Dynamic Status with their Outlook calendar, and click-to-dial using smart tags. MiCollab Client also integrates with IBM Lotus Notes, allowing users to dial from their contact list, launch web / video collaboration sessions, and integrate their Dynamic Status with their calendar.

- **Integration with Mitel Teleworker Solution:** Teleworker allows users to access their corporate voice network through the MiCollab Client softphone, from home or on the road, without the need for a virtual private network (VPN) connection.

- **Integration with Mitel Dynamic Extension and Dynamic Extension Express:** A MiCollab client user who also has Dynamic Extension or Dynamic Extension Express can answer an incoming call directed to their desk phone or on a device of their choice – for example, on a cell phone, SIP softphone or home phone. When the call is answered, the MiCollab Client application changes the user’s telephony presence to “off hook.” This enables MiCollab Client to display the correct telephony status for a user, regardless of whether the call was answered on a user’s desk phone, softphone, or mobile device.

- **Integration with MiCollab Audio, Web and Video Conferencing:** integration with this application allows users to place a video call with the click of a button, and start or schedule collaboration sessions.

- **Integration with Business Applications:** integrates with popular communications and productivity tools such as Outlook and Microsoft Office. Users can dial from their Outlook contact list, integrate their Dynamic Status with their Outlook calendar, and click-to-dial using smart tags. MiCollab Client also integrates with IBM Lotus Notes, allowing users to
dial from their contact list, launch web / video collaboration sessions, and integrate their Dynamic Status with their calendar.

- **Integration with MiVoice for Lync®:** supports seamless integration with Microsoft Lync clients through the Mitel Lync PlugIn. Mitel Lync plug-in is an application that integrates with Microsoft Lync Client and allows Microsoft Lync users to use Mitel telephony functionality through its feature rich MiCollab Client infrastructure.

- **Integration with User and Services Provisioning:** MiCollab Client is supported in integrated mode only on the MiVoice 5000 or MiVoice MX-ONE. In this mode, the MiCollab system keeps the User and Services database and client database synchronized so they function like a single database on the MiCollab server. On the MiVoice 5000 and MiVoice MX-ONE user provisioning is performed from the call manager platform.

**Desktop Softphone, Web Portal, and Mobile Client Support**

- **Softphone:** provides mobile users with access to MiVoice Business, MiVoice MX-ONE and MiVoice 5000 features from a remote PC or laptop. When remotely connected to a MiVoice Business, MiVoice MX-ONE, or MiVoice 5000 platform via a secure network connection, users can make and receive calls as though they were on the corporate network.

- **Softphone (SIP-based):** supports the use of Session Initiation Protocol (SIP) softphones from remote PCs or laptops as well as Mobile devices. Desktop clients utilizing SIP-based softphone can also take advantage of video calling functionality.

- **Web Portal:** provides a web-based interface to a key subset of client features, perfect for users who are remote from the office.

- **Mobile Clients:** Supported for BlackBerry®, Android™, Windows Mobile, and iPhone™.

**UNSUPPORTED FEATURES: MIVOICE 5000 AND MIVOICE MX-ONE**

- **Routing of Preferential Contacts:** The MiCollab Client Call Forwarding feature allows users to:
  - forward to any non-PRG destinations.
  - add special routing for preferential contacts.
  - send calls to dynamic extensions.

  There is no option to set the preferential routing information via CSTA on the MiVoice 5000 or MiVoice MX-ONE.

- **Call Handoff:** Users on Mobile device can use the Call Handoff feature (ability to push a call to other devices within the Personal Ring Group). This feature is limited to users on MiVoice Business communication platforms only.

- **Conference:** Allows you to create a conference between you, the caller on a current call, and the contacts that you select. After you establish a conference, you can then exit the conference.

- **Split Conference Split:** Allows you to split a three-party conference into two separate calls. When a three-party conference is split, the last party added to the conference is placed on hold, while you remain connected to the first party. After you split a conference, you cannot reconnect all parties into one call.
• **Auto Answer:** Incoming calls are answered at the first ring by the selected device (Desk Phone or Softphone). Users enable and disable this feature from the Dynamic Status dialog box on the Desktop Client.

• **Attendant/Receptionist Console Features and Presence:** Provides attendants and receptionists with console features and presence information allowing them to process calls efficiently.

• **Call Information (Call with info):** The `<info>` part of “Call with info” is handled within MiCollab Client application, not inside the PBX. This feature is not supported because of the MiCollab Client in SIP softphone mode doesn’t support “Call with info”.

• **Hot Desking:** Hot Desking allows anyone with a Hot Desk DN and User PIN to log in to an available hot desk-enabled telephone. Once logged in, the user can
  - Receive incoming calls at the set
  - Place outgoing calls
  - Retrieve voice messages
  - Program and use feature keys.

• **External Hot Desking User:** External Hot Desking extends hot desking capabilities to an external device, which makes it appear as an extension on the system. When the external hot desk user (EHDU) is logged in to the communications platform, a caller only needs to dial the extension number assigned to the user and the system automatically rings the user's cell phone, home phone or other device of choice—including an extension on another private network or PBX.

• **Mobile Clients:** iPad™ is not currently supported.

• **Dynamic Status - Selective Ringing:** Although the MiVoice 5000 and the MiVoice MX-ONE support dynamic status, they do not support the selective ringing of devices in the users' ring groups.

• **Console:** provides attendants and receptionists with console features and presence information allowing them to process calls efficiently.

• **MiCollab Co-located Mode:** In this mode, the Users and Services data and client data are contained in separate, independent databases on the MiCollab server. This mode is only supported for sites with either MiVoice Business or MiVoice Office platforms. With this mode, you must provision MiCollab Client services separately from the MiCollab Client Service Administration interface. Single point provisioning of MiCollab Client services is not supported.
A
AIID handling 48
AMC 37
Application Management Centre 37
Applications
for MiVoice Business 3
notes 139
supported by communication platforms 3
supported versions 3
Audio, web and video
integration with MiVoice 5000 51
integration with MiVoice MX-ONE 101
SIP server settings 57
AWV 16, 27, 155
COS settings for ports 22
SIP server settings 57

B
BluStar Server
installation 38, 78
purpose 33, 73
Broadcast priority 47

C
Class of service settings
for application ports 22
for MiCollab users 21
for services 22
Client station support 4
Common Service Profile 105
Conditions and limitations
for MiVoice 5000 integration 35
MiVoice MX-ONE 75
Contacts
corporate 140
non-corporate 140
COS settings
for MiCollab users 21
for ports 22
for services 22
CSTA port 60, 119

E
Element identification 6, 25

F
Force Calls 108

G
Guide, purpose of 3

H
HCI Reroute 10
Hunt Group 51, 102
creating 18
extended 17
programming 9
record a call 9
voicemail programming 8

I
ICP, configuration 58
IDS 67
Initial configuration with MiCW 6, 25
Install platforms
MiVoice 5000 38
MiVoice MX-ONE 78
Integrated Directory Services 67, 120
Integration
diagram, for MiVoice 5000 34
diagram, for MiVoice MX-ONE 74
procedure for MiVoice 5000 37
procedure for MX-ONE 77
requirements for MiVoice 5000 35
requirements for MiVoice MX-ONE 74
with MiVoice 5000 37
with MiVoice MX-ONE 77

L
LDAP Authentication
MiVoice 5000 36
MiVoice MX-ONE 76
Licensing 36
for MiCollab 36
for MiVoice 5000 36
for MiVoice MX-ONE 77
Line group, programming 11

M
Maintenance 21, 29
Manual configuration, of MiVoice Business 6, 25
MBG
configuration 14, 26
integrate with MiVoice 5000 57
MD5 password 55
Message waiting indication, programming 10
MiCollab
- API for MiVoice 5000 39, 79
- licensing 36
- programming for NP-UM 11
- Server Appliance 36

MiCollab AWV
- COS settings for ports 22
- description 16, 27, 155

MiCollab Client
- initial configuration 19, 29
- Integration Mode 38
- MiVoice 5000 integration 60
- MiVoice MX-ONE integration 118
- supported features 144
- micollab_api password 39, 79

Mitel Integration Configuration Wizard 76

MiVoice 5000
- connection configuration 67
- Integration diagram 34
- integration overview 33
- integration requirements 35
- Integration procedure 37
- LDAP Authentication 36
- licensing 36
- Management Portal 33
- Manager 33
- NP-UM Unsupported Features 141
- NuPoint integration 40
- supported applications 3
- sync databases 67
- user capacities 36

MiVoice Border Gateway
- configuration 14, 26
- integrate MiVoice MX-ONE 117
- integrate with MiVoice 5000 57

MiVoice Business
- programming NP-UM 7, 26
- supported applications 3

MiVoice MX-ONE
- conditions and limitations 75
- integrate AWV 101
- integrate with MBG 117
- Integration diagram 74
- integration overview 73
- integration procedure 77
- integration requirements 35, 74
- Integration procedure 77
- licensing 77
- MiCollab client integration 118

NP-UM Unsupported Features 141
- NuPoint integration 81
- supported applications 3
- MMP 33
- Multi-company management mode
  - for MiVoice 5000 36
  - for MiVoice MX-ONE 76
- MWI, programming 10
- MX-ONE Provisioning Manager interface 73

N
- Network elements
  - create for MiVoice 5000 38
  - identification 6, 25
- Non-corporate contacts 140
- NP-UM
  - configuration 7, 26
  - default COSs 22
- Number Presentation Category 107
- NuPoint Integration
  - with MiVoice 5000 40
  - with MiVoice MX-ONE 81
- NuPoint Unified Messaging
  - configuration 7, 26
  - default COSs 22

O
- ORIA, not supported 36
- Overview
  - MiVoice 5000 integration 33
  - MiVoice MX-ONE integration 73

P
- Parallel ringing 75
- PBX interoperability 4
- Ports 8
- Private direction 43
- Purpose, of this guide 3

R
- Record a Call 7, 9
- Redirect Server 34, 74
- RFC 4733 108

S
- Secure recording connector 57
- Service Node Manager 110
- SIP
gateway 41, 79
server 79
trunk integration for MiVoice 5000 40
trunk integration for MiVoice MX-ONE 81
Software upgrade 21, 29
Speech Auto Attendant 9, 75
Speech Navigation 3
System Administration Tool 21

T
Teleworker application, configuration 14, 26
Testing NuPoint
   MiVoice 5000 50
   MiVoice MX-ONE 100
Traffic Category 107

Types of users 140

U
User and services provisioning 69, 120
User capacity
   MiVoice 5000 36
   MiVoice MX-ONE 75
User pictures, not imported 36
User types 140
USP templates 73

V
Voicemail
   hunt group programming 8
   ports, programming 7
Appendix A

AUDIO, WEB AND VIDEO

CONFERENCING VOICE PROMPTS
Voice Prompts

The following table lists the English (United States) voice prompts available in the MiCollab Audio, Web and Video Conferencing product. The prompt numbers and names listed are the same for all available languages.

The following table lists the English (United States) voice prompts.

<table>
<thead>
<tr>
<th>#</th>
<th>Prompt Name</th>
<th>Script</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>TURN_OFF_MUSIC</td>
<td>To turn off the music, press one.</td>
</tr>
<tr>
<td>1</td>
<td>WELCOME</td>
<td>Welcome to the conference center.</td>
</tr>
<tr>
<td>2</td>
<td>ENTER_PIN</td>
<td>Enter an access code, and then press #. To cancel, press *.</td>
</tr>
<tr>
<td>3</td>
<td>CANCELLED_RETRY</td>
<td>Cancelled. Please try again.</td>
</tr>
<tr>
<td>4</td>
<td>FIRST_BADPIN</td>
<td>That access code isn’t recognized — please try again.</td>
</tr>
<tr>
<td>5</td>
<td>NEXT_BAD_PIN</td>
<td>That access code isn’t recognized.</td>
</tr>
<tr>
<td>6</td>
<td>REENTER_PIN</td>
<td>To enter another code, press *.</td>
</tr>
<tr>
<td>7</td>
<td>REENTER_END</td>
<td>To enter another code, press *, or to end this call, press #.</td>
</tr>
<tr>
<td>8</td>
<td>REENTER_ASSIST</td>
<td>To enter another code, press *, or for assistance, press zero.</td>
</tr>
<tr>
<td>9</td>
<td>SAY_NAME</td>
<td>At the tone, say your name and then press #. &lt;beep&gt;</td>
</tr>
<tr>
<td>10</td>
<td>NO_LEADER</td>
<td>The leader hasn’t activated this call yet. Please stay on the line.</td>
</tr>
<tr>
<td>11</td>
<td>GOODBYE</td>
<td>Thank you for calling the conference center. Goodbye.</td>
</tr>
<tr>
<td>12</td>
<td>CONNECTING</td>
<td>One moment while your call is connected.</td>
</tr>
<tr>
<td>13</td>
<td>TOO_EARLY</td>
<td>That conference hasn’t started yet.</td>
</tr>
<tr>
<td>14</td>
<td>TOO_LATE</td>
<td>That conference has already ended.</td>
</tr>
<tr>
<td>15</td>
<td>CALL_NOT_AVAIL</td>
<td>That conference isn’t available now.</td>
</tr>
<tr>
<td>16</td>
<td>NO_OPER</td>
<td>I’m sorry, the operator isn’t available now.</td>
</tr>
<tr>
<td>17</td>
<td>FIRSTCALLER</td>
<td>You’re the first person in this conference. Please stay on the line.</td>
</tr>
<tr>
<td>18</td>
<td>CAN’T_COMPLETE</td>
<td>Sorry, we’re unable to complete your call.</td>
</tr>
<tr>
<td>19</td>
<td>CALLER_UNAVAIL</td>
<td>That person isn’t available right now.</td>
</tr>
<tr>
<td>20</td>
<td>ZERO</td>
<td>Zero</td>
</tr>
<tr>
<td>#</td>
<td>PROMPT NAME</td>
<td>SCRIPT</td>
</tr>
<tr>
<td>----</td>
<td>----------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>21</td>
<td>ONE</td>
<td>One</td>
</tr>
<tr>
<td>22</td>
<td>TWO</td>
<td>Two</td>
</tr>
<tr>
<td>23</td>
<td>THREE</td>
<td>Three</td>
</tr>
<tr>
<td>24</td>
<td>FOUR</td>
<td>Four</td>
</tr>
<tr>
<td>25</td>
<td>FIVE</td>
<td>Five</td>
</tr>
<tr>
<td>26</td>
<td>SIX</td>
<td>Six</td>
</tr>
<tr>
<td>27</td>
<td>SEVEN</td>
<td>Seven</td>
</tr>
<tr>
<td>28</td>
<td>EIGHT</td>
<td>Eight</td>
</tr>
<tr>
<td>29</td>
<td>NINE</td>
<td>Nine</td>
</tr>
<tr>
<td>30</td>
<td>ONE_MOMENT</td>
<td>One moment, please.</td>
</tr>
<tr>
<td>31</td>
<td>NO_PORTS</td>
<td>All circuits are busy. Please try again in a few minutes.</td>
</tr>
<tr>
<td>32</td>
<td>DBL_POUND</td>
<td>At any time, you may press the # key twice for a list of options.</td>
</tr>
<tr>
<td>33</td>
<td>RECORDING_END</td>
<td>The recording has ended. To start again, press one. Otherwise, you may hang up.</td>
</tr>
<tr>
<td>34</td>
<td>PAUSED</td>
<td>Paused. To resume, press two.</td>
</tr>
<tr>
<td>35</td>
<td>RECORDINGS</td>
<td>Recordings</td>
</tr>
<tr>
<td>36</td>
<td>DIALOUT_CONFIRM</td>
<td>You’ve been invited to a conference call. To join, press one. To decline, press two.</td>
</tr>
<tr>
<td>37</td>
<td>DECLINED</td>
<td>Invitation declined. Goodbye.</td>
</tr>
<tr>
<td>40</td>
<td>LIST_NAMES</td>
<td>For a list of names, press three.</td>
</tr>
<tr>
<td>41</td>
<td>PLACE_CALL</td>
<td>To place a call, press two.</td>
</tr>
<tr>
<td>42</td>
<td>NO_NAMES</td>
<td>Names are not available.</td>
</tr>
<tr>
<td>43</td>
<td>RETURN_CONF</td>
<td>To return to the conference, press *.</td>
</tr>
<tr>
<td>44</td>
<td>INVALID_OPTION</td>
<td>Sorry, that's not a recognized option.</td>
</tr>
<tr>
<td>45</td>
<td>OPTION_NA</td>
<td>Sorry, that option isn’t available.</td>
</tr>
<tr>
<td>46</td>
<td>RETURNING</td>
<td>Returning to conference.</td>
</tr>
<tr>
<td>47</td>
<td>2ND_LEG_2WAY</td>
<td>Do you want to keep this call? To keep the call and return to the conference, press one. To drop the call and return, press two.</td>
</tr>
<tr>
<td>#</td>
<td>PROMPT NAME</td>
<td>SCRIPT</td>
</tr>
<tr>
<td>----</td>
<td>------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>48</td>
<td>BUSY</td>
<td>That number is busy.</td>
</tr>
<tr>
<td>49</td>
<td>CALL_2WAY</td>
<td>To return to the conference, press *. To try another number, press one.</td>
</tr>
<tr>
<td>50</td>
<td>CANT_JOIN</td>
<td>I’m sorry. The call leader hasn’t given approval for you to join this conference. Goodbye.</td>
</tr>
<tr>
<td>51</td>
<td>HUNG_UP</td>
<td>The person you called is no longer on the line.</td>
</tr>
<tr>
<td>52</td>
<td>INCOMPLETE_CALL</td>
<td>Sorry, we couldn’t complete your call.</td>
</tr>
<tr>
<td>53</td>
<td>JOINING</td>
<td>Now joining...</td>
</tr>
<tr>
<td>54</td>
<td>NAME_2WAY</td>
<td>I’m not sure if you recorded a name. To keep this recording, press one. To try again, press two.</td>
</tr>
<tr>
<td>55</td>
<td>NEXT_NO_NAME</td>
<td>Sorry, I still didn’t hear you say a name. You can’t join the conference until you record your name. To try again, press one.</td>
</tr>
<tr>
<td>56</td>
<td>NO_ANSWER</td>
<td>There’s no answer at that number.</td>
</tr>
<tr>
<td>57</td>
<td>MAGIC_KEY</td>
<td>Ready to place a call. To return to the conference at any time, press the * key twice.</td>
</tr>
<tr>
<td>58</td>
<td>NO_NAME</td>
<td>Sorry, I didn’t hear you say a name.</td>
</tr>
<tr>
<td>59</td>
<td>RECORD_CANCELLED</td>
<td>Recording cancelled.</td>
</tr>
<tr>
<td>60</td>
<td>ROLLCALL</td>
<td>To cancel the list at any time, press *.</td>
</tr>
<tr>
<td>61</td>
<td>ROLLCALL_2WAY</td>
<td>To return to the conference, press *. To repeat the list, press one.</td>
</tr>
<tr>
<td>62</td>
<td>CANCELLED</td>
<td>Cancelled.</td>
</tr>
<tr>
<td>63</td>
<td>ENTER_NUMBER</td>
<td>Enter a phone number. When you have finished, press #.</td>
</tr>
<tr>
<td>64</td>
<td>DIAL_ANOTHER</td>
<td>Cancelled. You may dial another number now, or to return to the conference, press * .</td>
</tr>
<tr>
<td>65</td>
<td>INVALID_PHONE</td>
<td>Sorry, we’re unable to call that number. You may dial another number now, or to return to the conference, press * .</td>
</tr>
<tr>
<td>66</td>
<td>INVALID_PHONE2</td>
<td>Sorry, that phone number isn’t valid.</td>
</tr>
<tr>
<td>67</td>
<td>COUNT1</td>
<td>There are...</td>
</tr>
<tr>
<td>68</td>
<td>COUNT2</td>
<td>...people in this call.</td>
</tr>
<tr>
<td>69</td>
<td>TEN</td>
<td>Ten</td>
</tr>
<tr>
<td>70</td>
<td>ELEVEN</td>
<td>Eleven</td>
</tr>
<tr>
<td>71</td>
<td>TWELVE</td>
<td>Twelve</td>
</tr>
<tr>
<td>#</td>
<td>PROMPT NAME</td>
<td>SCRIPT</td>
</tr>
<tr>
<td>----</td>
<td>--------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>72</td>
<td>THIRTEEN</td>
<td>Thirteen</td>
</tr>
<tr>
<td>73</td>
<td>FOURTEEN</td>
<td>Fourteen</td>
</tr>
<tr>
<td>74</td>
<td>FIFTEEN</td>
<td>Fifteen</td>
</tr>
<tr>
<td>75</td>
<td>SIXTEEN</td>
<td>Sixteen</td>
</tr>
<tr>
<td>76</td>
<td>SEVENTEEN</td>
<td>Seventeen</td>
</tr>
<tr>
<td>77</td>
<td>EIGHTEEN</td>
<td>Eighteen</td>
</tr>
<tr>
<td>78</td>
<td>NINETEEN</td>
<td>Nineteen</td>
</tr>
<tr>
<td>79</td>
<td>TWENTY</td>
<td>Twenty</td>
</tr>
<tr>
<td>80</td>
<td>THIRTY</td>
<td>Thirty</td>
</tr>
<tr>
<td>81</td>
<td>FORTY</td>
<td>Forty</td>
</tr>
<tr>
<td>82</td>
<td>FIFTY</td>
<td>Fifty</td>
</tr>
<tr>
<td>83</td>
<td>SIXTY</td>
<td>Sixty</td>
</tr>
<tr>
<td>84</td>
<td>SEVENTY</td>
<td>Seventy</td>
</tr>
<tr>
<td>85</td>
<td>EIGHTY</td>
<td>Eighty</td>
</tr>
<tr>
<td>86</td>
<td>NINETY</td>
<td>Ninety</td>
</tr>
<tr>
<td>87</td>
<td>HUNDRED</td>
<td>Hundred</td>
</tr>
<tr>
<td>88</td>
<td>OPTIONS</td>
<td>Options.</td>
</tr>
<tr>
<td>89</td>
<td>DROPPED</td>
<td>The call has been dropped.</td>
</tr>
<tr>
<td>90</td>
<td>ONE_CALLER</td>
<td>There is one person in this call.</td>
</tr>
<tr>
<td>91</td>
<td>MUTE</td>
<td>To mute your line, press one.</td>
</tr>
<tr>
<td>92</td>
<td>UNMUTE</td>
<td>To unmute your line, press one.</td>
</tr>
<tr>
<td>93</td>
<td>NUMCALLERS</td>
<td>To hear the number of callers, press three.</td>
</tr>
<tr>
<td>94</td>
<td>CHECK_RETURN</td>
<td>To return to the conference, press * now. Otherwise select from the following options...</td>
</tr>
<tr>
<td>95</td>
<td>NAMES</td>
<td>Names.</td>
</tr>
<tr>
<td>96</td>
<td>DIALOUT_NO_PORTS</td>
<td>All circuits are busy. Please try your call again in a few minutes.</td>
</tr>
<tr>
<td>#</td>
<td>PROMPT NAME</td>
<td>SCRIPT</td>
</tr>
<tr>
<td>----</td>
<td>-------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>97</td>
<td>RECORD</td>
<td>This call is being recorded.</td>
</tr>
<tr>
<td>98</td>
<td>REC_STOP</td>
<td>The recording has been stopped.</td>
</tr>
<tr>
<td>99</td>
<td>TRY LATER</td>
<td>Please try your call again in a few minutes.</td>
</tr>
<tr>
<td>100</td>
<td>JOIN_TONE</td>
<td>&lt;Rising beep tone&gt;</td>
</tr>
<tr>
<td>101</td>
<td>LEAVE_TONE</td>
<td>&lt;Descending beep tone&gt;</td>
</tr>
<tr>
<td>102</td>
<td>MUTE_TONE</td>
<td>&lt;double beep tone&gt;</td>
</tr>
<tr>
<td>103</td>
<td>UNMUTE_TONE</td>
<td>&lt;triple beep tone&gt;</td>
</tr>
<tr>
<td>104</td>
<td>DIALTOJOIN</td>
<td>To join the call press one.</td>
</tr>
<tr>
<td>105</td>
<td>EOCP_CONFWILLEND</td>
<td>This conference will end in...</td>
</tr>
<tr>
<td>106</td>
<td>EOCP_MINUTES</td>
<td>...minutes.</td>
</tr>
<tr>
<td>107</td>
<td>EOCP_ENDNOW</td>
<td>Please conclude your conference now to avoid being disconnected when this conference terminates.</td>
</tr>
<tr>
<td>108</td>
<td>EOCP_LDREXTEND</td>
<td>The designated leader will now be asked to extend this conference. You may continue this conference while the leader is away.</td>
</tr>
<tr>
<td>109</td>
<td>EOCP_LDRMNU1</td>
<td>Extend conference. Press the * key to cancel and return to the conference at any time.</td>
</tr>
<tr>
<td>110</td>
<td>EOCP_LDRMNU2</td>
<td>To extend the conference for 15 minutes, press one; for 30 minutes, press two, for 45 minutes, press three; for 60 minutes, press four.</td>
</tr>
<tr>
<td>111</td>
<td>EOCP_EXTGOOD</td>
<td>This conference has been extended successfully.</td>
</tr>
<tr>
<td>112</td>
<td>EOCP_EXTFAIL</td>
<td>I'm sorry, currently there are not enough ports available to extend this conference for that length of time.</td>
</tr>
<tr>
<td>113</td>
<td>EOCP_TOOLONG</td>
<td>Please select a shorter extension period...</td>
</tr>
<tr>
<td>114</td>
<td>EOCP_ENDED</td>
<td>This call has ended. Goodbye.</td>
</tr>
<tr>
<td>115</td>
<td>EOCP_LDRMNU3</td>
<td>...or press the * key to return to the conference.</td>
</tr>
<tr>
<td>116</td>
<td>AUDIO_LOCKED</td>
<td>This conference has been locked by the leader.</td>
</tr>
<tr>
<td>117</td>
<td>AUDIO_LK_MNU1</td>
<td>To lock this conference, press 5.</td>
</tr>
<tr>
<td>118</td>
<td>AUDIO_LK_MNU2</td>
<td>To unlock this conference, press 5.</td>
</tr>
<tr>
<td>119</td>
<td>AUDIO_LK_ST_1</td>
<td>This meeting is now locked.</td>
</tr>
<tr>
<td>120</td>
<td>AUDIO_LK_ST_2</td>
<td>This meeting is now unlocked.</td>
</tr>
<tr>
<td>#</td>
<td>PROMPT NAME</td>
<td>SCRIPT</td>
</tr>
<tr>
<td>----</td>
<td>------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>121</td>
<td>PID_TOGGLE</td>
<td>To enter a Personal ID, press star.</td>
</tr>
<tr>
<td>122</td>
<td>PID_SELECT</td>
<td>Enter your Personal ID, then press pound.</td>
</tr>
<tr>
<td>123</td>
<td>ACODE_TOGGLE</td>
<td>To enter an Access Code, press star.</td>
</tr>
<tr>
<td>124</td>
<td>PID_SKIP</td>
<td>To skip your Personal ID, press star.</td>
</tr>
<tr>
<td>125</td>
<td>PID_RETRY</td>
<td>That Personal ID isn't recognized, please try again.</td>
</tr>
<tr>
<td>126</td>
<td>PID_FINAL</td>
<td>That Personal ID isn't recognized.</td>
</tr>
<tr>
<td>127</td>
<td>PID_APPROVAL</td>
<td>Access to this conference requires leader approval.</td>
</tr>
<tr>
<td>128</td>
<td>PID_LEADER</td>
<td>Contact your Conference Leader to accept your request to attend this conference.</td>
</tr>
<tr>
<td>129</td>
<td>PID_MNU_4</td>
<td>To enter your Personal ID, press 4.</td>
</tr>
<tr>
<td>130</td>
<td>PID_MNU_RET</td>
<td>To return to the conference, press star.</td>
</tr>
<tr>
<td>131</td>
<td>PID_NOT_REG</td>
<td>That Personal ID isn't registered for this conference.</td>
</tr>
<tr>
<td>132</td>
<td>PID_CHG_FAIL</td>
<td>There was an error when attempting to change your Personal ID.</td>
</tr>
<tr>
<td>133</td>
<td>ACODE_SELECT</td>
<td>Enter an Access Code, then press pound.</td>
</tr>
<tr>
<td>134</td>
<td>JOIN_MUTED</td>
<td>Your audio is muted. You can hear the conference but cannot speak unless enabled by the conference leader.</td>
</tr>
<tr>
<td>135</td>
<td>DUPLICATE_PID</td>
<td>This conference restricts duplicate Personal IDs. That Personal ID is already in use.</td>
</tr>
<tr>
<td>136</td>
<td>AUDIO_ONLY_CONF</td>
<td>You have accessed an audio-only conference. Video is not available.</td>
</tr>
</tbody>
</table>