

MiCollab Platform Integration Guide

- MiVoice Office 400
- MiVoice 5000
- MiVoice MX-ONE

RELEASE 8.1

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MiCollab Platform Integration Guide

Release 8.1

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Chapter 1

INTRODUCTION

PURPOSE OF THIS GUIDE

This guide provides instructions on how to configure the Mitel communication platforms to support the MiCollab applications.

COMMUNICATION PLATFORM SUPPORT

All the communication platforms (network elements) must be of the same type on a single MiCollab or a multi-MiCollab site deployment. You cannot connect MiCollab to a mix of different network elements (for example, MiVoice 5000 and MiVoice MX-ONE). Also, it is not possible to change 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.

SUPPORTED MICOLLAB APPLICATIONS

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

- Communications platform
- Deployment configuration, and
- MiCollab platform
-

MIVOICE OFFICE 400 PLATFORMS

The following MiCollab applications are supported:

- MiCollab Client
- MiCollab Audio, Web and Video (AWV) Conferencing
- Teleworker Service for MiCollab Client softphones (supported by the MiVoice Border Gateway service in MiCollab).
- MiVoice Skype for Business

MIVOICE 5000 AND MIVOICE MX-ONE PLATFORMS

The following MiCollab applications are supported:

- MiCollab NuPoint Unified Messaging (not standalone NuPoint Unified Messaging) or MiCollab Advanced Messaging
- MiCollab Client
- MiCollab Audio, Web and Video (AWV) Conferencing
- MiVoice Border Gateway: MiVoice Border Gateway: Refer to the *MiVoice Border Gateway Installation and Maintenance Guide* for a table of the supported features.
- MiVoice for Skype for Business

- Vidyo.

CLIENT STATION SUPPORT

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

Chapter 2

MIVOICE OFFICE 400 INTEGRATION

OVERVIEW

You can integrate a single MiCollab system with a single MiVoice Office 400 platform to provide MiCollab applications, such as MiCollab Client, Teleworker, and Audio, Web, and Video to users who are hosted on the MiVoice Office 400 platform.

- For MiCollab integrations with the MiVoice Office 400 system, the administrator performs user provisioning separately on both MiCollab and on the MiVoice Office 400 system.
- Roles and templates with associated UCC licenses are used to define the MiCollab services for MiCollab users in the Users and Services application.
- Licenses and Roles are used to define the services for MiVoice Office 400 users.

The administrator can import a CSV file of users entries from the MiVoice Office 400. The users can be assigned MiCollab roles in the CSV file and imported into MiCollab using the Bulk User Provisioning tool.

A typical integration consists of the components shown in Figure 1:

- **Communications Platform:** A single MiVoice Office 400 communications platform or Advanced Intelligent Network can be integrated with a single MiCollab system.
- **MiCollab Server:** Provides application services (AWV, MBG, and MiCollab Client) to MiVoice Office 400 users and supports MiCollab Client softphones for external users over the Internet.
 - Audio, Web and Video integrates with the MiVoice Office 400 using SIP terminals.
 - MiCollab Client softphones are integrated with the MiVoice Office 400 via SIP terminals. Computer Telephony Integration (CTI) is achieved via a CSTA Proxy in the MiCollab system.
 - MiVoice Border Gateway solution provides a secure communications path for remote MiCollab Client Softphones to the MiCollab Client Service. The MBG provides support for MiCollab Client softphones through the implementation of proprietary SIP headers, SIP feature enhancements, line enhancements, and security enhancements, along with administrator interface changes for its management.
 - MiCollab Client CSTA Proxy: Provides Computer Telephony Integration (CTI) between the MiVoice Office 400 and MiCollab Client to support telephony features such as "Click-to-Call" and line state.
- **Standalone MBG:** A standalone MBG server is installed in the Demilitarized Zone (DMZ) of a customer's existing firewall. The MiCollab MBG application must be clustered with the standalone MBG.
- **Firewall:** Protects corporate LAN from Internet.
- **Redirection and Configuration Service (RCS) 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.
- **Voice mail:** The voice messaging application embedded in the MiVoice Office 400 provides users with voice mail services.

- **SIP Terminals:** The Audio, Web and Conferencing application audio channels are configured in the MiVoice Office 400 Web Admin interface as an internal user group with standard SIP terminals.
- **Administration Interfaces:** User provisioning must be performed separately on both the MiVoice Office 400 and on MiCollab. The administrator provisions users on the
 - MiVoice Office 400 from the WebAdmin (Expert Mode), and on
 - MiCollab from the Users and Services application.

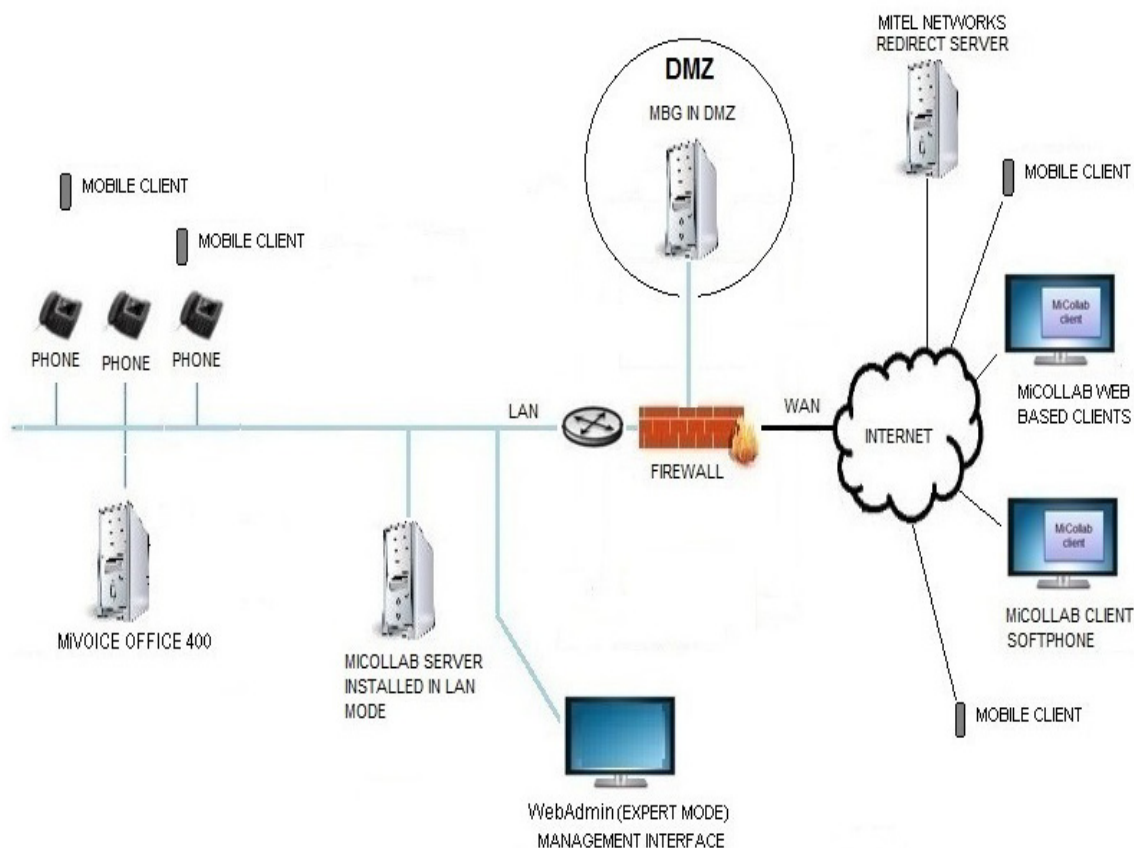


Figure 1: MiVoice Office 400 Integration

REQUIREMENTS

- Integration with MiCollab 7.2 or higher is supported with MiVoice Office 400 Release 4.1 or higher.
- MiCollab Client must be configured in Integrated Mode.

CONDITIONS AND LIMITATIONS

- The only supported configuration is a single MiVoice Office 400 or Advanced Integrated Network (AIN) with a single MiCollab server in the same network.
- Administrators must perform user and services provisioning (for example, adds or deletes) separately from both MiCollab Users and Services and the MiVoice Office 400 Web Admin.

- The MiCollab End User Portal is supported for MiVoice Office 400 users. It provides them with access to their user portal and AWW settings. However, a user's MiVoice Office 400 phones are not displayed in the portal interface.
- Voice messaging services are provided by the embedded voice mail application in the MiVoice Office 400. The NuPoint Unified Messaging application is not supported for MiVoice Office 400 integrations.
- MiCollab does not provide administrators with the ability to manage MiVoice Office 400 desk phones.
- MiCollab Integrated Directory Services does not support a connection to MiVoice Office 400 directory service.

LICENSING

To license the solution, you must apply licenses to both the MiCollab and the MiVoice Office 400. Separate licensing servers are used.

MIVOICE OFFICE 400 LICENSING

License the MiVoice Office 400 system from the Software License Server (SLS). Only MiVoice Office 400 certified technicians should apply licenses to the MiVoice Office 400.

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 Office 400.

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 server.
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 on-line 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 Office 400 platform.

- Install the communication platform and server
- Configure MiCollab into MiCollab Client Integrated Mode
- Create network elements
- Configure MiCollab system application settings
- Integrate with MiVoice Office 400:
 - Integrate MiCollab Server
 - Integrate Audio, Web and Video Conferencing
 - Integrate MiVoice Border Gateway
 - Integrate MiCollab Client Service
- Perform user and services provisioning.

If you are integrating an existing MiVoice Office 400 with a new MiCollab system, you can export a CSV file of user entries from the MiVoice Office 400 system. You can then import the user entries into the MiCollab system using the Bulk User Provisioning (BUP) tool in USP.

INSTALL COMMUNICATION PLATFORM AND SERVER

1. Install, license, configure, and provision the MiVoice Office 400. Refer to the MiVoice Office 400 documentation for instructions.
2. Install the MiCollab server.
3. Log into MiCollab server manager. Under **ServiceLink**, click **Install Applications** and then click the **Install Applications** tab. Set the ICP type to **MiVoice Office 400**.
4. Collect the following information for the integration:
 - MiCollab IP Address
 - MiVoice Office 400 IP Address.

CONFIGURE MICOLLAB CLIENT INTEGRATION MODE

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

CREATE NETWORK ELEMENT

Create the network element for the communication platform:

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 Office 400".
6. Enter the IP address of the MiVoice Office 400 Service Node Manager.
7. After you save your updates to the Network Element page, you are prompted to associate the element with 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 are downloaded from the AMC. The settings in the downloaded roles and templates do not apply to the MiVoice Office 400. However, after you assign a MiVoice Office 400 network element in the MiCollab Network Element page, the roles and templates are updated to reflect the settings for the MiVoice Office 400.

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

8. [Configure](#) the MiVoice Office 400 as a SIP Server in the MiCollab Audio, Web and Video application.

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 help for instructions.

INTEGRATE MICOLLAB SERVER WITH MIVOICE OFFICE 400

DEFINE MICOLLAB SERVER ON MIVOICE OFFICE 400

1. Log into the MiVoice Office 400 WebAdmin in Expert Mode.
2. Go to **Services > BluStar / MiCollab** (see Figure 2).

The screenshot shows the MiCollab configuration interface. On the left is a sidebar menu with categories: Permission set, Terminals, System, Routing, Services (highlighted with a red circle), Voice mail, Auto attendant, Music on hold, Announcement service, Conference, Message/Announcement, Text messages, SMSC / ESME, Time controlled functions, Mitel Mobile Client, Coded call, Hotline destinations, **BluStar / MiCollab** (highlighted with a red circle), Mitel Border Gateway, IP network, Private networking, Hospitality, and Multimedia. The main content area has buttons for 'Apply', 'Reload', and 'Export MiCollab Users'. Below these are fields for 'IP address / host name' (with a 'Configure BluStar server' button), 'SIP port' (5060), 'Calendar presence synchronisation via BluStar server' (checkbox), 'User name (SIP/LDAP/CSTA)' (bucs76000035), and 'Password (SIP/LDAP/CSTA)' (9zlumvIYYY). A section titled 'MiCollab' contains a 'MiCollab server' checkbox, an 'IP address / host name' field (with a 'Configure MiCollab server' button), a 'Description' field, 'User name (CSTA/LDAP)' (MiCollab1703143A), and 'Password (CSTA/LDAP)' (6OmCIBBO9c). Below this is a table for 'MiCollab role'.

ID (10)	Role definition	Role name
0	None	None
1	Basic User	Basic User
2	UCC Basic User	UCC (V4.0) Basic
3	UCC Entry User	UCC (V4.0) Entry
4	UCC Standard User	UCC (V4.0) Standard
5	UCC Standard Mobile User	UCC (V4.0) Standard - Mobile
6	UCC Premium User	UCC (V4.0) Premium

Figure 2: Configure BluStar/MiCollab Services

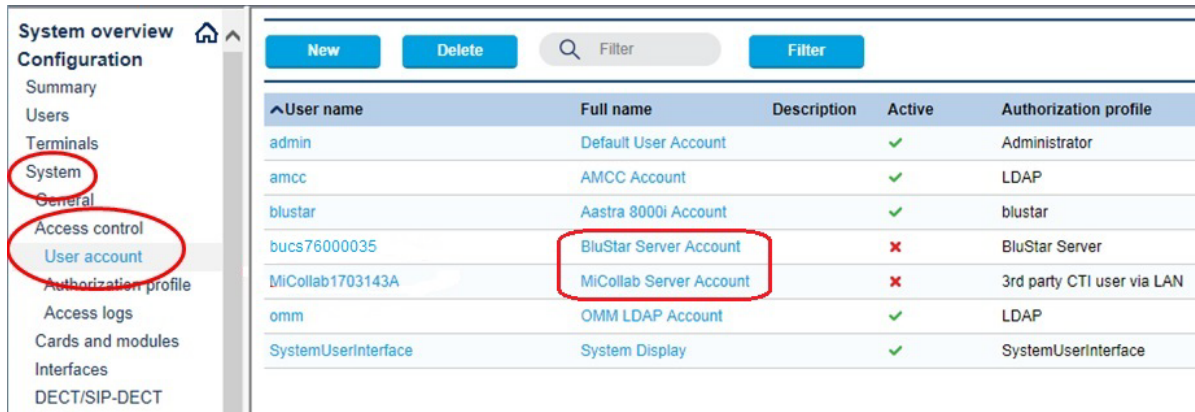
3. Complete the following fields:

- **MiCollab server:** Check the box.
- **IP address / host name:** Enter the IP Address or FQDN of the MiCollab server.
- **Description:** Enter a string, if desired, to identify the server.
- **User name / Password:** Cannot be changed here – see Figure 4.
- **MiCollab role:** The ID and Role Definition cannot be changed. If desired, modify the Role name to correspond to the name used in the MiCollab server.

CHANGE USER NAME AND / OR PASSWORD FOR CSTA

You must configure the CSTA user name and password on the MiVoice Office 400.

1. Go to **System > Access control > User account** (see Figure 3).



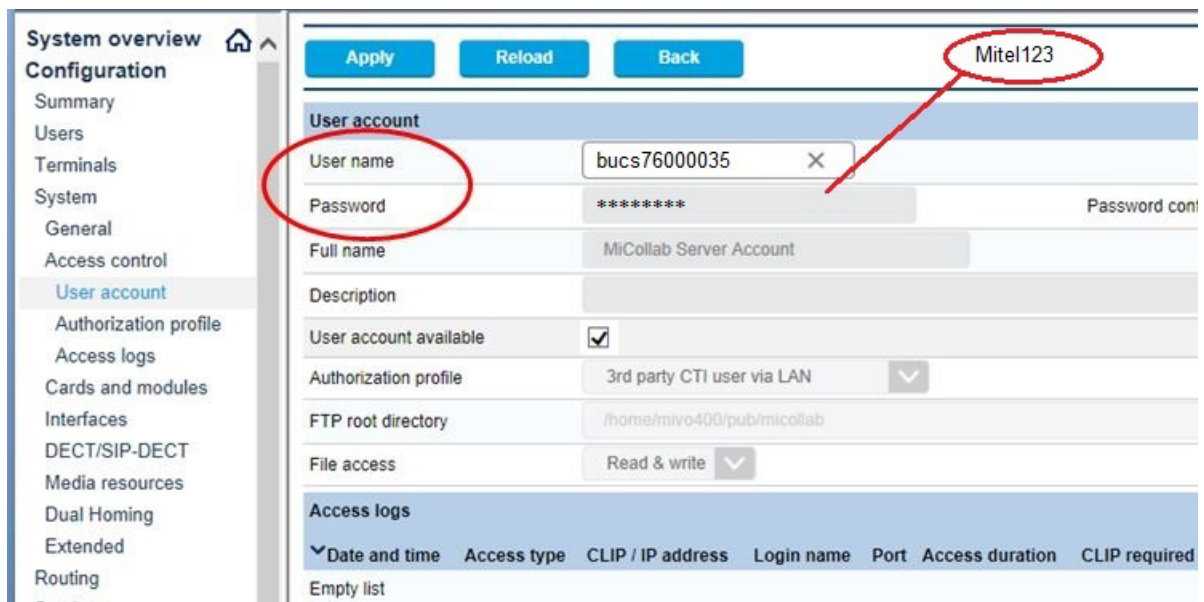
User name	Full name	Description	Active	Authorization profile
admin	Default User Account		✓	Administrator
amcc	AMCC Account		✓	LDAP
blustar	Aastra 8000i Account		✓	blustar
bucs76000035	BluStar Server Account		✗	BluStar Server
MiCollab1703143A	MiCollab Server Account		✗	3rd party CTI user via LAN
omm	OMM LDAP Account		✓	LDAP
SystemUserInterface	System Display		✓	SystemUserInterface

Figure 3: System > Access Control

2. Click **BluStar Server Account**.
3. Change the User name to "bucs1234". Leave the other fields at the defaults.
4. Click **MiCollab Server Account**.
5. Change the User name to "bucs76000035".
6. Change the Password to "Mitel123". Ensure that you activate the account. Leave the other fields at the defaults. See Figure 4.



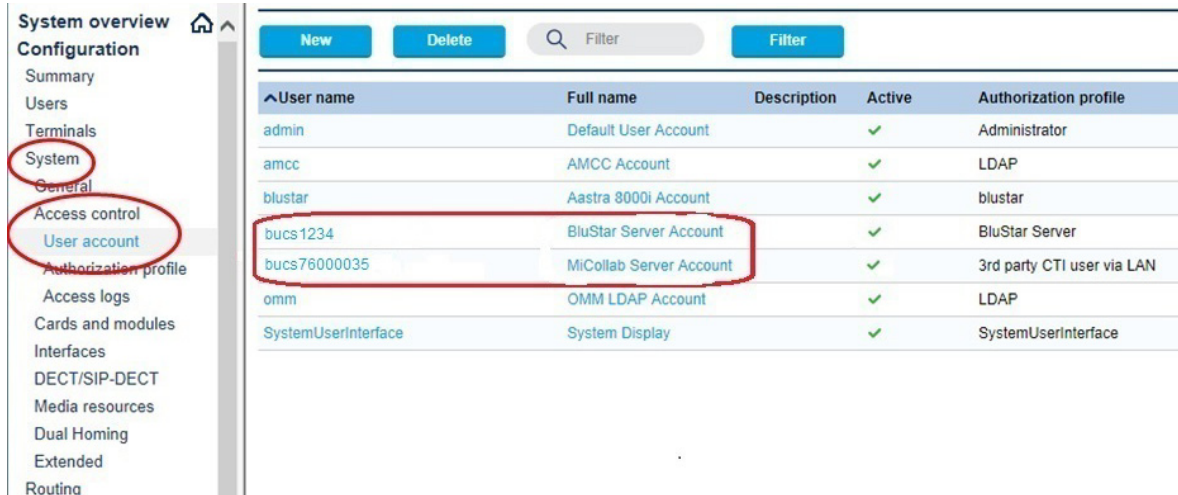
Note: After you enter and confirm the new password successfully, the Password and Password confirm fields are blank. Click **Services > BluStar / MiCollab** to confirm your password change.



User account	
User name	bucs76000035
Password	Mitel123
Full name	MiCollab Server Account
Description	
User account available	<input checked="" type="checkbox"/>
Authorization profile	3rd party CTI user via LAN
FTP root directory	/home/mivo400/pub/micollab
File access	Read & write
Access logs	
Date and time	Access type
CLIP / IP address	Login name
Port	Access duration
CLIP required	

Figure 4: Changing MiCollab Server Account User Name and Password

- Click **Apply**. The **System > User account** screen should appear as follows:



User name	Full name	Description	Active	Authorization profile
admin	Default User Account		✓	Administrator
amcc	AMCC Account		✓	LDAP
blustar	Aastra 8000i Account		✓	blustar
bucs1234	BluStar Server Account		✓	BluStar Server
bucs76000035	MiCollab Server Account		✓	3rd party CTI user via LAN
omm	OMM LDAP Account		✓	LDAP
SystemUserInterface	System Display		✓	SystemUserInterface

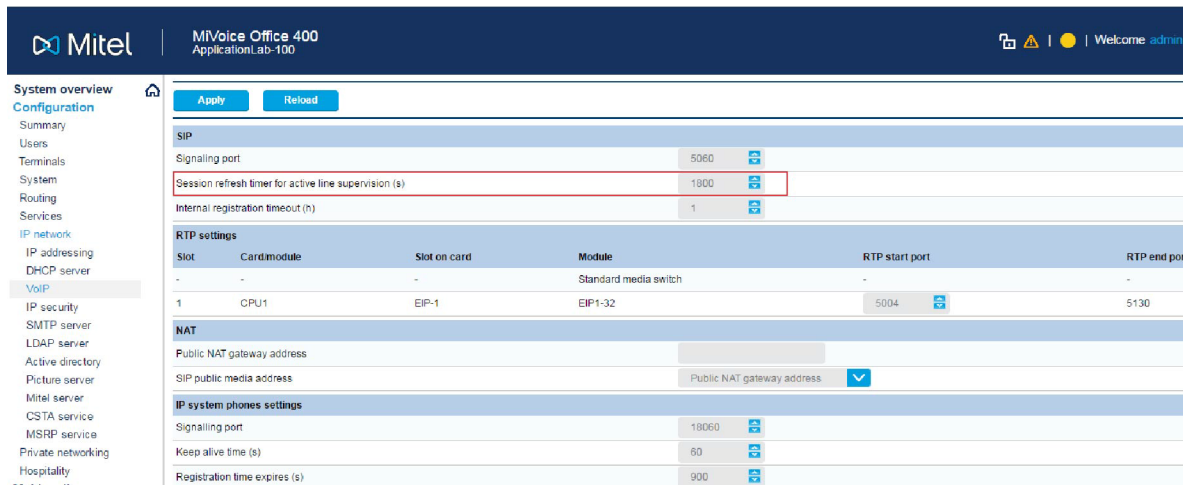
Figure 5: User Accounts

- Turn on the CSTA service under **Configuration > IP network > CSTA service**.

INITIAL MIVOICE OFFICE 400 CONFIGURATION

Configure MiVoice Office 400 to make inbound and outbound calls.

- Go to **MiVoice Office 400 Web Admin > Configuration > IP Network > VoIP**.
- Change **Session refresh timer for active line supervision (s)** from 3600 to 1800.



Slot	Card/module	Slot on card	Module	RTP start port	RTP end port
1	CPU1	EIP-1	EIP1-32	5004	5130

Figure 6: Initial Configuration

INTEGRATE AUDIO, WEB AND VIDEO (AWV)

To integrate the AWV application with the MiVoice Office 400, you must configure the MiVoice Office 400 system settings first, then configure the SIP server settings in the AWV application.

INSTALL MICOLLAB AWW 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.

CONNECT AWW APPLICATION TO MIVOICE OFFICE 400

You connect the AWW application to MiVoice Office 400 as an internal user group with standard SIP terminals. The work flow for initiating the SIP users / terminals and user group is as follows:

- Create the users and terminals.
- Configure the user group.

Create Users and Terminals

1. Log into the MiVoice Office 400 WebAdmin (Expert Mode).
2. Go to **Users > User list**
3. Click the **New** tab (see Figure 7).

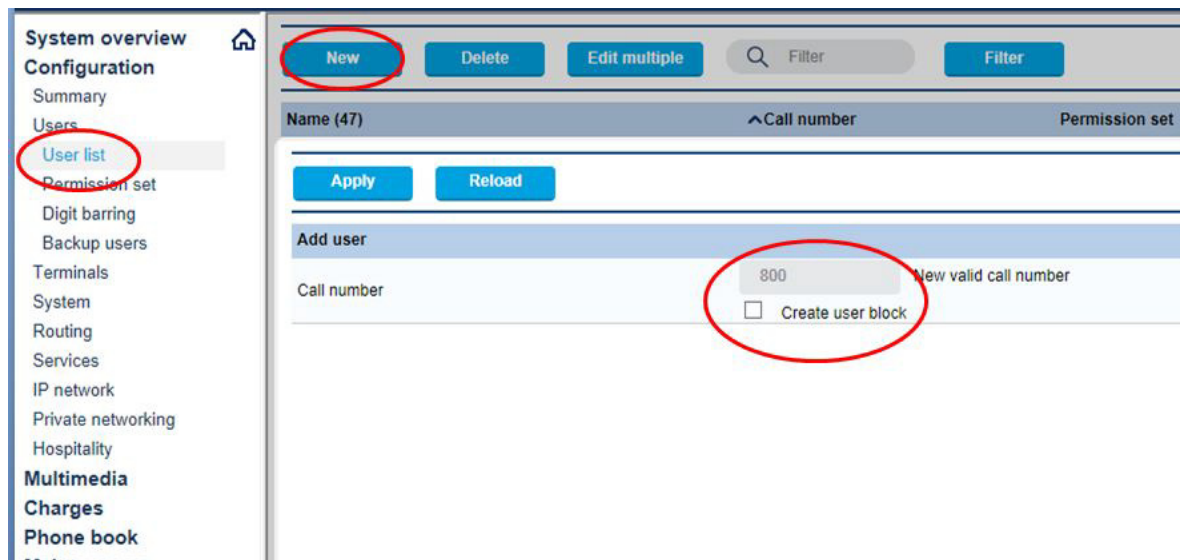


Figure 7: Create User Block

4. Enter the first telephone number for the block of users.
5. Check the **Create user block** box – The screen shown in Figure 8 appears.

The screenshot shows the 'Add user' form in the MiCollab Platform Configuration interface. The form is titled 'Add user' and includes the following fields and options:

- Call number start:** 800 (New valid call number)
- Call number end:** 803 (Valid block of call numbers)
- Route:** 1 (Dropdown menu)
- Cost centres:** (Dropdown menu)
- Voice mailbox:** ☒
- Assign terminal:** ☒
- Terminal interface:** Standard SIP (Dropdown menu)
- Terminal type:** SIP terminal (Dropdown menu)
- Description:** AWV Terminal
- BluStar Video Softphone:** ☐


The 'Add user' button is highlighted in blue. The left sidebar contains a navigation menu with categories like System overview, Configuration, Multimedia, Charges, Phone book, Maintenance, and Setup wizard.

Figure 8: Create User Block

6. Enter the following parameters:
 - **Call number end:** Enter the last number for the block of users.
 - **Assign terminal:** Check the box.
 - **Terminal interface:** Select **Standard SIP**.
 - **Description:** Enter a string, if desired, to identify the terminals.
 - All other parameters can be left at their default values.
 - Click **Apply**.
7. Change the SIP user name and password for each terminal:
 - Go to **Terminals > Standard terminals**.
 - Select each terminal in turn (see Figure 9).
 - Change **SIP user name** to be the same as the telephone number.
 - Use the **SIP password** that is provided by the administration interface (for example: h1xgTHhR).
 - Click **Apply**.



Note: All created Standard-SIP phones require the same SIP password. Copy the password of the first SIP phone and paste it to all the others.

System overview 

Configuration

- Summary
- Users
- User list
- Permission set
- Digit barring
- Backup users
- Terminals**
- Standard terminals
- Free seating phones
- Backup terminals
- Phone labels
- SIP registration

System

Routing

Services

IP network

Private networking

Hospitality

Multimedia

Charges

Phone book


Maintenance

Setup wizard

Apply **Reload** **Back**


Select


<< SIP terminal, 801

Emergency destinations None 


Force call waiting ☐

Special ringing tone ☐

PSTN overflow No 


Region None 

Connection settings

State  Not registered

IP address -

SIP port 5060


MBG controller None 

SIP user name 801-gc

SIP password h1xgTHhR

MBG SIP user name

MBG SIP password

Used transport protocol UDP or TCP 

Enable keep alive ☐


Send redirecting information Yes, using 'Diversion header (non-recursing)' 

Figure 9: SIP User Names and Password

Configure the User Group

1. Go to **Routing > List view > User groups** (see Figure 10).

System overview		Configured			Filter	
Configuration						
Summary						
Users						
User list						
Permission set						
Digit barring						
Backup users						
Terminals						
Standard terminals						
Free seating phones						
Backup terminals						
Phone labels						
SIP registration						
System						
Routing						
Graphical view						
List view						
Network interfaces						
Trunk groups						
Route						
DDI plan						
Call distribution						
User groups						
Exchange						
Ext./Int. mapping						

30	Global	X	X	X
31	Global	X	X	X
32	Global	X	X	X
33	Global	X	X	X
34	Global	X	X	X
35	Global	X	X	X
36	Global	X	X	X
37	Global	X	X	X
38	Global	X	X	X
39	Global	X	X	X
40	Global	X	X	X
41	Global	X	X	X
42	Global	X	X	X
43	Global	X	X	X
44	Global	X	X	X
45	Global	X	X	X
46	Global	X	X	X
47	Global	X	X	X
48	Global	X	X	X

Figure 10: Configure User Groups

2. Select an unused user group. The following screen is displayed.

The screenshot shows a web-based configuration interface for MiCollab AWW. At the top, there's a header with 'Configured' and two 'Filter' buttons. Below this is a modal window with a close button (X) in the top right corner. Inside the modal, there are two buttons: 'Apply' and 'Reload'. The main form is titled 'User group' and contains several input fields: 'User group number' (39), 'Call number' (811) with a note 'New valid call number', 'Name' (MiCollab AWW), and 'Call distribution' (Cyclic). Below these fields are two sections: 'Main group' and 'Delayed subgroup'. Each section has an 'Add' button and a list of numbers (800, 801, 802) with red 'X' icons and up/down arrows. At the bottom of the modal is a 'Destination and settings' section with four checkboxes: 'Large user group', 'General bell', 'General bell delay', and 'Operator console'. Below the modal, there are two rows of 'Global' settings, each with three red 'X' icons.

Figure 11: Adding New Group

3. Enter the following parameters:
 - **Call number:** Enter the internal telephone number for AWW.
 - **Name:** Enter a string, if desired (advisable).
 - **Main group:** Add the numbers of the previously created users.
 - **Call distribution:** Change to **Cyclic**.
 - **Large user group:** Check this box if there are more than 16 members of the group.
 - All other parameters can be left at their default values.
 - Click **Apply**.

CONFIGURE SIP SERVER SETTINGS IN MICOLLAB AWW

Configure the SIP Server settings in MiCollab Audio, Web and Video Conferencing using the account information from the Mitel MiVoice Office 400 system configuration:

1. Log into the MiCollab server manager interface.
2. Under **Applications**, click **Audio, Web and Video Conferencing**.
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 400** for 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 user 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 user 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. This field is mandatory. It is the SIP password of the standard SIP terminals belonging to the users in the user group.
 - **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 (MBG)

MiVoice Border Gateway provides a secure communications path for remote MiCollab Client users to the MiCollab Client Service. Only MiCollab clients are supported as Teleworker devices on MiVoice Office 400 systems.



Note: Mitel 6800 and 6900 Series SIP Phones can be used as Teleworker devices on a MBG in conjunction with a MiVoice Office 400 communication platform. The devices will not be visible or managed through MiCollab **Users and Services**. The system administrator is responsible to set up Mitel 6800/6900 series SIP phones using a configuration file. For instructions, see *Mitel SIP Teleworker via MBG on MiVoice Office 400 Deployment Guide*.

CONFIGURE MBG

1. Configure a MBG in the DMZ and cluster with the MiCollab-MBG in the LAN (recommended configuration). When you create the network element in the MiCollab USP network element tab, the network element is automatically added to the embedded MiVoice Border Gateway (MBG) application.
2. Set the MBG SIP Capabilities for the MiVoice Office 400 to UDP, TCP.

Manage ICP

Name	MiVoice Office 400	Hostname or IP address	88.88.88.88
Type	MiVoice Office 400	Installer password	
SIP capabilities	UDP, TCP	Indirect call recording capable	<input type="checkbox"/>

Figure 12: Configure MBG SIP Capabilities

- Configure the SIP settings:

SIP options

SIP support UDP <input type="checkbox"/> TCP <input checked="" type="checkbox"/> TCP/TLS <input checked="" type="checkbox"/>	Local streaming <input type="checkbox"/> Codec support Restricted to G.729, G RTP framesize Dynamic Set-side RTP security Allow Icp-side RTP security Disable Permit weak passwords <input type="checkbox"/> KPML username KPML password Confirm KPML password
Registration Mode Gap Set-side registration expiry time 240 ICP-side registration expiry time 900 Allowed URI names Add another Blank: any field you no longer want.	PRACK support <input type="checkbox"/> Send options keepalives Only behind NAT Options interval 20 Challenge methods Invite, Subscribe, Refer, Prack

Figure 13: Configure MBG SIP Settings

- Configure the "Network profile" according to the network configuration.

5. Configure the "Application Integration".

The screenshot shows the 'MiVoice Business Console' configuration interface. The 'MiCollab Client' section is highlighted with a red oval. It contains the following fields:

- MiCollab Client connector enabled**: ☒
- NuPoint voicemail hostname or IP address**:
- MiCollab Client hostname or server IP address**:
- Collaboration server hostname or IP address**:

Figure 14: Configure Application Integration

6. Configure the Web Proxy (for the Standalone MBG clustered only) to allow the connection between applications on the LAN and clients (for example, AWW, MiCollab Client) on the Internet.

INTEGRATE MICOLLAB CLIENT SERVICE

CONFIGURE MICOLLAB CLIENT

Refer to the MiCollab Client Service application help and the *MiCollab Client Administrator's Guide* for configuration information.

DEPLOY MICOLLAB CLIENT MOBILE CLIENTS

MiVoice Office 400 platforms support MiCollab for Mobile clients. 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

The MiCollab Client CSTA Proxy application supports the call control messaging between MiCollab and the MiVoice Office 400 platform to support MiCollab Client features such as "Click-to-Call".

1. Log into the MiCollab server manager.
2. Under **Applications**, click **MiCollab Client Service**.
3. Click **Configure MiCollab Client Service**.
4. Click **PBX Nodes**.
5. Double-click the system name or IP Address of the MiVoice Office 400.
6. Open **CSTA Settings**.
7. In the Port field, enter the number of the CSTA port on the MiVoice Office 400.
8. Refer to the on-line help for descriptions of the other fields. Typically, you will not need to change the default settings.

9. Click **Save**.

Configure MiCollab Client Deployment

1. Log into the MiCollab server manager interface.
2. Under **Applications** click **MiCollab Client Deployment**.
3. Refer to the MiCollab Client Deployment on-line help for instructions on how to configure and deploy the clients.

USER PROVISIONING

User provisioning must be performed using an export of user entries from the MiVoice Office 400. All additions must be done manually on both the MiCollab and MiVoice Office 400.

For the initial user provisioning you must complete the following steps:

- Create the users on MiVoice Office 400
- Export the CSV file of users
- Import the CSV file into the MiCollab bulk user provisioning.

CONFIGURE THE USERS ON MIVOICE OFFICE 400

1. Go to **Users > User list view**.
2. Click **New** (see Figure 15).
3. Enter the **Call number** of the new user

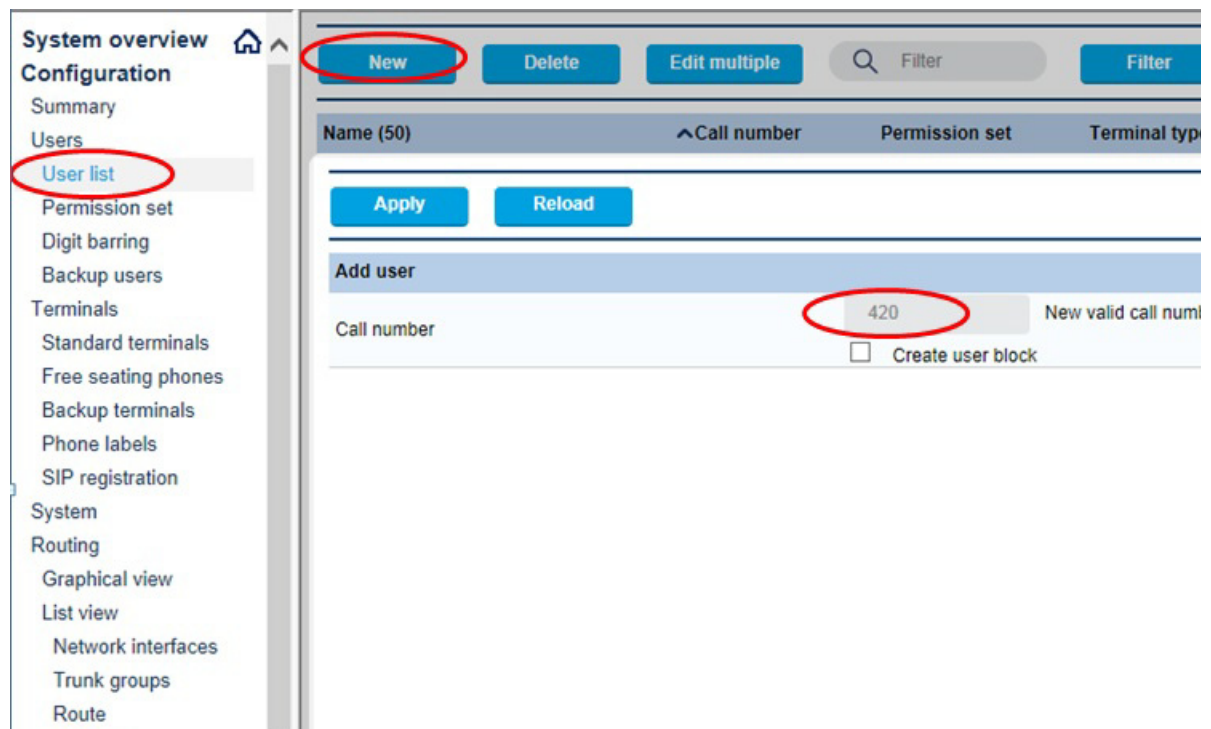


Figure 15: New User List

4. Click **Apply**.

System overview

Configuration

- Summary
- Users
 - User list**
 - Permission set
 - Digit barring
 - Backup users
- Terminals
 - Standard terminals
 - Free seating phones
 - Backup terminals
 - Phone labels
 - SIP registration
- System
- Routing
 - Graphical view
 - List view
 - Network interfaces
 - Trunk groups
 - Route
 - DDI plan
 - Call distribution
 - User groups
- Exchange
- Ext./Int. mapping
- Emergency destinations
- Data services
- LCR
- Blacklist

Apply **Reload** **Back** **Expand all sections**

Select

<< 420 >>

User

Call number 420

Name George Harrison

PIN **** Confirm PIN ****

Windows user name gharrison

Use PIN instead of password ☒

Password Password confirmation

E-mail address gharrison@mitel.com

User language English

Settings

Licence / Role 0 - None 0 - None

Permission set 1 [Go to permission set](#)

Authorization profile ---

Route 1 [Go to route](#)

Number of private contacts 50 [Go to phone book](#)

Cost centre None

Connection Normal

Use for CTI Not defined

Figure 16: User Configuration

5. Complete the following:

- **Name:** Enter the name of the user. Note that the first part (before the space) must be the surname and the second part (after the space) must be the first name. This is currently hard-coded in MiVoice Office 400.
- **PIN / Password:** One or the other should be entered and the tick box set accordingly.
- **Windows user name:** Required for some MiCollab roles. It is the Login Id.
- **E-mail address:** Required for some MiCollab roles.
- **License / Role:** Select the MiCollab bundle license and role from the drop down lists. (see Figure 17 and Figure 18).
- All other parameters can be left at their default values or changed if required.
- Click **Apply**.

System overview

Configuration

- Summary
- Users
 - User list**
 - Permission set
 - Digit barring
 - Backup users
- Terminals
 - Standard terminals
 - Free seating phones
 - Backup terminals
 - Phone labels
 - SIP registration
- System
- Routing
 - Graphical view
 - List view
 - Network interfaces
 - Trunk groups
 - Route
 - DDI plan
 - Call distribution
 - User groups
 - Exchange
 - Ext./Int. mapping
 - Emergency destinations
 - Data services
 - LCR
 - Blacklist

Apply **Reload** **Back** **Expand all sections**

Select << 420 >>

User

Call number

Name

PIN Confirm PIN

Windows user name

Use PIN instead of password ☒

Password Password confirmation

E-mail address

User language

Settings

Licence / Role 0 - None

Permission set [Go to permission set](#)

Authorization profile

Route [Go to route](#)

Number of private contacts [Go to phone book](#)

Cost centre

Connection

Use for CTI

Figure 17: Assign License

User

Call number

Name

PIN Confirm PIN

Windows user name

Use PIN instead of password ☒

Password Password confirmation

E-mail address

User language

Settings

Licence / Role

Permission set [Go to permission set](#)

Authorization profile

- 0 - None
- 1 - Basic User
- 2 - UCC (V4.0) Ba
- 3 - UCC (V4.0) Er
- 4 - UCC (V4.0) St
- 5 - UCC (V4.0) St
- 6 - UCC (V4.0) Pr
- 7 - MiCollab Clie
- 8 - Contact
- 9 - Custom

Figure 18: Assign Role

EXPORT LIST OF USERS

1. Go to **Services > BluStar / MiCollab** (see Figure 19).

Exchange
Ext./Int. mapping
Emergency destinations
Data services
LCR
Blacklist
CLIP based routing
Services
Voice mail
Auto attendant
Music on hold
Announcement service
Conference
Message/Announcement
Text messages
SMSC / ESME
Time controlled functions
Mitel Mobile Client
Coded call
Hotline destinations
BluStar / MiCollab
Mitel Border Gateway
IP network
Private networking
Hospitality
Multimedia
Charges
Phone book
Maintenance

Apply Reload **Export MiCollab Users**

Password (SIP/LDAP/CSTA) 9zIumvYYY

MiCollab

MiCollab server ☒ **Unlock account**

IP address / host name 10.100.88.204 **Configure MiCollab server**

SIP port 10255

Description

User name (CSTA/LDAP) MiCollab1703143A

Password (CSTA/LDAP) 6OmCIBBO9c **Regenerate password**

MiCollab role

ID (10)	Role definition	Role name
0	None	None
1	Basic User	Basic User
2	UCC Basic User	UCC (V4.0) Basic
3	UCC Entry User	UCC (V4.0) Entry
4	UCC Standard User	UCC (V4.0) Standard
5	UCC Standard Mobile User	UCC (V4.0) Standard - Mobile
6	UCC Premium User	UCC (V4.0) Premium
7	Teamwork Mode User	MiCollab Client Teamwork Mode User
8	Contact	Contact
9	Custom	Custom

Figure 19: BluStar / MiCollab

2. Click **Export MiCollab Users** to export a list of users in a CSV file.
3. Import the users into the MiCollab database using the Bulk User Provisioning tool. Refer to the MiCollab server manager help for instructions.
4. After you have imported the users into MiCollab, you must remember to perform all future user provisioning (for example adds or deletes) in both MiCollab Users and Services and the MiVoice Office 400 Web Admin.

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 20:

- **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 CSTA proxy on the MiCollab server.
 - MiVoice Border Gateway solution provides a secure communications path for remote MiCollab Client Softphones to the MiCollab Client Service. The MBG provides support for MiCollab Client Softphones through the implementation of proprietary SIP headers, SIP feature enhancements, line enhancements, and security enhancements, along with administrator interface changes for its management.
 - MiCollab Client CSTA Proxy: 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 CSTA proxy using CSTA II protocol.

- **Standalone MBG:** A standalone vMBG server can be installed in the Demilitarized Zone (DMZ) of a customer's existing firewall to support SIP Teleworker devices. The MiCollab MBG application must be clustered with the standalone MBG.
- **MiCollab Advanced Messaging (AVST) server:** An optional standalone server that can be used to provide voice messaging services.
- **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.

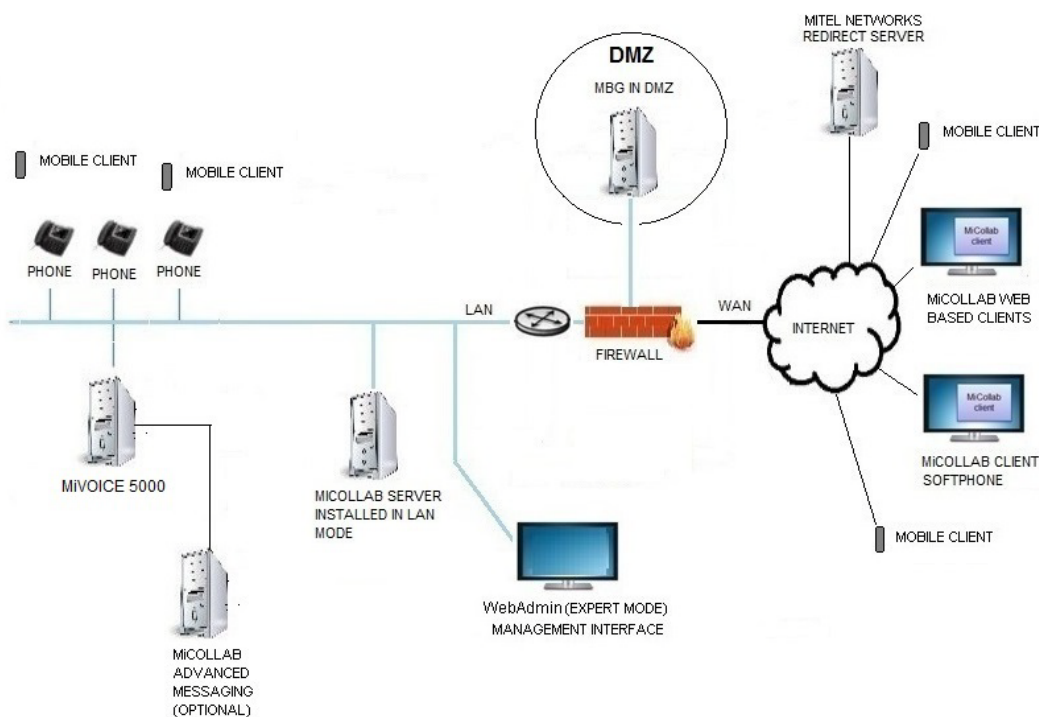


Figure 20: MiVoice 5000 Integration

REQUIREMENTS

- Integration with MiCollab 7.1 or higher is supported with MiVoice 5000 version 6.1 SP2 or higher and MiVoice 5000 Manager version 3.1 or higher.
- MiCollab Client service must be configured in Integrated Mode.

CONDITIONS AND LIMITATIONS

- One or more MiCollab servers (up to four) can provide applications services to the users on the MiVoice 5000 system in the same network.
- The integration of multiple MiCollab systems to the MiVoice 5000 platform is supported.
- 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.
- 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 service 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.
- Each MiCollab system supports a maximum of 5000 users. In a multi-MiCollab deployment, up to four peered MiCollab systems can be deployed to support a total of up to 20,000 users and 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 MiCollab End User Portal is supported for MiVoice 5000 users. It provides them with access to their user portal, voice mail, and AWW 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.
- 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 cannot be imported into the MiCollab Client server via the MX-ONE Provisioning Manager, but they can be imported directly from Active Directory using MiCollab Integrated Directory Services.
- 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

MIVoice 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.



Note: MiCollab Advanced Messaging (AVST) is not licensed through the AMC.

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
- 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 (or optionally install MiCollab Advanced Messaging server)
 - 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 "MiVoice 5000".
4. Collect the following information for the integration:
 - MiCollab IP address
 - MiVoice 5000 IP address.

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.



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 5000 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.
 - Default user templates cannot be modified, however you can modify the AWW system defaults that are applied to the default UCC templates.
10. [Configure](#) the MiVoice 5000 network element within the NuPoint Unified Messaging application
 - as a SIP GATEWAY, 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 21 illustrates the SIP trunk integration:

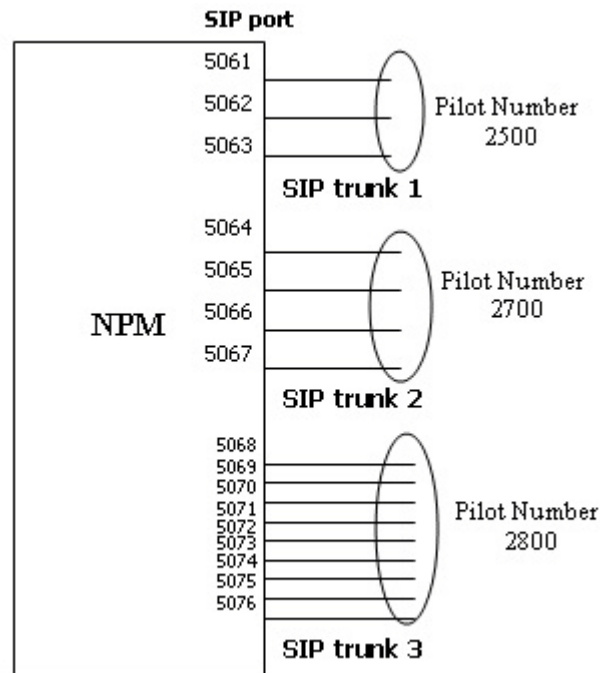


Figure 21: NuPoint SIP Trunk Integration

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.

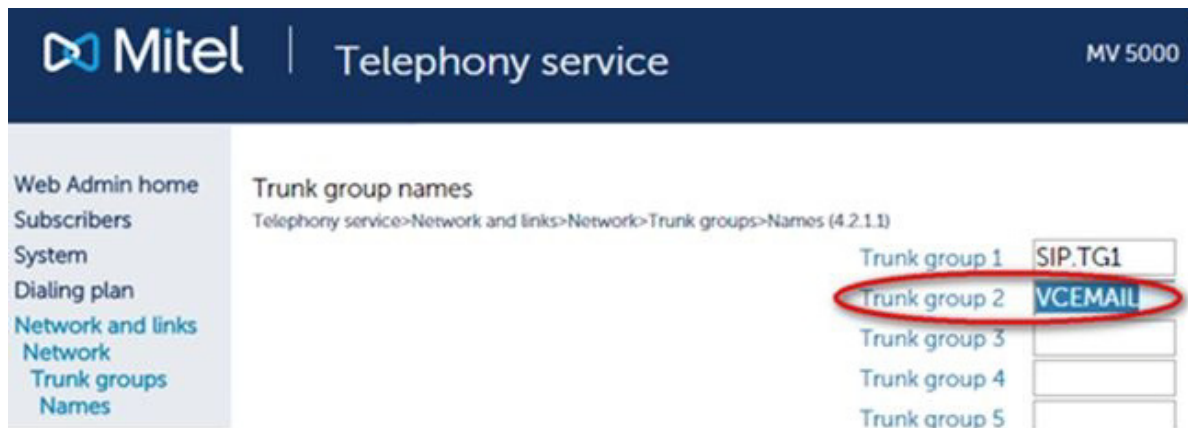


Figure 22: Trunk Group for MiCollab NuPoint

3. Specify Private Direction name.



Figure 23: Specify Private Direction Name

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



Figure 24: Call Routing Definition

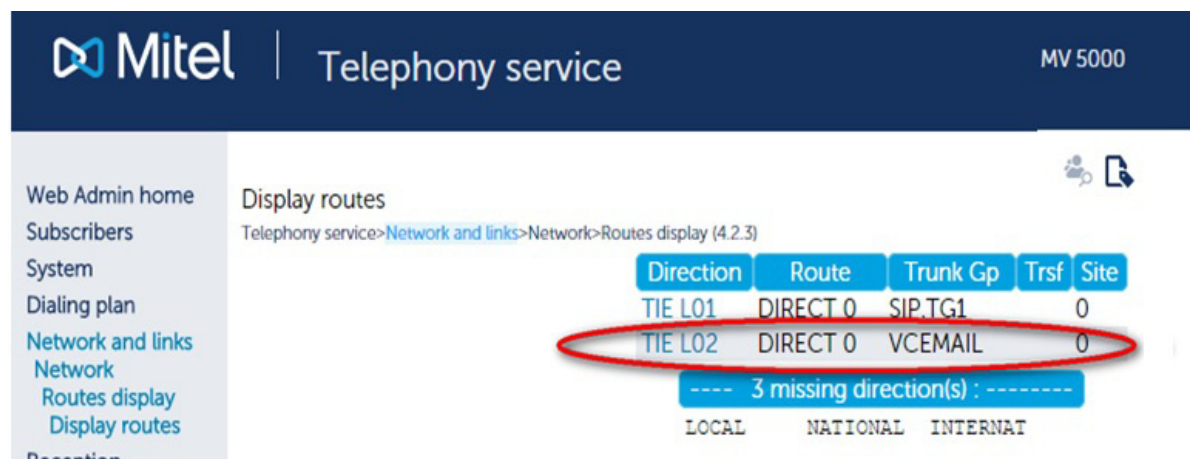


Figure 25: Display Routes

5. Enter an access code for direction (3.2.4).

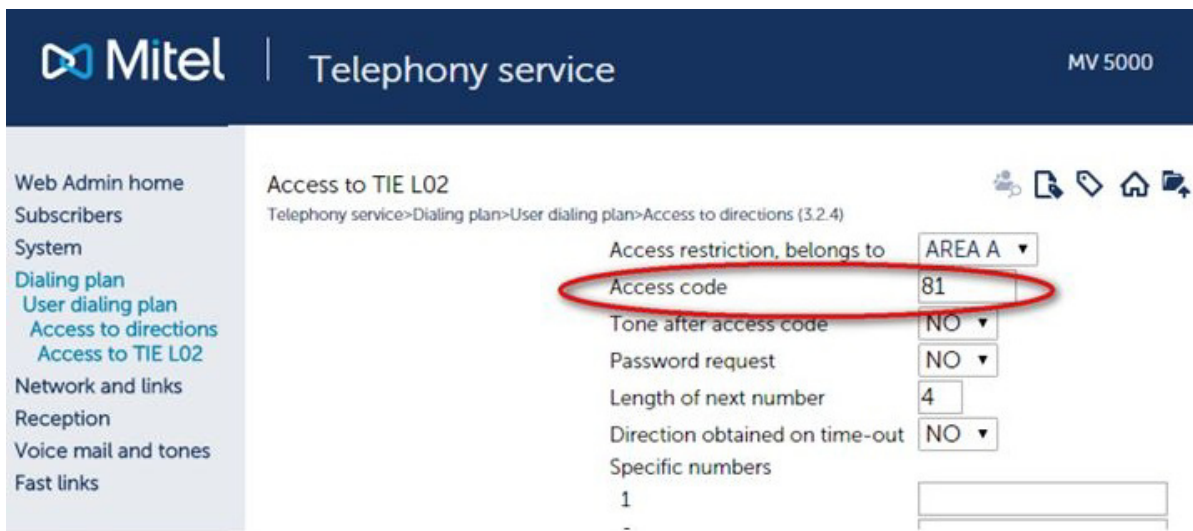


Figure 26: Access to Direction

6. Define an internal plan.

Mitel | Telephony service MV 5000

Web Admin home
Subscribers
System
Dialing plan
Network and links
Network
AID handling
Internal plans definition
Reception

Internal plans definition
Telephony service>Network and links>Network>AID handling>Internal plans definition (4.2.6.1)

Use of PLAN 1 ☒
- plan type PSTN ▼

Use of PLAN 2 ☒
- plan type TL ▼

Use of PLAN 3 ☒
- plan type TL ▼

Use of PLAN 4 ☐

Figure 27: Define Internal Plan

7. Define trunk group characteristics.

Mitel | Telephony service MV 5000

Web Admin home
Subscribers
System
Dialing plan
Network and links
Network
Trunk groups
Characteristics
Characteristics of trunk group
VCEMAIL
Reception
Voice mail and tones
Fast links

Characteristics of trunk group VCEMAIL
Telephony service>Network and links>Network>Trunk groups>Characteristics (4.2.1.2)

Signaling characteristics:

Physical type VOICE IP ▼

Nature BOTHWAY ▼

Signalling type SIP ▼

Subtype VOICE MAIL ▼

Characteristics

Figure 28: Trunk Group Characteristics

Web Admin home

Subscribers

System

Dialing plan

Network and links

Network

Trunk groups

Characteristics

Characteristics of trunk group ..

VCEMAIL VOICE IP BOTHWAY

Reception

Voice mail and tones

Fast links

VCEMAIL VOICE IP BOTHWAY (basic mode)

Telephony service>Network and links>Network>Trunk groups>Characteristics (4.2.1.2)

Signalling type

SIP

Link state

WAITING FOR CALL

Proxy n° 1

10.148.81.223

- port

5058

Proxy n° 2

Domain / realm

Local proxy

NO

Proxy checking

Switch to advanced mode

IP address / port of micollab server

Figure 29: Configure IP BOTHWAY

System

Dialing plan

Network and links

Network

Trunk groups

Characteristics

Characteristics of trunk group ..

FX NPM VOICE IP BOTHWAY

Reception

Voice mail and tones

Fast links

Name management

☒

Forwarding management

☐

- on busy / immediate forward

☐

- forward on no answer

☐

Voice mail

☒

- subscription

NO

Local generation of tones

☒

Support PRACK (100rel)

☒

Tones management before answer

183+SDP+P-Early-Media

- support P-Early-Media

☐

Re-invite without allowed SDP

☒

Reject T.38

415 Unsupported Media Type

REFER sending

☐

Support of video

☐

Support of T.38

☒

Support of other medias (IM, etc..)

☒

Bearer type incoming

CCBT+CCBNT

Calls from

RESEAU

Priority calls if transit

☐

Search DID numbers

☐

- incoming digit translator number

☐

- search via directory

☒

- reject of numbers not assigned

☐

Pre-answering message, caller charged

☐

- if called party free or busy 1

☐

- if called party busy 2

☐

- if number not assigned

☐

Transf. acc. to called pty comp-dept

☐

Transfer to

Disabled

Trunk group id (tel. record)

0

Trunk group monitoring

☒

Max. nb of simultan. calls allowed

CAC IP address

Centre - CAC class

G711 forced in mode FAX/Modem

☒

Figure 30: Configure IP BOTHWAY - Continued

8. Define voice mail

Mitel | Telephony service MV 5000

Web Admin home
Subscribers
System
Dialing plan
Network and links
Reception
Voice mail and tones
Voice mail

Voice mail definition
Telephony service>Voice mail and tones>Voice mail>Definition (6.1.1)

Voice mail call number 817777
Voice mail type EXTERN. ▾
Automatic call back of calls NONE ▾

Figure 31: Voice Mail Definition

9. Set Broadcast priority

Mitel | Telephony service MV 5000

Web Admin home
Subscribers
System
Dialing plan
Network and links
Multi-site
Services location
Other services
Service VOICE MAIL

Service VOICE MAIL
Telephony service>Network and links>Multi-site>Services location>Other services (4.3.2.5)

Broadcast priority 1 INTERNAL ▾
Broadcast priority 2 ▾
Broadcast priority 3 ▾
Broadcast priority 4 ▾

Figure 32: Broadcast Priority

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.

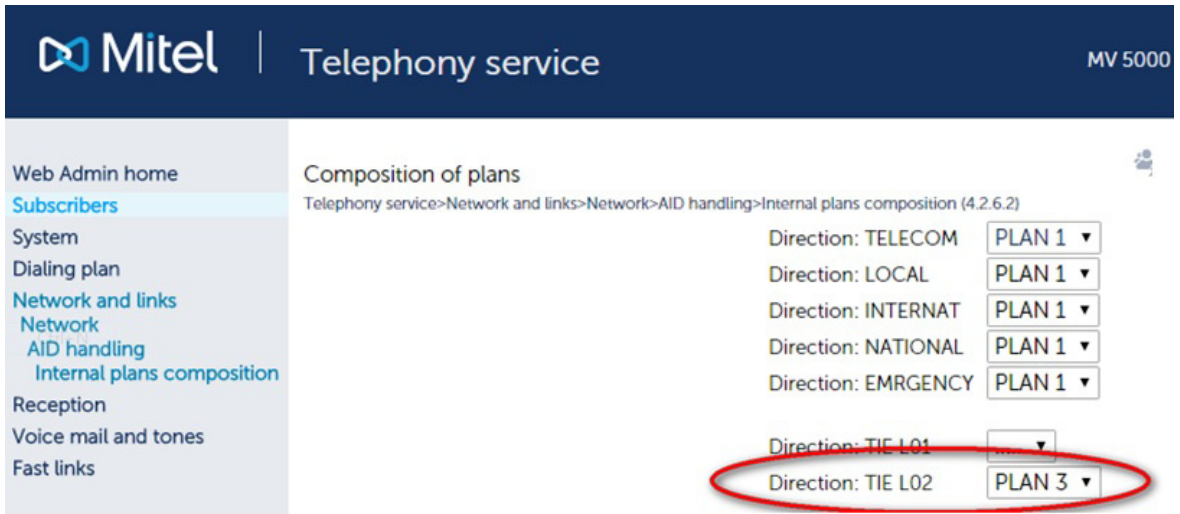


Figure 33: AID Handling - Composition of Plans

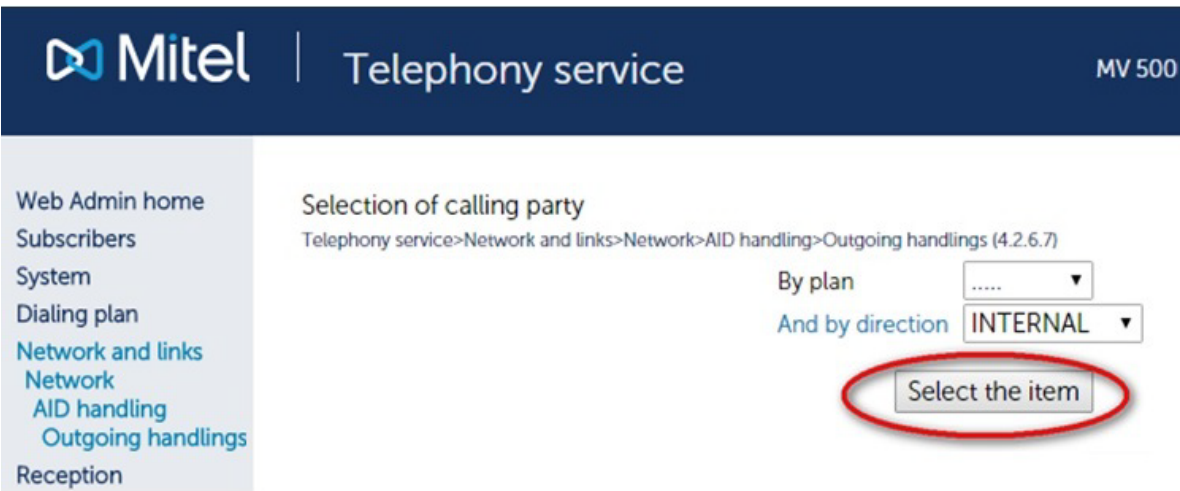


Figure 34: AID Handling - Selection of Calling Party

Mitel | Telephony service MV 5000

Web Admin home
Subscribers
System
Dialing plan
Network and links
 Network
 AID handling
 Outgoing handlings
 Outgoing for INTERNAL
Reception
Voice mail and tones
Fast links

Outgoing for INTERNAL
Telephony service>Network and links>Network>AID handling>Outgoing handlings (4.2.6.7)

And the requested plan: **PLAN 3**

On trunk group: YES

Fallback present: YES

- inhibit sending of IID and AID: NO

- send IID: NEVER

- AID completed with IID: NO

- AID set using DID number: YES

- digit translator number:

- inter-plan forwarding: NO

Figure 35: AID Handling - Outgoing for Internal

Mitel | Telephony service MV 5000

Web Admin home
Subscribers
System
Dialing plan
Network and links
 Network
 AID handling
 Displays
 Outgoing handlings
Reception
Voice mail and tones
Fast links

Display of outgoing handling
Telephony service>Network and links>Network>AID handling>Displays>Outgoing handlings (4.2.6.9.1)

Calling	Called	Trunk gp	IID	Trl AID
-INTERNAL	PLAN 1		
-INTERNAL	PLAN 3		
-OPERATOR	PLAN 1		0

Figure 36: AID Handling - Display of Outgoing Handling

Mitel Telephony service MV 5000

Web Admin home
Subscribers
Subscriptions
 Characteristics
System
Dialing plan
Network and links
Reception
Voice mail and tones
Fast links

Subscriptions 6001
Telephony service>Subscribers>Subscriptions>Characteristics (1.2.3)

By directory number: 6001

Characteristics | Directory | Terminals | Keys | Forwards | Home automation | Phone bo

Subscr. status: IN SERVICE

Subscriber type: INTERNAL

Directory number: 6001

DID DN PLAN 1:

DID DN PLAN 2:

DID DN PLAN 3: 6504

Subscriber 6000 calls NuPoint mailbox (trunk SIP)

Figure 37: SIP Trunk Group - Voice Mail Direct Call

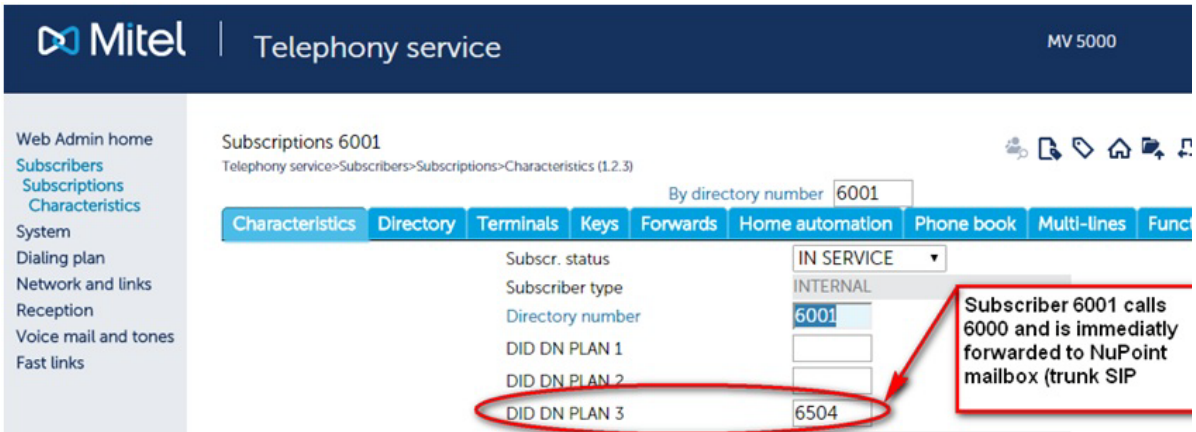


Figure 38: SIP Trunk Group - Voice Mail Forwarded Call

11. Add the MiCollab/NuPoint IP address in the Whitelist if the security is enabled.

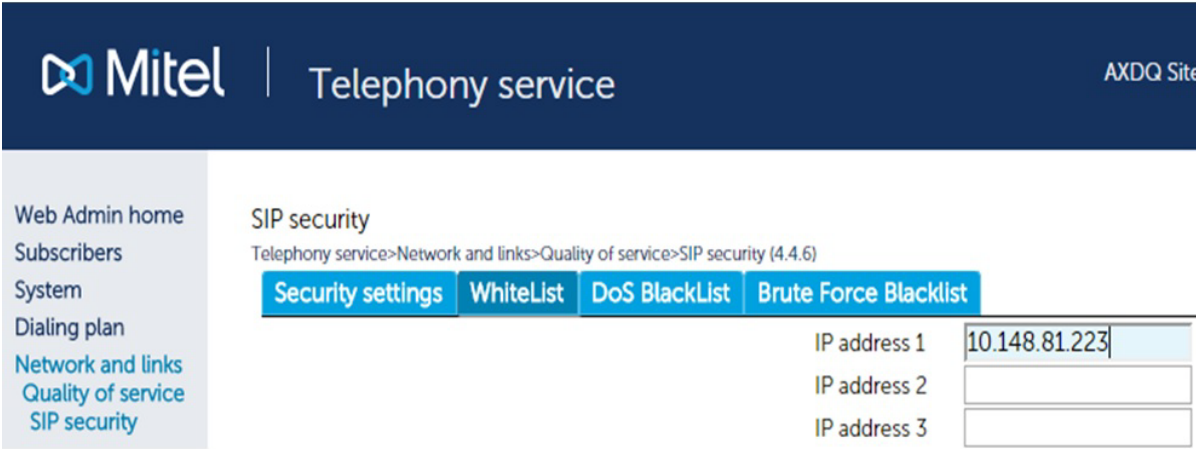


Figure 39: Add WhiteList for NuPoint

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/MCClient-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).

The screenshot shows the Mitel Telephony service web interface. On the left is a navigation menu with links like 'Web Admin home', 'Subscribers', 'Subscriptions', 'Create', 'System', 'Dialing plan', 'Network and links', 'Reception', 'Voice mail and tones', and 'Fast links'. The main content area is titled 'Subscriptions creation' with a breadcrumb 'Telephony service>Subscribers>Subscriptions>Create (1/1)'. The form contains three fields: 'Subscriber type' (a dropdown menu showing 'HUNT GROUP'), 'First directory number' (a text box with '5000'), and 'Requested number' (a text box with '1'). These three fields are circled in red. Below these fields are two checkboxes: 'Check number uniqueness in multisite' (checked) and 'Automatic creation of DID number' (unchecked). At the bottom right of the form is a 'Confirmation' button.

Figure 40: Hunt Group Head Definition

The screenshot shows the Mitel Telephony service web interface. The left sidebar contains a navigation menu with options like 'Web Admin home', 'Subscribers', 'Hunt groups and companies', 'Hunt groups', 'Characteristics', 'System', 'Dialing plan', 'Network and links', 'Reception', 'Voice mail and tones', and 'Fast links'. The main content area is titled 'Hunt group 5000' and shows the configuration for this group. The 'Characteristics' tab is selected, and the 'Hunt group type' is set to 'CYCLIC'. Other fields include 'Subscription type' (HUNT GROUP), 'Directory number' (5000), 'DID directory nb. PLAN 1', 'DID DN PLAN 2', 'DID DN PLAN 3', 'Hunt group name' (SUB 5000), and 'Hunt group nature' (TELEPHONY).

Figure 41: Hunt Group Cyclic Head Type

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

The screenshot shows the Mitel Telephony service web interface. The left sidebar contains a navigation menu with options like 'Web Admin home', 'Subscribers', 'Hunt groups and companies', 'Hunt groups', 'Characteristics', 'System', 'Dialing plan', 'Network and links', 'Reception', 'Voice mail and tones', and 'Fast links'. The main content area is titled 'Hunt group 5000' and shows the configuration for this group. The 'Characteristics' tab is selected, and the 'Feature class' is set to 'FAC00'. Other fields include 'Subscription type' (HUNT GROUP), 'Directory number' (5000), 'DID directory nb. PLAN 1', 'DID DN PLAN 2', 'DID DN PLAN 3', 'Hunt group type' (CYCLIC), 'Hunt group name' (SUB 5000), 'Hunt group nature' (TELEPHONY), 'Used for pre-call distr.' (checkbox), 'Day category' (INTERNATIO.), 'Night category' (INTERNATIO.), 'Predefined forwarding', 'Mutual aid number', and 'Global ringing duration (sec)' (40).

Figure 42: Hunt Group Feature Class

The screenshot shows the Mitel Telephony service web interface. The left sidebar contains navigation links: Web Admin home, Subscribers, Rights, Feature class, System, Dialing plan, Network and links, Reception, Voice mail and tones, and Fast links. The main content area is titled 'Feature class FAC00' with a breadcrumb 'Telephony service>Subscribers>Rights>Feature class (1.4.3)'. A search bar shows 'By its name' with 'FAC00' selected. Below are tabs for 'Names', 'Characteristics', and 'Users'. The 'Characteristics' tab is active, displaying a list of features with checkboxes and dropdown menus. The 'Call waiting' feature is highlighted with a red oval, and its value is set to 'REFUSED'. Other features include 'Paging access', 'Privileged set', 'Pick up protection override', 'Locking allowed', 'Unlocking allowed', 'Mobile recording allowed', 'Pick up protection', 'Night category override', 'Call forwarding protection', 'Data protection', 'Do not disturb allowed', 'Intrusion allowed', 'Intrusion accepted', 'Right to ciphering', 'Master of conference', 'Pre-emptive rerouting to voice mail', 'Use of DISA function', 'Return to console on spec. time-out', 'External forwarding allowed', 'Assistant forwarding allowed', 'Announcement list call', 'Network shift allowed', 'Network rerouting allowed', 'Id sent to public network', 'Id sent to private network', 'Id sent can be modif. for each call', 'Priority terminal', 'Right to immediate forwarding', 'Forwarding on busy allowed', 'Forwarding on no answer allowed', 'Ring duration before forward', and 'Recorded calls allowed'. A red box at the bottom contains the text: 'Call waiting feature to be defined as REFUSED for hunt group'. The bottom status bar shows 'MV5000-R6.1 SP2 /E500 ANG', 'Site: 001-LOC SITE', '12/08/15 16:13:11', and 'DIRECTORY: NS IN SERVICE'.

Web Admin home
Subscribers
Rights
Feature class
System
Dialing plan
Network and links
Reception
Voice mail and tones
Fast links

MV5000-R6.1 SP2 /E500 ANG
Site: 001-LOC SITE
12/08/15 16:13:11
* DIRECTORY: NS IN SERVICE

Feature class FAC00
Telephony service>Subscribers>Rights>Feature class (1.4.3)

By its name
Directory beginning with

Names Characteristics Users

Paging access
Privileged set
Pick up protection override
Locking allowed
Unlocking allowed
Mobile recording allowed
Pick up protection
Night category override
Call forwarding protection
Data protection
Do not disturb allowed
Intrusion allowed
Intrusion accepted
Right to ciphering
Master of conference
Pre-emptive rerouting to voice mail
Use of DISA function
Call waiting
Return to console on spec. time-out
External forwarding allowed
Assistant forwarding allowed
Announcement list call
Network shift allowed
Network rerouting allowed
Id sent to public network
Id sent to private network
Id sent can be modif. for each call
Priority terminal
Right to immediate forwarding
Forwarding on busy allowed
Forwarding on no answer allowed
Ring duration before forward
Recorded calls allowed

REFUSED

STANDARD

"Call waiting" feature to be defined as REFUSED for hunt group

Figure 43: Hunt Group Feature Class

Mitel

Telephony service

MV 5000

Web Admin home

Subscribers

Hunt groups and companies

Hunt groups

Characteristics

System

Dialing plan

Network and links

Reception

Voice mail and tones

Fast links

Hunt group 5000

Telephony service>Subscribers>Hunt groups and companies>Hunt groups>Characteristics (1.3.1.2)

By directory number 5000

Characteristics

Directory

Composition

Forwards

Functions

States

Extension 1	6100
Extension 2	6101
Extension 3	6102
Extension 4	6103
Extension 5	6104
Extension 6	6105
Extension 7	6106
Extension 8	6107
Extension 9	6108
Extension 10	6109
Extension 11	6110
Extension 12	6111
Extension 13	6112
Extension 14	6113
Extension 15	6114
Extension 16	6115
Extension 17	6192
Extension 18	6193
Extension 19	6194

Up to 100 extensions (subscribers) can be defined inside a hunt group. The extensions must be created before if not already existing.

Figure 44: Subscriptions to be included in Hunt Group

Mitel | Telephony service MV 5000

Web Admin home
 Subscribers
 Subscriptions
 Characteristics

Subscriptions 6100
 Telephony service>Subscribers>Subscriptions>Characteristics (1,2,3)

By directory number 6100

Characteristics	Directory	Terminals	Keys	Forwards	Home automation	Phone book
Subscr. status	IN SERVICE ▼					
Subscriber type	INTERNAL					
Directory number	6100					
DID DN PLAN 1						
DID DN PLAN 2						
DID DN PLAN 3						
Extension name	SUB 6100					
Terminal authentication	<input checked="" type="checkbox"/>					
- value	swM3kOF9GH7XIRE2					
User password	*****					
User Portal account	<input type="checkbox"/>					

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)

Figure 45: 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.

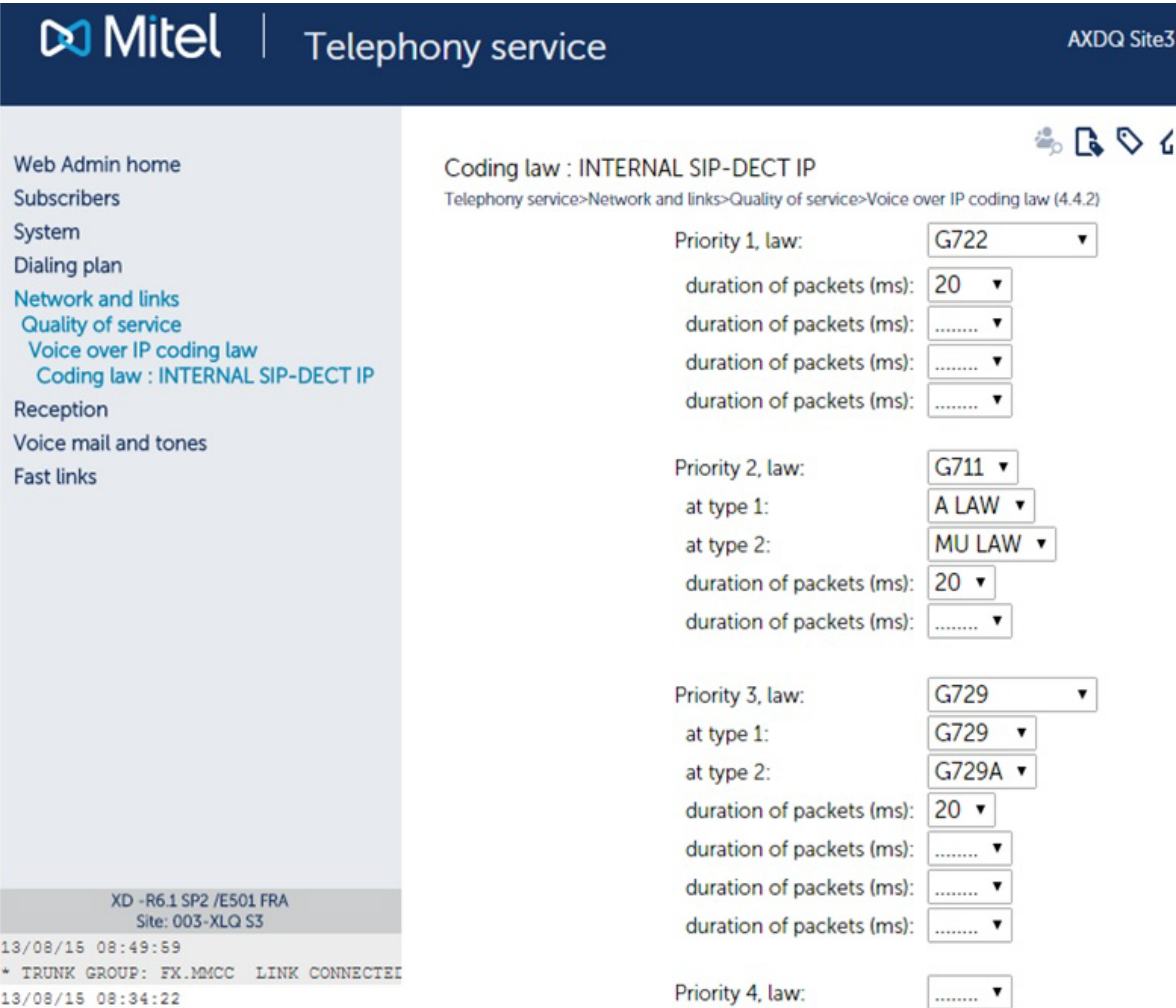


Figure 46: Configure Codec

4. Set the DTMF Method to RTP PACKET and the Header Value to 101. Note that SIP-INFO is not managed for the MiCollab Clients

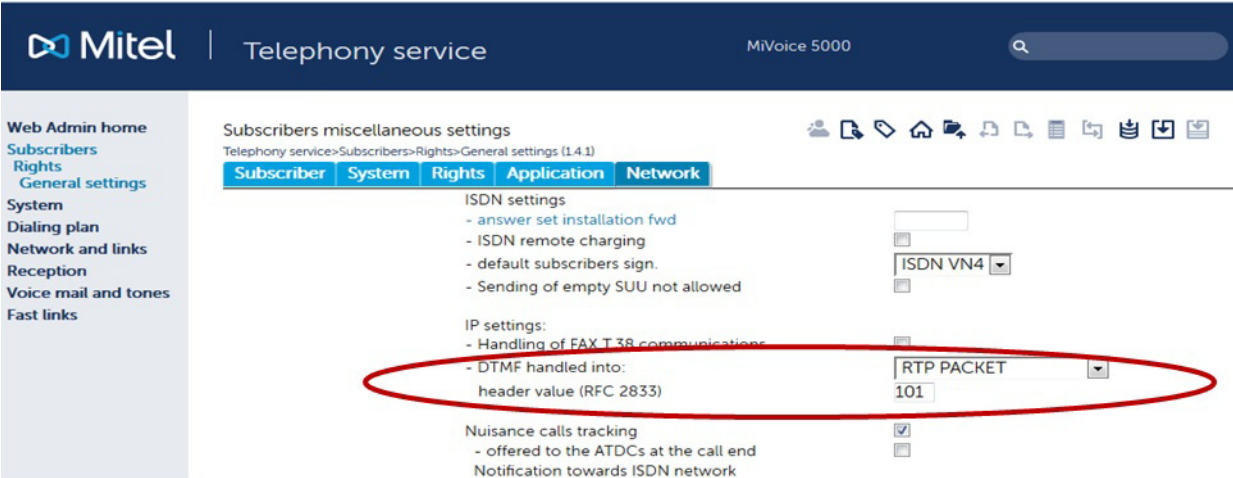


Figure 47: Configure the DTMF Method and the Header Value

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.
2. Under **Applications**, click **Audio, Web and Video Conferencing**.
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 SIP Teleworker support for MiCollab Client softphones.

CONFIGURE THE ICPS IN THE STANDALONE MBG (OPTIONAL)

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:

The screenshot shows the 'Manage ICP' form. The 'Name' field contains 'Aastra A5000'. The 'Hostname or IP address' field contains '88.88.88.88'. The 'Type' dropdown menu is open, showing a list of options: 'MiVoice Business', 'MiVoice Business Silhouette', 'MiVoice MX-ONE', 'MiVoice 5000' (which is highlighted in blue), and 'MiVoice Office'. The 'SIP TLS capable' checkbox is unchecked. The 'Installer password' field is empty. The 'Indirect call recording capable' checkbox is unchecked. A 'Save' button is located at the bottom right of the form.

Figure 48: 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.

The screenshot shows the 'Manage ICP' form with the 'SIP capabilities' field set to 'UDP, TCP'. This field is circled in red. The other fields are: 'Name' (mv5000-ico2), 'Hostname or IP address' (88.88.88.88), 'Type' (MiVoice 5000), 'Installer password' (empty), and 'Indirect call recording capable' (unchecked).

Figure 49: Configure MBG SIP Capabilities

2. Configure the SIP settings. In the Allowed URI Names field, you can enter the name of the FQDN of the MBG SIP host. This is useful for identifying 68xxi remote workers and MiCollab mobile client teleworkers.

SIP options

SIP support UDP ☐ TCP ☒ TCP/TLS ☒

Registration Mode Gap

Set-side registration expiry time 240

ICP-side registration expiry time 900

Allowed URI names Add another

PRACK support ☐

Send options keepalives Only behind NAT

Options interval 20

Challenge methods Invite, Subscribe, Refer, Prack

Local streaming

Codec support Restricted to G.729, G

RTP framesize Dynamic

Set-side RTP security Allow

Icp-side RTP security Disable

Permit weak passwords ☐

KPML username

KPML password

Confirm KPML password

Figure 50: Configure MBG SIP Settings

3. Configure the "Network profile" according to the network configuration
4. Configure the "Application Integration".

MiVoice Business Console

MiVoice Business Console support ☐

Call recording

Enabled ☐

MiCollab Client

MiCollab Client connector enabled ☒

NuPoint voicemail hostname or IP address

MiCollab Client hostname or server IP address 192.168.100.55

Collaboration server hostname or IP address 192.168.100.55

Figure 51: Configure 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, AWWV, MiCollab Client) on the Internet.

INTEGRATE MICOLLAB CLIENT

CONFIGURE MICOLLAB CLIENT

Refer to the MiCollab Client Service application online help and the *MiCollab Client Administrator Guide* for configuration information.

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 MOBILE CLIENTS

MiVoice 5000 platforms support MiCollab mobile clients. 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

The MiCollab Client CSTA Proxy application supports the call control messaging between MiCollab and the MiVoice 5000 platform to support MiCollab Client features such as "Click-to-Call".

1. Log into the MiCollab server manager.
2. Under **Applications**, click **MiCollab Client Service**.
3. Click **Configure MiCollab Client Service**.
4. Click **PBX Nodes**.
5. Double-click the system name or IP Address of the MiVoice 5000.
6. Open **CSTA Settings**.
7. In the Port field, enter the number of the CSTA port on the MiVoice 5000 (default is 3211).
8. Refer to the online help for descriptions of the other fields. Typically, you will not need to change the default settings.
9. Click **Save**.

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.

Manage MiCollab Client Deployment

Required information is missing!
The External Hostname is a mandatory setting for the deployment of configurations!

Deployment email address is missing!
Please note that the Deployment email address is used as a fallback if no email address is available for a user. If no Deployment email address is added, deployments to users without a valid email address will fail.

Users | **Deployment Profiles** | Configuration

Deployment Email • **Connection to MBGs** • Branding Settings

Operation status report
Successfully contacted MBG.
Please approve the specified Token ID on the MBG's Server-Manager WebGUI under "Administration" -> "Web Services" and enter the Verification Code.

> Location: [Configuration](#) / [Connection to MBGs](#) / Edit

Name:

Host:

Port:

Use https: ☒

Token key:

Verifier:

Save and send AuthRequest

Figure 52: Setting up MiCollab Client Deployment Connection to Local MBG

- Under **Administration**, click **Web Services**.

Configure MSL Web Services

> Location: MSL web services

This interface permits configuration of MSL's web services interface, and the clients that are permitted to use it.

Manage web service availability

Web service status Enabled

Access URL <https://<hostname or ip address>/mslrest/>

Below you will find the registered consumers of this web service. These are vendors of web service clients, not active clients themselves. For registered clients, see further below in the table entitled, "Final tokens".

[Add a new consumer](#)

Consumer information	Name	Consumer ID	Shared secret	RSA certificate (if any)
Active	Oria	oria	497257d82065cde1687fa6446da165d30ea4c94a	Modify
✓	MiCollab Client Deployment	MiCollabClientDeployment	ad3def11bfeac00ea7c806e6b61687ca090ed130f	Modify
✓	vApp	vapp	22c01bd55bdd688810ef04e0f9ae50f71d293854	Modify Delete
✓	deployu_for_uca	deployu_uca	wypct4qin1ylnzyoktpprvclgsrr4hqeicwsw	Modify Delete
✓	Users and Services	sas_usp	cmuc1i9uzng6fcvnb16jx2pi4k2xjwyot6q8120	Modify

The following table shows the list of approved tokens, representing an approved client for this web service.

Final tokens	Consumer	Token ID	Secret	Expiry	Description			
Users and Services	mi9zz2gyqnc5jcmfpmxehg==	k1inaznjsuyiz0a3esra3w==	May 4, 2016, 12:14 p.m.		Modify	Renew	Revoke	
deployu_for_uca	cl7rbtiisocxpu6f0rmiqw==	zka0j1wasnmwfy5leaushq==	May 4, 2016, 12:15 p.m.		Modify	Renew	Revoke	
MiCollab Client Deployment	4vvhrjrctoajvd8kae26qg==	ifkka6mjsiovm3ae9lhrwg==	May 4, 2016, 8:39 p.m.		Modify	Renew	Revoke	

The following table shows the list of temporary tokens. These tokens, if approved, can be used for the client to fetch its final tokens, used for day-to-day authentication. These tokens require administrator intervention to permit access. If you do not wish to permit access to the client responsible for the request, you may either reject the token, or wait for it to expire.

Temporary tokens	Consumer	Token ID	Expiry	Verifier	
Approved	MiCollab Client Deployment	dvmkws2siisqrhja556g==	Tue, May 5, 2015 @ 21:05:00 UTC	Approve	Reject

Figure 53: Approve MiCollab Client Deployment Temporary Token in Web Services Page

- Click **Approve**.

- 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.

Configure MSL Web Services

» Location: MSL web services

This interface permits configuration of MSL's web services interface, and the clients that are permitted to use it.

Manage web service availability

Web service status: Enabled

Access URL: <https://<hostname or ip address>/mslrest/>

Below you will find the registered consumers of this web service. These are vendors of web service clients, not active clients themselves. For registered clients, see further below in the table entitled, "Final tokens".

[Add a new consumer](#)

Consumer information				
Active	Name	Consumer ID	Shared secret	RSA certificate (if any)
✓	Oria	oria	497257d82065cde1687fa6446da165d30ea4c94a	Modify
✓	MiCollab Client Deployment	MiCollabClientDeployment	ad3def11bfeac00ea7c806e6b61687ca090ed130f	Modify
✓	vApp	vapp	22c01bd55bdd688810ef04e0f9ae50f71d293854	Modify Delete
✓	deployu_for_uca	deployu_uca	wypct4qin1ylnzzyoktprvcglbsrr4hqeicwsw	Modify Delete
✓	Users and Services	sas_usp	cmuc1i9uzng6sfvnb16jx2pi4k2xjwyot6q8120	Modify

The following table shows the list of approved tokens, representing an approved client for this web service.

Final tokens					
Consumer	Token ID	Secret	Expiry	Description	
Users and Services	mi9zz2gyqnc5jcmfpmxehg==	k1inaznjsuyiz0a3esra3w==	May 4, 2016, 12:14 p.m.		Modify Renew Revoke
deployu_for_uca	cl7rbtiisocxpu6f0rmigw==	zka0j1wasnmwfy5leaushq==	May 4, 2016, 12:15 p.m.		Modify Renew Revoke
MiCollab Client Deployment	4vvhrjrctoajvd8kae26qg==	ifkka6mjsiovm3ae9lhrwg==	May 4, 2016, 8:39 p.m.		Modify Renew Revoke

The following table shows the list of temporary tokens. These tokens, if approved, can be used for the client to fetch its final tokens, used for day-to-day authentication. These tokens require administrator intervention to permit access. If you do not wish to permit access to the client responsible for the request, you may either reject the token, or wait for it to expire.

Temporary tokens				
Approved	Consumer	Token ID	Expiry	Verifier
✓	MiCollab Client Deployment	dvmkws12siisqrhja556g==	Tue, May 5, 2015 @ 21:05:00 UTC	298490 Reject

Figure 54: Verifier Code

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

Enable Remote Access to the Deployment Unit Interface

- Log into the MBG server manager.
- Under **Administration** click **Remote proxy services**.
- Click the **LAN server proxy list** tab.
- Click **Add new LAN server proxy** and add the MiCollab server.
- Click **Modify** and configure the proxy settings.
- Click **Save**.

Mitel | Mitel Standard Linux admin@vmbg-lco.mycompany.local Status

Applications
 MiVoice Border Gateway
 Remote proxy services

ServiceLink
 Blades
 Status

Administration
 Web services
 Backup
 View log files
 Event viewer
 System information
 System monitoring
 System users
 Shutdown or reconfigure
 Virtualization

Security
 Remote access
 Port forwarding
 Web Server Certificate
 Certificate Management

Configuration
 Networks
 E-mail settings

Configure Web Proxy & Remote Management Service

LAN server proxy list | Users | Supported applications | MiVoice Business support

» Location: LAN server proxy list

Welcome to the Remote proxy services administrative interface. From here you can manage all aspects of the Web Proxy's behaviour. If at any time you information, click the Help icon in the upper-right corner of the page.

This page outlines existing LAN servers currently supported by this MBG server. Remote proxy services relies on the fully-qualified domain name in the H that request to the appropriate LAN server. Access via IP address is not supported.

Note that unencrypted HTTP traffic is not supported for security reasons.

Add new LAN server proxy

Enabled	WAN-side FQDN	Allowed netblocks	Server type		
<input checked="" type="checkbox"/>	micollab1.int.com	All	MiCollab server with the following user level access enabled: MiCollab Client MiCollab MiCollab Audio, Web and Video Conferencing Google Calendar Integration to AWV Deployment Unit Admin level access is enabled	Modify	Del

Licensing information | **Web proxy Remote management**
 True | True

Figure 55: Remote Proxy Services

Configure Web Proxy & Remote Management Service

LAN server proxy list | Users | Supported applications | MiVoice Business support

» Location: [LAN server proxy list](#) / [Modify](#)

Welcome to the Remote proxy services administrative interface. From here you can manage all aspects of the Web Proxy's behaviour. If at any time you require more information, click the Help icon in the upper-right corner of the page.

The following form permits configuration of a proxy to a single LAN server. None of the other fields will apply to change the server's behaviour unless the "Enabled" checkbox is also checked.

Enabled ☒

WAN-side FQDN

What kind of LAN server are you configuring?

- ☒ MiCollab
- ☐ MiVoice Business
- ☐ MiCollab Client
- ☐ MiCollab Unified Messaging
- ☐ generic MSL admin only
- ☐ Open Integration Gateway
- ☐ Oria

Which user interfaces would you like to enable access to?

- ☒ MiCollab
- ☒ MiCollab Client
- ☐ MiCollab Unified Messaging
- ☒ **Deployment Unit**
- ☒ MiCollab Audio, Web and Video Conferencing
- ☒ Google Calendar Integration to AWV

Listen port for MiCollab AWV

Do you wish to permit remote administrative access? ☒ Yes

What netblocks should be able to access it?

Save

Figure 56: Enable Access to Deploy Unit Interface

Create and Assign Deployment Profiles

16. Log into MiCollab server manager.
17. Under **Applications**, click **MiCollab Client Deployment**.
18. 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.
19. 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 or the FQDN of the MBG SIP host 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

General Settings

Name *	default	Log Level	INFO
Use Teleworker	<input checked="" type="checkbox"/>	Call Mode	Video
Use Softphone	<input checked="" type="checkbox"/>	Office Number	
		Office Number Pause	0
MBG	Local	Config download host *	Custom cbelab-micollab.surrot.com
		MBG SIP host *	Custom 193.248.147.29
		PBX SIP host	Default
Override user email	<input type="checkbox"/>	Conference Access Code	
Deployment email address	cbenoit@mitel.com	Emergency Numbers	000,110,112,118,119,911,999

Figure 57: General Setting (Settings shown are examples only)

Softphone Settings

PBX type	MV 5000	Teleworker type	MBG
SIP transport protocol	TCP	SIP transport protocol	TLS
SIP port	5060	SRTP mode	Mandatory
SIP DTMF method	RFC 2833 / RFC 4733	SIP port	5061
Default audio codec	g722	SIP DTMF method	RFC 2833 / RFC 4733
Max video TX rate (kbit/s) *	768	Default audio codec	g722
Max video RX rate (kbit/s) *	768	Max video TX rate (kbit/s) *	192
DSCP SIP	Assured forwarding 11	Max video RX rate (kbit/s) *	192
DSCP RTP audio	Assured forwarding 12	DSCP SIP	Assured forwarding 11
DSCP RTP video	Assured forwarding 13	DSCP RTP audio	Assured forwarding 12
Use Wi-Fi only	<input type="checkbox"/>	DSCP RTP video	Assured forwarding 13
		Use Wi-Fi only	<input type="checkbox"/>

Figure 58: Softphone Settings

20. Click the **Users** tab and assign the deployment profiles (templates/roles) to the MiCollab Client users.

Purchase and Import SSL Certificates to Servers

21. Log into the MiCollab server manager.
22. Under **Security**, click **Web Server Certificates**.
23. 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

24. 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.

CONFIGURE 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.

Refer to the *Integrated Directory Services* help in the MiCollab server mananager online help for configuration instructions.

CONFIGURE 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.

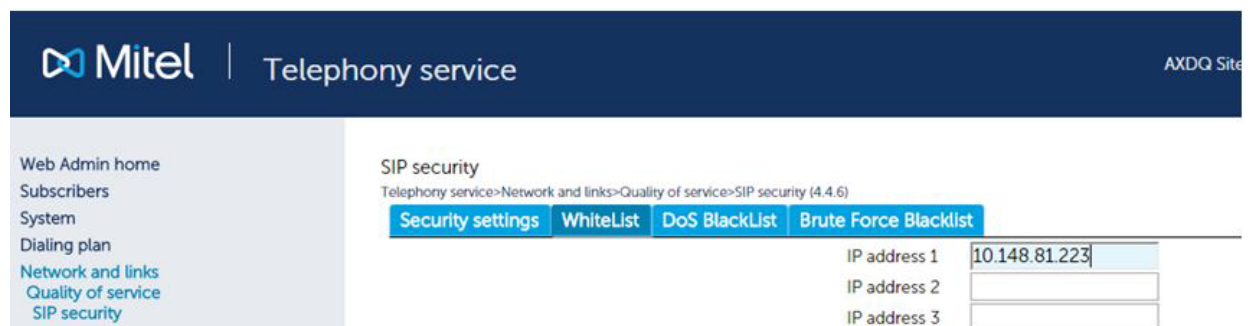


Figure 59: Add MBG IP Address in Whitelist

MIGRATION PROCEDURE FOR AWW

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 AWW site to MiCollab Release 7.1 or later support.

You can migrate systems where the AWW accounts were only created within the AWW application to MiCollab 7.1 or later. These accounts do not lose their existing conferences during the migration.

1. Backup the database, install MiCollab 7.1, and then restore their database.
2. Integrate the MiCollab system with the MiVoice 5000 call manager. See “Integration Procedure” on page 33 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 AWW account e-mail address, the account is linked to the newly created user.

Systems where the AWW 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 7.1 and integrate it with the MiVoice 5000. In this case, the users lose their existing conferences.

Chapter 4

MX-ONE INTEGRATION

OVERVIEW

You can integrate up to eight MiCollab servers 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 MiVoice 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 60:

- **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 CSTA Proxy in the MiCollab system
 - 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.
- **Standalone MBG:** A standalone vMBG server can be installed in the Demilitarized Zone (DMZ) of a customer's existing firewall to support SIP Teleworker devices. The MiCollab MBG application must be clustered with the standalone MBG.
- **MiCollab Advanced Messaging (AVST) server:** An optional standalone server that can be used to provide voice messaging services.

- **MiCollab Client CSTA Proxy:** 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 CSTA proxy using CSTA III protocol.
- **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 Voice mail 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.

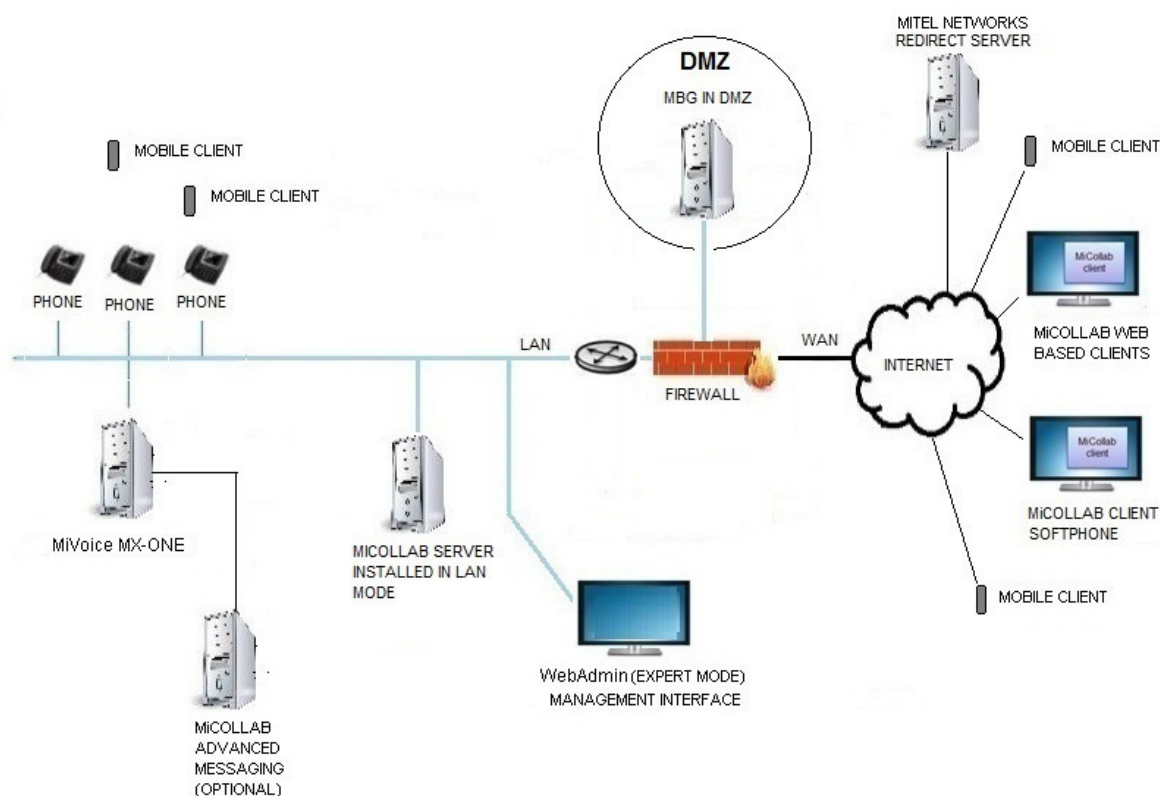


Figure 60: MiVoice MX-ONE Integration

REQUIREMENTS

- Integration with MiCollab 7.1 or higher is supported with MiVoice MX-ONE 6.1 SP1 or higher.
- MiCollab Client must be configured in Integrated Mode.

CONDITIONS AND LIMITATIONS

- One or more MiCollab servers (up to eight) can provide applications services to the users on the MiVoice MX-ONE system in the same network.
- The integration of multiple MiCollab systems to the MiVoice MX-ONE platform is 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 Provisioning Manager. 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.
- Voice messaging services can be provided by the MiCollab NuPoint Unified Messaging application or from an optional MiCollab Advanced Messaging server.
- 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 service 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.
- Each MiCollab system supports a maximum of 5000 users. In a multi-MiCollab deployment, up to eight peered MiCollab systems can be deployed to support a total of up to 40,000 users and contacts.
- 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. Manually refresh the MiCollab server from the PM Subsystem task on the MX-ONE to complete the synchronization of 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 MiCollab End User Portal is supported for MiVoice MX-ONE users. It provides them with access to their user portal, voice mail, and AWW 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.
- The MX-ONE Parallel Ringing feature allows an incoming call to ring several phones (desk-phones, softphones or mobile phones) that are registered with different extension numbers simultaneously. The call can then be answered on any of the phones. This feature requires all the phones involved to be defined in a Parallel Ringing list. One phone in the list is configured as the main extension and only calls to this extension are distributed among the other phones in the list. MiCollab can only support application services to the main extension in the Parallel Ringing list.
- 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 cannot be imported into the MiCollab Client server via the MX-ONE Provisioning Manager, but they can be imported directly from Active Directory using MiCollab Integrated Directory Services.
- 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 Release 7.0 or Release 7.1 server, but supports the configuration of multiple MiCollab Release 7.2 or later servers. Note that the MiCollab servers must be running the same software release.
- A MiCollab Export task exports data in to a MiCollab_Users.zip file that is comprised of multiple MiCollab CSV files. The user data in each file varies depending on the source user data:

USER DATA	FILENAME STARTS WITH
Email IDs, Phone Numbers and SIP Passwords	MiCollabUsers0_x.csv
Phone Numbers	MiCollabUsers1_x.csv
Email IDs	MiCollabUsers2_x.csv
without Email IDs, Phone Numbers and SIP Passwords	MiCollabUsers3_x.csv
with MiCollab roles assigned	MiCollabUsers4_x.csv

- Each CSV file is generated with a maximum of 2500 user records. New files are generated if user count exceeds 2500 in any of the above categories.
- The External Number and DID Number fields are updated on a user record if the UDF fields are defined as External Number and DID Number in the UDF Mapping task. The field names External Number and DID Number are case sensitive.
- When PM UDF mapping is configured to map **Telephone Number** from AD to External Number, Mobile Number, or any other number entry, the number is truncated to the PM - AD integration defined extension length (1-10 digits).

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.



Note: MiCollab Advanced Messaging (AVST) is not licensed through the AMC.

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
- 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 (or optionally install MiCollab Advanced Messaging server)
 - Integrate Audio, Web and Video Conferencing
 - Integrate MiVoice Border Gateway
 - Integrate MiCollab Client Service
- 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.
3. Log into MiCollab server manager. Under **ServiceLink**, click **Install Applications** and then click the **Install Applications** tab. Set the ICP type to "MiVoice MX-ONE".
4. Collect the following information for the integration:
 - MiCollab IP Address
 - MiVoice MX-ONE IP Address.

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**.

Add MiCollab Subsystem to Manager Provisioning

1. Log into the MiVoice MX-ONE Provisioning Manager management interface.
2. 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
 - **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
 - **MiCollab pool:** Select the MiCollab pool
 - **Enable MiCollab AD Authentication:** If the check box is enabled, then the user in MiCollab will be created with Active Directory authentication.



Note: Enable **AD Authentication** for MiCollab User works if Enable MiCollab AD Authentication field of MiCollab Server is enabled.

Figure 61: Subsystem - Add



Note: It is recommended to use the LIM server address or provide the same IP address in PM and MiCollab Server Configuration to add users to MiCollab.

3. Click **Apply**.

Subsystem - Add - Result

Done

Change operation successful for:
■ Subsystem Name: MiCollab-Stockholm

Property	Value
Subsystem Type	MiCollab Server
Subsystem Name	MiCollab-Stockholm
Version	7.3
IP Address	10.105.66.15
User ID in Subsystem	micollab_api
Location	Stockholm
MiCollab Pool	1
Enable MiCollab AD Authentication	true

Change This... Done

Figure 62: Subsystem - Add - Result

User - Change - MiCollabUserTest

Apply Cancel

User Service Summary MiCollab Configuration Scheduling

Assign MiCollab Extension(Extension, LIM IP): 6001,192.168.28.9 ▼

Secondary Extension: 6002,192.168.28.9 ▼

MiCollab Pool : 1 ▼

MiCollab Servers: MiCollab-Stockholm ▼

MiCollab Role: UCC Premium MXONE-MiCollab ▼

Prompt Language: System Default ▼

Enable AD Authentication: ☐

Apply Cancel

Figure 63: User - Change



Note: The MX-ONE Provisioning Manager Administrator needs **Manage service data** privilege to access **MiCollab Configuration** tab.

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 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 64 illustrates the SIP trunk integration:

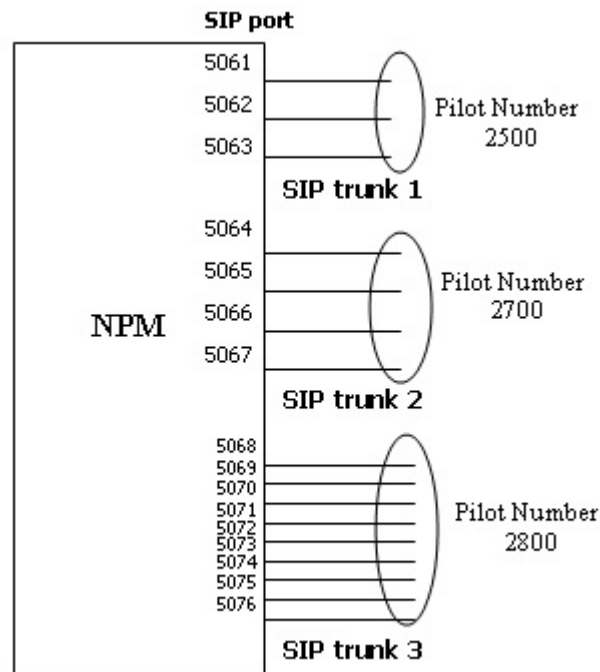


Figure 64: NuPoint SIP Trunk Integration

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.

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).

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**.

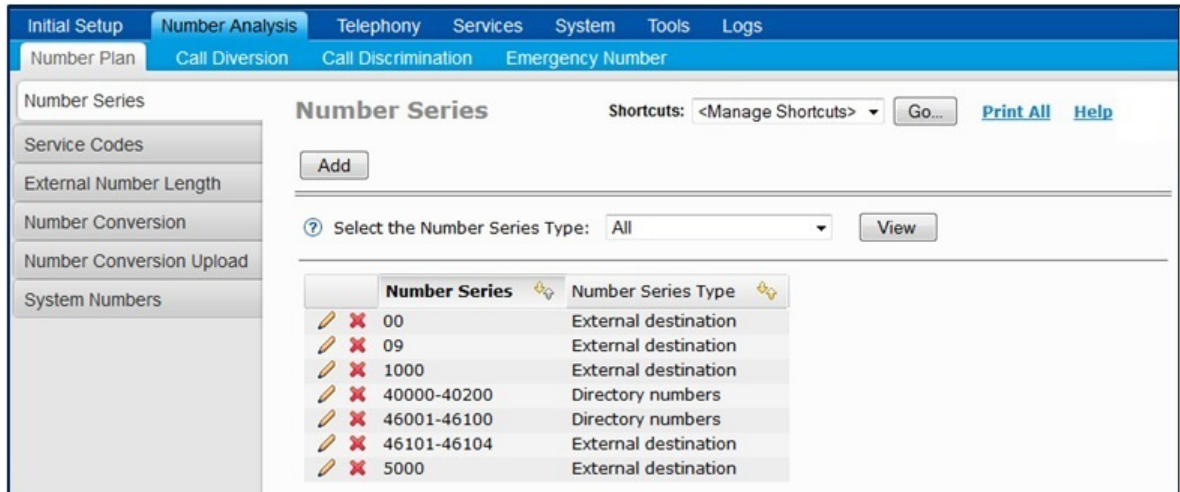


Figure 65: Number Series

4. Select the **Number Series Type**, and enable the **External numbers** option.

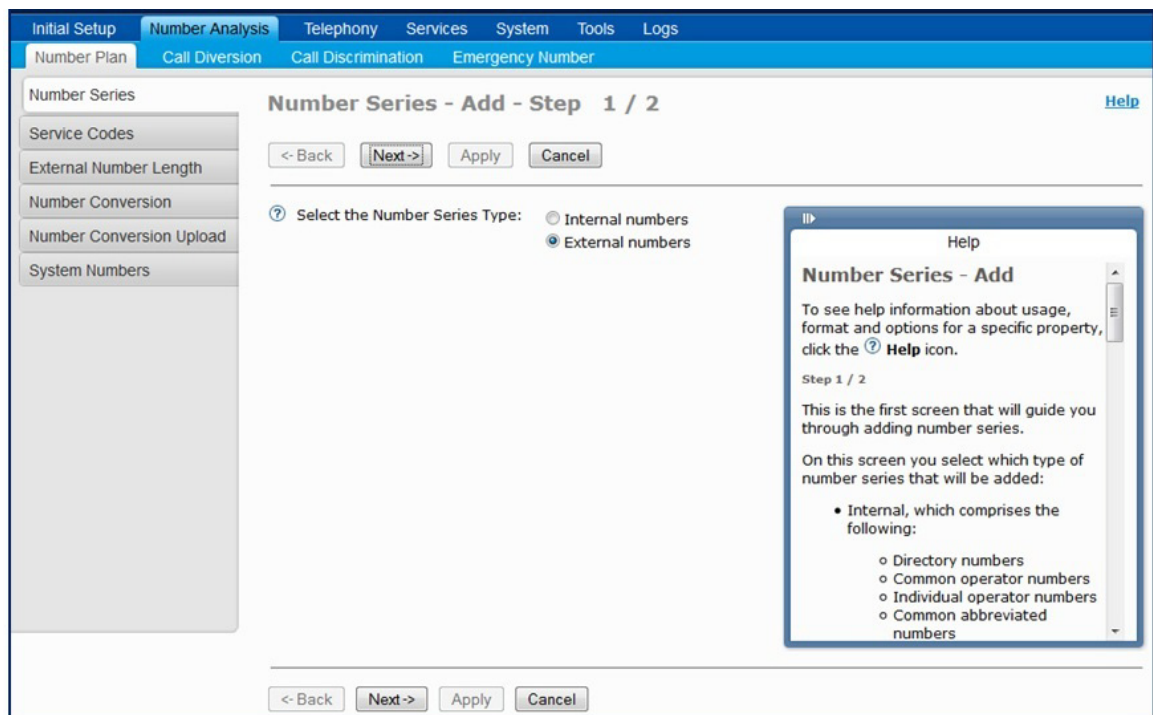


Figure 66: Number Series - Add - Step 1

5. Enter the Voice Mail numbers in the External Destination field.

Initial Setup | **Number Analysis** | Telephony | Services | System | Tools | Logs

Number Plan | Call Diversion | Call Discrimination | Emergency Number

Number Series

Service Codes

External Number Length

Number Conversion

Number Conversion Upload

System Numbers

Number Series - Add - Step 2 / 2 [Help](#)

<- Back Next -> Apply Cancel

External Number Series

External Coordinated Destination:

External Destination: 6001

Least Cost Routing Access Numbers:

Common Direct In-Dialing Operator Numbers:

Own Node Number:

Common Public Directory Numbers:

Access Numbers for Mobile Extension (without Authorization):

Access Numbers for Mobile Extension (with Authorization):

Public Destination Least Cost Routing:

Direct Inward Service Access:

Fictitious Destination Numbers:

Help

Number Series - Add

To see help information about usage, format and options for a specific property, click the [Help](#) icon.

Step 1 / 2

This is the first screen that will guide you through adding number series.

On this screen you select which type of number series that will be added:

- Internal, which comprises the following:
 - Directory numbers
 - Common operator numbers
 - Individual operator numbers
 - Common abbreviated numbers

Figure 67: Number Series - Add

6. Click **Apply**. The Service Node Manager shows the result of the operation

Initial Setup | **Number Analysis** | Telephony | Services | System | Tools | Logs

Number Plan | Call Diversion | Call Discrimination | Emergency Number

Number Series

Service Codes

External Number Length

Number Conversion

Number Conversion Upload

System Numbers

Number Series - Add - Result [Help](#)

Done

✓ **Add operation successful for:**

- Number Series: 6001

Property	Value
External destination	6001

Add New... Change This... Remove This Done

Figure 68: Number Series - Add - Result

- Set the number length to the external number.
- Click **Number Analysis**, **Number Plan**, and then select **External Number Length**.
- Click **Add**.

External Number Length

Shortcuts: <Manage Shortcuts> Go... [Print All](#) [Help](#)

[Add](#)

	External Number	Minimum Length	Maximum Length
	09	2	2
	1000	4	4
	46101	5	5
	46102	5	5
	46103	5	5
	46104	5	5

Figure 69: External Number Length

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

External Number Length - Add

[Help](#)

[Apply](#) [Cancel](#)

External Number: * 6001

Minimum Length: * 4

Maximum Length: 4

[Apply](#) [Cancel](#)

Help

External Number Length - Add

To see help information about usage, format and options for a specific property, click the [Help](#) icon.

This screen that will guide you through initiating number length data.

1. Click the **External Number** text box.
2. Enter an external number as desired.
3. Change property values for **Minimum Number Length** and **Maximum Number Length** as required.
4. Click **Apply** to initiate number length data according to the

Figure 70: External Number Length - Add

11. Click **Apply**. The Service Node Manager shows the operation result:

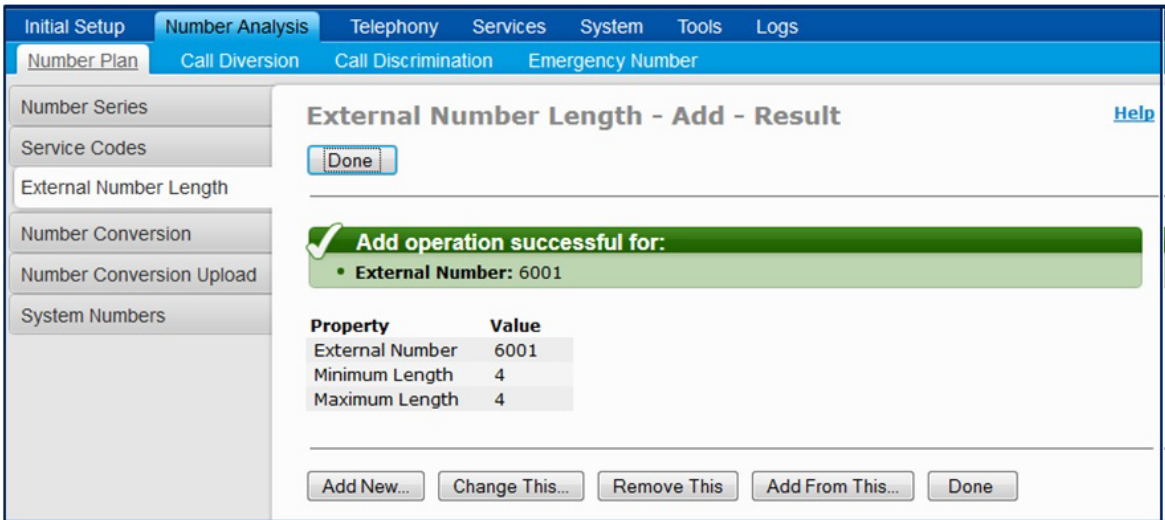


Figure 71: External Number Length - Add - Result

12. Configure a SIP trunk:

- Click **Telephony**, click **External Lines**, and then select **Route**.
- Click **Add**.

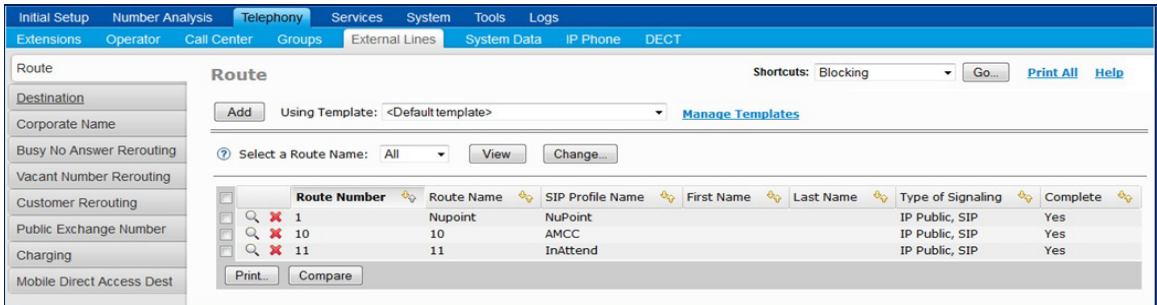


Figure 72: Route

- Set the Type of Signaling to “IP Public, SIP”
- Select “NuPoint” in the Profile Name List.

The screenshot shows the 'Route - Add - Step 1 / 9' configuration window. The sidebar on the left lists various configuration options: Destination, Corporate Name, Busy No Answer Rerouting, Vacant Number Rerouting, Customer Rerouting, Public Exchange Number, Charging, and Mobile Direct Access Dest. The main area displays 'Type of Signaling' set to 'IP Public, SIP' and 'Profile Name' set to 'NuPoint'. Navigation buttons include '<- Back', 'Next ->', 'Apply', and 'Cancel'. A help window is open on the right, showing the 'Summary' tab for 'Route - Add'.

Route - Add - Step 1 / 9

<- Back Next -> Apply Cancel

? Type of Signaling: IP Public, SIP
 ? Profile Name: NuPoint

Summary Help

Route - Add

To see help information about usage, format and options for a specific property, click the ? Help icon.

To cancel and return to the **Route** screen, click **Cancel** in any step.

Shortcuts to help sections:

[Type of Signaling](#)
[General](#)
[ISDN 30B+D Private](#)
[ISDN 30B+D Public, ISDN 23B+D Private or ISDN 23B+D Public](#)
[IP Private](#)
[Hardware - Servers](#)
[Hardware - Boards](#)
[Hardware - Individuals](#)
[Services](#)
[Number Data](#)
[SIP Route Data](#)

Type of Signaling

<- Back Next -> Apply Cancel

Figure 73: Add Route - Step 1

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.

Initial Setup

Number Analysis

Telephony

Services

System

Tools

Logs

Extensions

Operator

Call Center

Groups

External Lines

System Data

IP Phone

DECT

Route

Destination

Corporate Name

Busy No Answer Rerouting

Vacant Number Rerouting

Customer Rerouting

Public Exchange Number

Charging

Mobile Direct Access Dest

Route - Add - Step 2 / 2

Help

<- Back

Next ->

Apply

Cancel

Basic settings

Route Name: *

Voice_Mail

Route Number: *

2

Profile specific settings

Refer to the Help panel for parameters description

Number of Trunks: *

15

Remote Proxy IP: *

192.168.222.153

Remote Proxy Port: *

5060

Server Numbers: *

1

VoiceMail Number: *

6001

Note: External Destination Number needs to initiate in the Number Analysis -> Number Series and it needs to be associated with the route in Telephony -> External Lines -> Destination.

Summary

Help

Route - Add

To see help information about usage, format and options for a specific property, click the ? Help icon.

To cancel and return to the Route screen, click Cancel in any step.

Shortcuts to help sections:

Type of Signaling

General

ISDN 30B+D Private

ISDN 30B+D Public, ISDN 23B+D Private or ISDN 23B+D Public

IP Private

Hardware - Servers

Hardware - Boards

Hardware - Individuals

Services

Number Data

SIP Route Data

Type of Signaling

<- Back

Next ->

Apply

Cancel

Figure 74: Add Route - Step 2

14. Click **Apply**. The Service Node Manager shows the operation result.

Add operation successful for:

- **Route Name:** Voice_Mail

General	
Profile Name	NuPoint
Route Name	Voice_Mail
Route Number	2

SIP Route Specific Data	
Outgoing Traffic	
Remote Port	5060
Unknown Public Number	sip:?@192.168.222.153
Incoming Traffic	
Type of Accepted Calls	Remote IP
Addresses or Numbers to Match Incoming Call	192.168.222.153
Priority for Incoming Calls	255
MWI Number	6001
Handle as Extension	No
Incoming Invite Challenge	No
Emergency Call Data	
Type of Accepted Calls	EMERGENCY
Addresses or Numbers to Match Incoming Call	192.168.222.153
Priority for Incoming Calls	255
Third Party Registration	
Supervise Time	30

Route Category	
Transmission Category	4
Disturbance Level	0
Route Selection Category	
Incoming Traffic	Open for Incoming Traffic
Line Selection During Outgoing Traffic	Sequential
Route Characteristics Outgoing Traffic	Normal route
Allow Alternative Route Selection	Permitted
Customer Affiliation	0
Allow Virtual Calls	Yes
Allow Malicious Call Tracing	No
Facilities Restriction Level	0
Receive Traveling Class Mark Information	No
Route to Telident Machine for Emergency Calls	Normal
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 Compability Substitution	No
Allow Number Conversion	Yes
Route Selection Category	
Signaling Data	
Dial Tone Characteristics after External Line Seizure	No monitoring path established
User of Digit Transmission for Transit Exchange	No
Use Net Service Facilities	No
Ringing Tone Transmission for Outgoing Traffic	A-party receives ringing tone
Ringing Tone Transmission for Outgoing Traffic	After minimum number of digits
Route Equipment	
Trunk Line Number	1-15

Figure 75: Add Route - Result

- 15. Associate the route with the destination access code.
- 16. Click **Telephony** and then **External Lines**, select **Destination**, and click **Add**.

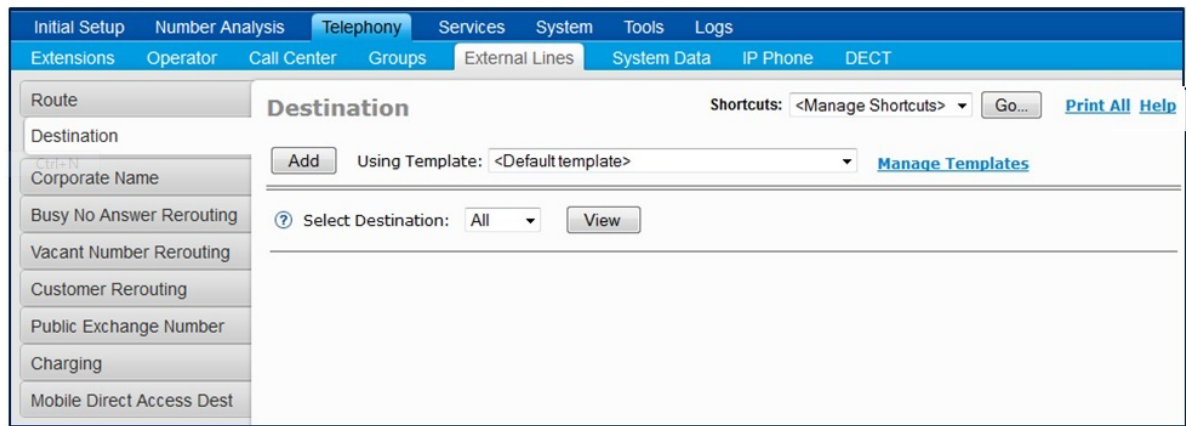


Figure 76: External Lines - Destination

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

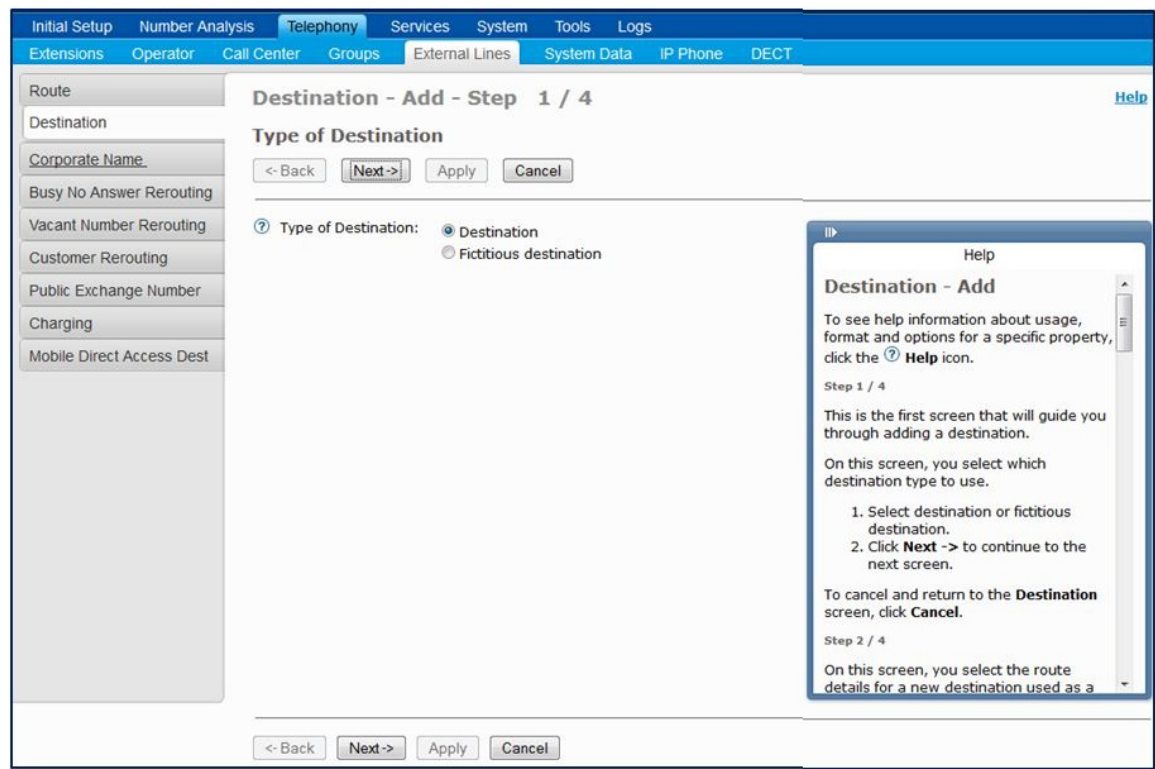


Figure 77: Destination - Add - Step 1

- 18. Select the **Destination Number** and the **Route Name** and then click **Next**.

The screenshot displays the 'Destination - Add - Step 2 / 4' configuration window. The top navigation bar includes 'Initial Setup', 'Number Analysis', 'Telephony', 'Services', 'System', 'Tools', and 'Logs'. Below this, a sub-navigation bar shows 'Extensions', 'Operator', 'Call Center', 'Groups', 'External Lines', 'System Data', 'IP Phone', and 'DECT'. The left sidebar lists various configuration options: 'Route', 'Destination', 'Corporate Name', 'Busy No Answer Rerouting', 'Vacant Number Rerouting', 'Customer Rerouting', 'Public Exchange Number', 'Charging', and 'Mobile Direct Access Dest'. The main area is titled 'Destination - Add - Step 2 / 4' and 'Route Details'. It contains three fields: 'Destination' (set to '6001-External'), 'Route Name' (set to 'Nupoint'), and 'Customer Choice' (with a checkbox). Each field has an 'Edit...' button. Navigation buttons at the bottom include '<- Back', 'Next ->', 'Apply', and 'Cancel'. A help window on the right, titled 'Help' and 'Destination - Add', provides instructions for using the screen, including a list of steps: 1. Select destination or fictitious destination. 2. Click Next -> to continue to the next screen. It also mentions that clicking Cancel will return to the Destination screen.

Initial Setup Number Analysis **Telephony** Services System Tools Logs

Extensions Operator Call Center Groups **External Lines** System Data IP Phone DECT

Route

Destination

Corporate Name

Busy No Answer Rerouting

Vacant Number Rerouting

Customer Rerouting

Public Exchange Number

Charging

Mobile Direct Access Dest

Destination - Add - Step 2 / 4 [Help](#)

Route Details

<- Back Next -> Apply Cancel

? Destination: 6001-External Edit...

? Route Name: Nupoint View... Edit...

? Customer Choice: ☐

Help

Destination - Add

To see help information about usage, format and options for a specific property, click the ? Help icon.

Step 1 / 4

This is the first screen that will guide you through adding a destination.

On this screen, you select which destination type to use.

1. Select destination or fictitious destination.
2. Click **Next ->** to continue to the next screen.

To cancel and return to the **Destination** screen, click **Cancel**.

Step 2 / 4

On this screen, you select the route details for a new destination used as a

<- Back Next -> Apply Cancel

Figure 78: Destination - Add - Step 2

19. Click **Advanced** and select:

- Show Original A-Number
- Enable Enhanced Sent A-Number Conversion.
- Set Type of Called Number to "Private Unknown".

The screenshot shows the 'Destination - Change - 6001' configuration window. The left sidebar contains a list of configuration categories: Route, Destination, Corporate Name, Busy No Answer Rerouting, Vacant Number Rerouting, Customer Rerouting, Public Exchange Number, Charging, and Mobile Direct Access Dest. The main area displays the following settings:

- Destination: 6001
- Route Name: Nupoint
- Primary Choice is the sequence number for the route choice in alternative routing
- Start Position for Digit Transmission: 1
- Type of Seizure of External Line: Immediate seizure
- Forward Switching: ☐
- Type of Called Number: Unknown public
- Type of Calling Public Number: Unknown public
- Type of Calling Private Number: Private Unknown
- Use as Emergency Destination: ☐
- Pre-digits in order to form a new External Number:
- Truncated Digits in Dialed Number: 0
- Type of Signal Seizure: ☒ Terminating seizure, ☐ Transit seizure
- B-Answer Signal Available: ☒
- Allow to send Traveling Class Mark: ☐
- Route Type: Private
- Maximum Number of Transit Exchanges: 25
- PNR Number Translation Information: No Translation
- Supplementary Services Using User to User Interface: Not Allowed
- Use Least Cost Routing for All Calls: ☐
- Allow Sending of Expensive Route Warning Tone: ☐
- Type of Protocol to use for Supplementary Service Call Offer: ☒ User to User Interface(UUI), ☐ Generic Function Protocol(GFP)
- Type of Protocol for Call Back/Call Completion: ☒ User to User Interface(UUI), ☐ Generic Function Protocol(GFP)
- Show Original A-Number: ☒
- Use Original A-Number's Type of Number: ☐
- Enable Enhanced Sent A-Number Conversion: ☒
- Use ETSI Diversion Supplementary Service: ☐

Buttons at the bottom include 'Basic...', 'Apply', and 'Cancel'.

Figure 79: External Lines - Destination - Change

20. Click **Apply**. The Service Node Manager shows the operation result.

Initial Setup Number Analysis **Telephony** Services System Tools Logs

Extensions Operator Call Center Groups **External Lines** System Data IP Phone DECT

Route

Destination

Corporate Name

Busy No Answer Rerouting

Vacant Number Rerouting

Customer Rerouting

Public Exchange Number

Charging

Mobile Direct Access Dest

Destination - Change - 6001 - Result [Help](#)

☒ **Change operation successful for:**

- Destination: 6001

Property	Value
Destination	6001
Route Name	Nupoint
Start Position for Digit Transmission	1
Type of Seizure of External Line	Immediate seizure
Forward Switching	Not permitted
Type of Called Number	Unknown public
Type of Calling Public Number	Unknown public
Type of Calling Private Number	Private Unknown
Truncated Digits in Dialed Number	0
Type of Signal Seizure	Terminating seizure
B-Answer Signal Available	Allowed
Allow to send Traveling Class Mark	Not Allowed
Maximum Number of Transit Exchanges	25
PNR Number Translation Information	No Translation
Supplementary Services Using User to User Interface	Not Allowed
Use Least Cost Routing for All Calls	No
Allow Sending of Expensive Route Warning Tone	Allowed
Type of Protocol to use for Supplementary Service Call Offer	User to User Interface(UUI)
Type of Protocol for Call Back/Call Completion	User to User Interface(UUI)
Show Original A-Number	Yes
Use Original A-Number's Type of Number	No
Enable Enhanced Sent A-Number Conversion	Allowed
Use as Emergency Destination	No
Use ETSI Diversion Supplementary Service	No

Figure 80: Destination - Change - 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.

Users Services Administrators System Logs Own Settings

Extension Available Extensions Individual Diversion Mailbox

Extension - Change - 8002 Shortcuts : Common Category Go... Help

Apply Cancel

General

? Telephony System: MXONE-MICOLLAB

? Extension Number: 8002

? Description:

? Server Number: 1 New Group Ctrl+N

? Extension Type: IP

? Customer: None

? Common Service Profile: 2 - (None) ▼

? Language: Default ▼

? Backup Answering Position Number:

? Allow Security Exception: ☒

? Allow EDN: NO

? Boss/Secretary: None ▼

? Home Area Code:

? Protocol: ☒ SIP ☐ IP

Name Identity

? First Name:

? Last Name:

Authorization Code

? Authorization Codes:

Ring Signal

? Ring Signals:

Personal Number

? Personal Number List:

Figure 82: Extension - Change - 8002

26. Click in the first pen to edit List Number 1.

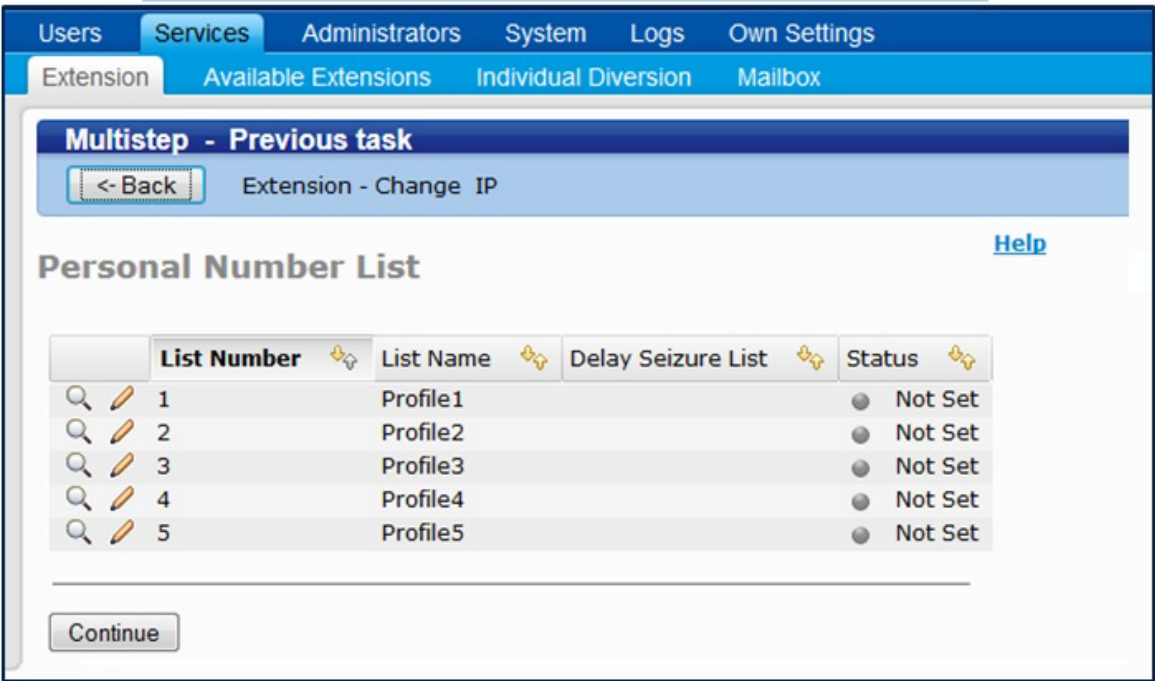


Figure 83: Extension - Personal Number List

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:

Users Services Administrators System Logs Own Settings

Extension Available Extensions Individual Diversion Mailbox

Multistep - Previous task

[<- Back](#) Extension - Change IP

Personal Number List - Change - 1 [Help](#)

[Continue](#) [Cancel](#)

General Data

? Extension Number: 8002

? List Number: 1

? List Name: Profile1

? Status: Active

Call Sequence 1

? Number: 8002

? Ring Duration [s]: 20

? If Number Busy Go To: Next sequence ▼

? If DND Active Go To: No Progress ▼

? Use Once: ☐

? Accept Calls From: ☒ Internal ☒ Operator ☒ External

? Individual Repeated Distribution Bypass: ☐

? Support SMS Messages: ☐

? Support Instant Messaging: ☐

Call Sequence 2

? Number: 6001

? Ring Duration [s]: 20

? If Number Busy Go To: Busy tone ▼

? If DND Active Go To: No Progress ▼

? Use Once: ☐

? Accept Calls From: ☒ Internal ☒ Operator ☒ External

? Individual Repeated Distribution Bypass: ☐

? Support SMS Messages: ☐

? Support Instant Messaging: ☐

Figure 84: Personal Number List - Change - 1

28. Click **Continue**.

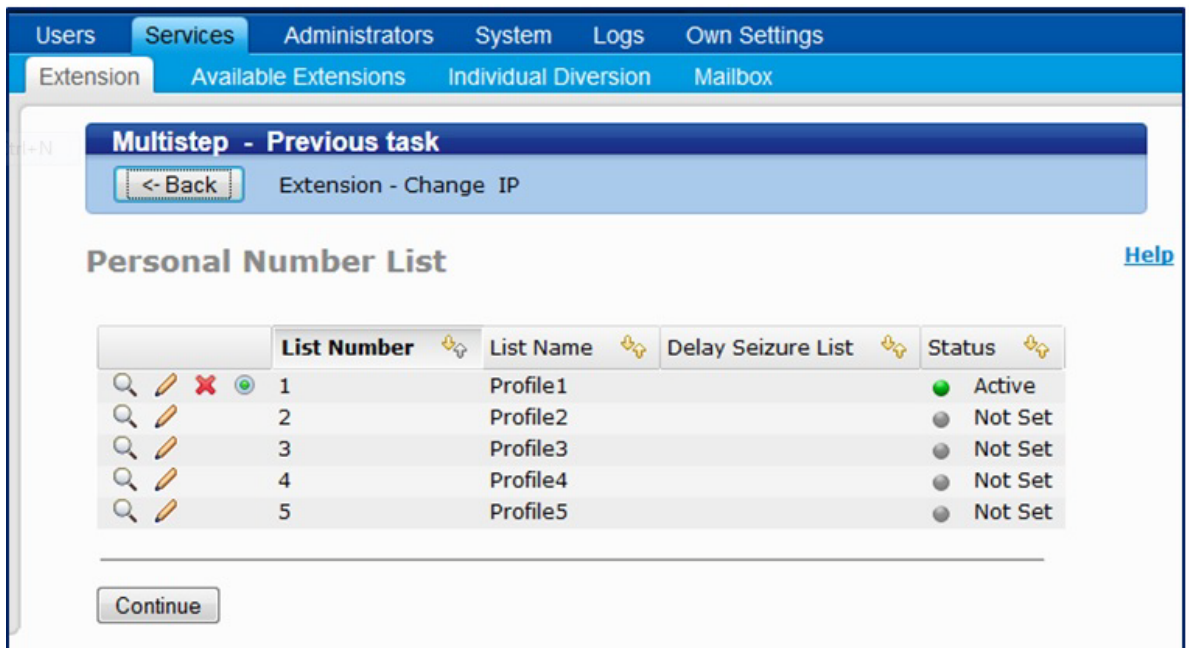


Figure 85: Personal Number List - Extension - Change IP

29. Click **Continue**.

The screenshot shows the 'Extension - Change - 8002' configuration window. The top navigation bar includes 'Users', 'Services', 'Administrators', 'System', 'Logs', and 'Own Settings'. Below this, a sub-navigation bar shows 'Extension', 'Available Extensions', 'Individual Diversion', and 'Mailbox'. The main title is 'Extension - Change - 8002'. To the right of the title, there is a 'Shortcuts' dropdown set to 'Common Category', a 'Go...' button, and a 'Help' link. Below the title bar are 'Apply' and 'Cancel' buttons.

The configuration is organized into several sections:

- General:**
 - Telephony System: MXONE-MICOLLAB
 - Extension Number: 8002
 - Description: (empty text box)
 - Server Number: 1
 - Extension Type: IP
 - Customer: None
 - Common Service Profile: 2 - (None) (dropdown)
 - Language: Default (dropdown)
 - Backup Answering Position Number: (empty text box)
 - Allow Security Exception: ☒
 - Allow EDN: NO
 - Boss/Secretary: None (dropdown)
 - Home Area Code: (empty text box)
 - Protocol: ☒ SIP, ☐ IP
- Name Identity:**
 - First Name: (empty text box)
 - Last Name: (empty text box)
- Authorization Code:**
 - Authorization Codes: (empty text box) with an 'Edit...' button
- Ring Signal:**
 - Ring Signals: (empty text box) with an 'Edit...' button
- Personal Number:**
 - Personal Number List: (empty text box) with an 'Edit...' button
- Logged On Status:**
 - Registered Phone Type: 1: Profile1:Active
 - Registered Phone Type: NOT REGISTERED

Figure 86: Extension - Change - 8003

30. 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 AWW application with the MiVoice MX-ONE, you must configure the MiVoice MX-ONE system settings first, then configure the SIP server settings in the AWW application.

INSTALL MICOLLAB AWW 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 AWW

You connect the AWW 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 AWW 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 87: Hunt Group

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

Hunt Group - Add - Step 1 / 3

Customer Name: None

Available Directory Number Intervals: 8003-8199

Help

Summary

Hunt Group - Add

To see help information about usage, format and options for a specific property, click the ? Help icon.

Step 1 / 3

On this screen you select an interval of directory numbers in which the HuntGroup will be created.

1. Click the **Available Directory Number Intervals** drop-down list.
2. Select a customer in the drop-down list.
3. Click an appropriate interval in the drop-down list.
4. Click **Next ->** to continue to the next screen.

To cancel and return to the Hunt Group

Figure 88: Hunt Group - Add - Step 1

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.

Figure 89: Hunt Group - Add Step 2

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Figure 90: Hunt Group - Add Step 3

9. Click **Apply**. The Service Node Manager shows the operation result.

Initial Setup

Number Analysis

Telephony

Services

System

Tools

Logs

Extensions

Operator

Call Center

Groups

External Lines

System Data

IP Phone

DECT

Group Do Not Disturb

Customer

Hunt Group

Hunt Group Member

Pickup Group

Hunt Group - Add - Result

Help

Done

✓ Add operation successful for:

• Directory Number: 8003

Legends : ☒ = Advanced field

Hunt Group Category Characteristics

Property	Value
Directory Number	8003
Customer Name	None
Server Number	1
Direct In-dialing	Open
Recall Category	Not provided
Display of Called Number	Selected member information
Music on Wait	Not provided
Allow Collect Call	Not allowed
Permit Automatic Extending	Not permitted
Traffic Connection Class	15
Member Selection Order	Sequential
Queue Internal Calls	Not allowed
Diversion	Not permitted
Maximum Calls to External Destination	00
External Follow Me/Diversion on the Group Number	Activation/Deactivation is not permitted
Maximum Number of Queuing Calls to the Group	0
Unanswered Call Temporarily Marks Member Unavailable	Unavailable for a period of time
Ringing Time	30

Hunt Group Name

Property	Value
First Name	MiCollab AWV
<input checked="" type="checkbox"/> Include in Dial by Name Database	No
<input checked="" type="checkbox"/> Name Presentation Order	First part of name is presented
<input checked="" type="checkbox"/> Restrict Presentation	Not restricted

Add New...

Change This...

Remove This

Add From This...

Done

Figure 91: 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.

Common Service Profiles

Shortcuts: <Manage Shortcuts> Go... [Print All](#) [Help](#)

Add Using Template: <Default template> [Manage Templates](#)

CSP Number	CSP Name	Customer
0	CSP 0	None
1	CSP 1	None
2	CSP 2	None

Change... Remove Print... Compare

Figure 92: Common Service Profiles

12. Click **Add**.

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

Common Service Profiles - Add - Step 1 / 6 [Help](#)

Name Identity

<- Back **Next ->** Apply Cancel

Customer: None

CSP Name: * AWV Extensions

CSP Number: 3

<- Back Next -> Apply Cancel

Figure 93: Common Service Profiles - Add - Step 1

14. Click **Next**.

15. Define the Number Presentation Category.

The screenshot shows the 'Common Service Profiles - Add - Step 2 / 6' configuration page. The left sidebar contains a list of configuration items: Account Code, Common Category, Common Service Profiles (selected), Common Abbreviated Number, Common Authorization Code, Force Mobile Through PBX, and Delay Seizure List. The main content area is titled 'Number Presentation Category' and includes a 'Help' link. Below the title are navigation buttons: '<- Back', 'Next->', 'Apply', and 'Cancel'. The configuration options are as follows:

- Request A-number from the PSTN: ☐
- Use Number Presentation Restriction: ☐
- Number Presentation Restriction is Permitted per Call: ☐
- Allow Network Affiliation: ☒
- Calling Line Identification Presentation Restriction Override: Not Permitted (dropdown)
- Never Display Number from PSTN: ☐
- Calling Party Display: ☐ PBX member, ☒ PBX group number and name

At the bottom of the configuration area are navigation buttons: '<- Back', 'Next->', 'Apply', and 'Cancel'.

Figure 94: Common Service Profiles - Add - Step 2

16. Click **Next**.

17. Define the Traffic Category.

The screenshot shows the 'Common Service Profiles - Add - Step 3 / 6' configuration page. The left sidebar is identical to the previous step, with 'Common Service Profiles' selected. The main content area is titled 'Traffic Category' and includes a 'Help' link. Below the title are navigation buttons: '<- Back', 'Next->', 'Apply', and 'Cancel'. The configuration options are as follows:

- Block Emergency Switching Characteristics: ☒
- Direct Indialling Characteristics: Open (dropdown)
- Use Rerouting Limitations: ☐
- Common Abbreviated Number Traffic Class: 03 (dropdown)
- TCD-Category Night: Fully Open (dropdown)
- TCD-Category Day: Fully Open (dropdown)
- Traffic Connection Class: 15 (dropdown)

At the bottom of the configuration area are navigation buttons: '<- Back', 'Next->', 'Apply', and 'Cancel'.

Figure 95: Common Service Profiles - Add - Step 3

18. Click **Next**.

19. Define the Service Category.

Common Service Profiles - Add - Step 4 / 6 [Help](#)

Service Category

<- Back **Next ->** Apply Cancel

Automatic Call Back Characteristics:	Permitted	<input type="checkbox"/>
Allow Call Waiting Tone Initiation:		<input type="checkbox"/>
Call Waiting Tone Reception(B-party):	Deactivated	<input type="checkbox"/>
Call Waiting Tone Reception(C-party):		<input type="checkbox"/>
Intrusion Capability Level:	0	<input type="checkbox"/>
Intrusion Protection Level:	3	<input type="checkbox"/>
Allow Malicious Call Tracing Category:		<input type="checkbox"/>
Manual Message Waiting:		<input type="checkbox"/>
Call Metering Category:	Per route	<input type="checkbox"/>
	Per extension	<input type="checkbox"/>
Allow A-Number Request from MFC:		<input type="checkbox"/>
Allow A-Subscriber Charged:		<input type="checkbox"/>
Allow Individual Do Not Disturb:		<input type="checkbox"/>
Hospitality Class of Extension:	Normal extension	<input type="checkbox"/>
Accept Incoming Collect Calls:		<input type="checkbox"/>
Force Calls from or to IP Terminal to be Gateway Calls:		<input type="checkbox"/>
Service License:		<input type="checkbox"/>
	Short message service	<input type="checkbox"/>
	Free seating	<input type="checkbox"/>
Allow External Controlled Call Distribution:		<input type="checkbox"/>
Offered Timer [s] :	0	<input type="checkbox"/>
Enable Common Authorization Code:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Allow Free on Busy:		<input type="checkbox"/>
Extended services in Intrusion state:		<input type="checkbox"/>
Call List Deactivation Forbidden:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Allow Activation/Deactivation of Group Do Not Disturb:		<input type="checkbox"/>
Allow Automatic Answer:		<input type="checkbox"/>
Request Transfer Permission of Public Trunk:		<input type="checkbox"/>
Transfer Reception:		<input type="checkbox"/>
Permitted to transfer calls to intruded party:		<input type="checkbox"/>
Forced Disconnect Timer [s]:	0	<input type="checkbox"/>
Answer Handled By External Application:		<input type="checkbox"/>
Log Off Restriction:	LogOff allowed	<input type="checkbox"/>

<- Back Next -> Apply Cancel

Figure 96: Common Service Profiles - Add - Step 4

20. Click **Next**.

21. Define the Diversion Category.

Figure 97: Common Service Profiles - Add - Step 5

- 22. Click **Next**.
- 23. Define the Routing Category.

Figure 98: Common Service Profiles - Add - Step 6


- 24. Click **Apply**. The Service Node Manager shows the operation result.

Initial Setup Number Analysis **Telephony** Services System Tools Logs

Extensions Operator Call Center Groups External Lines System Data IP Phone DECT

Account Code
Common Category
Common Service Profiles
Common Abbreviated Number
Common Authorization Code
Force Mobile Through PBX
Delay Seizure List

Common Service Profiles - Add - Result [Help](#)

 **Add operation successful for:**

- CSP Name: AWV Extensions

Name Identity

Property	Value
CSP Number	3
CSP Name	AWV Extensions
Customer	None

Number Presentation Category

Property	Value
Request A-number from the PSTN	Restricted for extension
Use Number Presentation Restriction	Not restricted
Number Presentation Restriction is Permitted per Call	No
Allow Network Affiliation	Allowed
Calling Line Identification Presentation Restriction Override	Not Permitted
Never Display Number from PSTN	No
Calling Party Display	PBX group number and name

Traffic Category

Property	Value
Block Emergency Switching Characteristics	Yes
Direct Indialling Characteristics	Open
Use Rerouting Limitations	No
Common Abbreviated Number Traffic Class	03
TCD-Category Night	Fully Open
TCD-Category Day	Fully Open
Traffic Connection Class	15

Figure 99: Common Service Profiles - Add - Result

Traffic Connection Class	15
Service Category	
Property	Value
Automatic Call Back Characteristics	Permitted
Allow Call Waiting Tone Initiation	No
Call Waiting Tone Reception(B-party)	Deactivated
Call Waiting Tone Reception(C-party)	No
Intrusion Capability Level	0
Intrusion Protection Level	3
Allow Malicious Call Tracing Category	No call tracing
Manual Message Waiting	Not allowed
Call Metering Category	Per route
Allow A-Number Request from MFC	No
Allow A-Subscriber Charged	Normal
Allow Individual Do Not Disturb	No
Hospitality Class of Extension	Normal extension
Accept Incoming Collect Calls	No
Force Calls from or to IP Terminal to be Gateway Calls	Yes
Allow External Controlled Call Distribution	No
Offered Timer [s]	0
Enable Common Authorization Code	Enabled
Allow Free on Busy	Disabled
Extended services in Intrusion state	Extended services not permitted
Call List Deactivation Forbidden	Yes
Allow Activation/Deactivation of Group Do Not Disturb	Not permitted
Allow Automatic Answer	No
Service License	
Short message service	No
Free seating	No
Request Transfer Permission of Public Trunk	Not allowed
Transfer Reception	Not allowed
Permitted to transfer calls to intruded party	Not allowed
Forced Disconnect Timer [s]	0
Answer Handled By External Application	No
Log Off Restriction	LogOff allowed
Call Diversion Category	
Property	Value
Use External Follow Me	No
Allow Follow Me	No
Allow Diversion Bypass	No
Origin is an Internal Extension	Feature not allowed
Origin is a Private External Line	Feature not allowed
Origin is a Public External Line	Feature not allowed
Allow Auto Bypass of Follow Me for SMS	No
Allow Auto Bypass of External Follow Me for SMS	No
Allow Direct Diversion to	Only an individual divertee position
Allow Diversion on Busy	No
Allow Diversion on No Answer	No
Allow Multi Directory Diversion	No
Allow Remote Programming on Follow Me	No
Allow Remote Programming on ECF	No
Allow Remote Programming on No Reply	No
Allow Remote Programming on Busy	No
Allow Remote Programming on Direct Diversion	No
Routing Category	
Property	Value
Facility Restriction Level	0
Account Code Category	Least cost routing tables 1 or 2
Off-hook Queuing Level	0
Authorization Type for Route Selection	Normal extension
<input type="button" value="Add New..."/> <input type="button" value="Change This..."/> <input type="button" value="Remove This"/> <input type="button" value="Add From This..."/> <input type="button" value="Done"/>	

Figure 100: Common Service Profiles - Add - Result (Continued)

Initiate the SIP extension to be used as group members

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

26. Click **Services** and then click **Extension**.

The screenshot shows the 'Extension - Add' form in the MX-ONE Provisioning Manager. The top navigation bar includes 'Users', 'Services' (selected), 'Administrators', 'System', 'Logs', and 'Own Settings'. Below this, a sub-navigation bar shows 'Extension' (selected), 'Available Extensions', 'Individual Diversion', and 'Mailbox'. The main form area is titled 'Extension' and includes a 'Help' link. It features an 'Add' button, a 'Using Template:' dropdown set to '<Default template>', and a 'Manage Templates' link. The form contains several fields: 'Telephony System' (dropdown set to 'MXONE-MICOLLAB, version 6.0'), 'Extension Type' (dropdown set to 'IP'), 'Enter Extension Number(s):' (text input with examples like '* or 1000 or 1000-1050'), and 'Enter Equipment Position:' (text input with examples like '1-0-40-00'). At the bottom, there are 'View' and 'Change...' buttons, a 'Maximum rows per page' dropdown set to '200', and left/right navigation arrows.

Figure 101: Extension - Add

27. Click **Add**.

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

The screenshot shows the 'Extension - Add - Step 1 / 2' form. The top navigation bar is the same as in Figure 101. The sub-navigation bar is the same. The main form area is titled 'Extension - Add - Step 1 / 2' and includes a 'Shortcuts:' dropdown set to 'Common Category', a 'Go...' button, and a 'Help' link. Below the title bar, there are navigation buttons: '<- Back', 'Next ->', 'Apply', and 'Cancel'. The form contains two fields: 'Telephony System' (dropdown set to 'MXONE-MICOLLAB') and 'Extension Type' (dropdown set to 'IP'). At the bottom, there are navigation buttons: '<- Back', 'Next ->', 'Apply', and 'Cancel'.

Figure 102: Extension - Add - Step 1

29. Click **Next**.

30. 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 89).

The screenshot displays the 'Extension - Add - Step 2 / 2' configuration page. The top navigation bar includes 'Users', 'Services', 'Administrators', 'System', 'Logs', and 'Own Settings'. Below this, a sub-navigation bar shows 'Extension', 'Available Extensions', 'Individual Division', and 'Mailbox'. The main title is 'Extension - Add - Step 2 / 2' with a 'Shortcuts' dropdown set to 'Common Category' and 'Go...' and 'Help' buttons. Navigation buttons at the top include '<- Back', 'Next ->', 'Apply', and 'Cancel'. The 'General' section includes fields for 'Telephony System' (MXONE-MICOLLAB), 'Extension Number Range' (8004-8009), 'Extension Number' (8004), and 'Description'. The 'Domain Name' is set to 'DEFAULT', 'Server Number' to '1', 'Customer' to 'None', 'Common Service Profile' to '3 - AWV Extensions (None)', 'Language' to 'Default', 'Boss/Secretary' to 'None', and 'Home Area Code' is empty. The 'Protocol' is set to 'SIP' (radio button selected). The 'Backup Answering Position Number' is empty, 'Allow Security Exception' is checked, and 'Allow EDN' is unchecked. The 'Name Identity' section has empty fields for 'First Name' and 'Last Name'. The 'Authorization Code' section has an 'Edit...' button. The 'Ring Signal' section has an 'Edit...' button. The 'Personal Number' section has an 'Edit...' button. The 'Function Keys' section has 'Phone Type' set to 'Other type', 'Panel Type' set to 'No panel', and a 'Change...' button. The 'Group Setup' section has 'Hunt Group Number' set to '8003' and 'Call Pickup Group' set to 'None'. An 'Advanced...' button is at the bottom left. Navigation buttons at the bottom include '<- Back', 'Next ->', 'Apply', and 'Cancel'.

Figure 103: Extension - Add - Step2

31. Click **Apply**. The Provisioning Manager shows the operation result.

Extension Available Extensions Individual Diversion Mailbox

Extension - Add - Result Shortcuts : Common Category Go... [Help](#)

Done

Add operation successful for:

- Extension Number: 8004

Legends : = Advanced field

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

New Snip Ctrl+N

Add New... Change This... Remove This Add From This... Done

Figure 104: Extension - Add - Result

- 32. Click **Add From This** to initiate more SIP extensions with the same set of parameters.
- 33. In the **Shortcut** field, select Hunt Group.

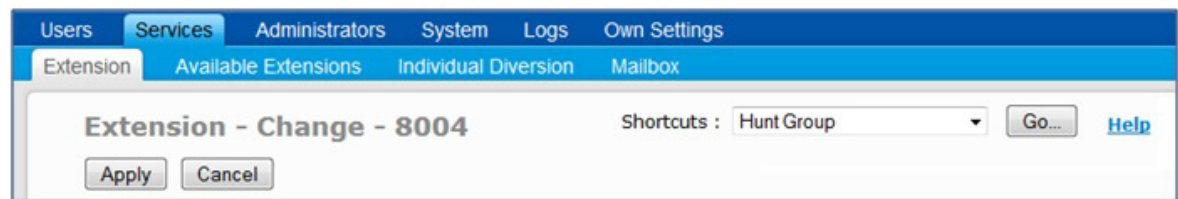


Figure 105: Extension - Change

- 34. Click **Go**. The Provisioning Manager opens the Service Node Manager – Hunt Group tab.

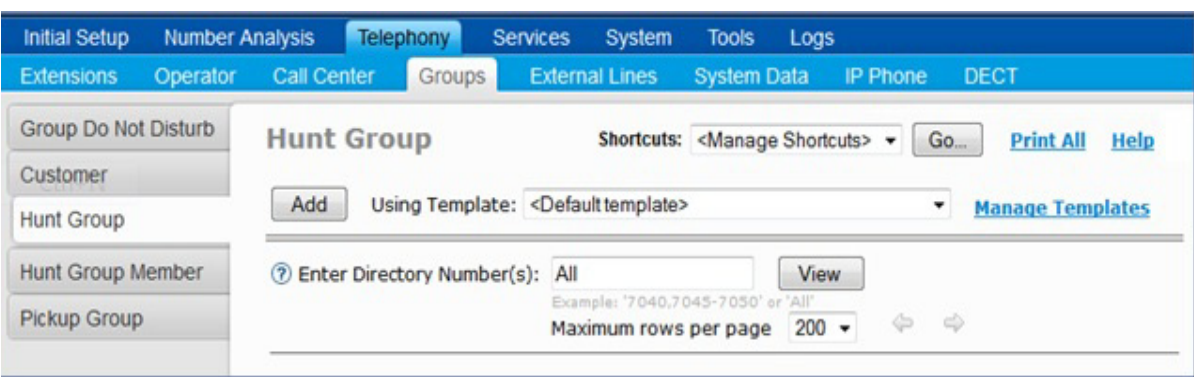


Figure 106: Hunt Group

- 35. Select **Hunt Group Member**.

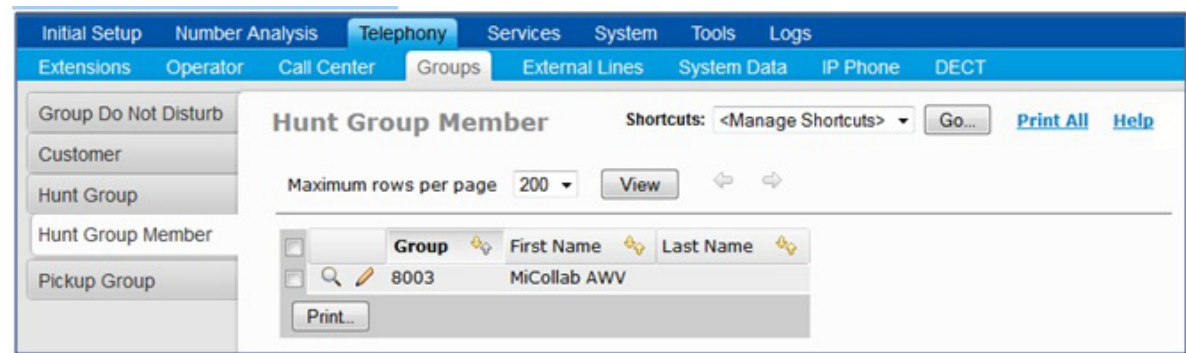


Figure 107: Hunt Group Member

- 36. Review the Hunt Group Members.

Property	Value
Group	8003
First Name	MiCollab AWV
Last Name	
Member	8004
Member	8005
Member	8006

Figure 108: Hunt Group Member - View

37. You can also manage the Hunt Group Members using the **Change This...** function.

Remove Existing Members

- ☐ Remove All
- ☐ 8004
- ☐ 8005
- ☐ 8006

Figure 109: Manage Hunt Group Members - Managing

CONFIGURE SIP SERVER SETTINGS IN MICOLLAB AWW

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.
2. Under **Applications**, click **Audio, Web and Video Conferencing**.
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

- SIP Teleworker for MiCollab Client softphones and 6800 sets
- SIP Trunking, and
- Secure Call Recording

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 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:

The screenshot shows the 'Manage ICP' form with the following fields and values:

- Name:** Astra A5000
- Hostname or IP address:** 88.88.88.88
- Type:** A dropdown menu is open, showing the following options: MiVoice Business, MiVoice Business Silhouette, **MiVoice MX-ONE** (highlighted), MiVoice 5000, and MiVoice Office.
- SIP TLS capable:** (checkbox, unchecked)
- Installer password:** (text input field, empty)
- Indirect call recording capable:** (checkbox, unchecked)
- Save:** A button at the bottom right.

Figure 110: Configure MiVoice MX-ONE as ICP on Standalone MBG

CONFIGURE SIP TRUNKS

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

INTEGRATE MICOLLAB CLIENT SERVICE

MICOLLAB CLIENT CONFIGURATION

Refer to the *MiCollab Client Service* application help and the *MiCollab Client Administrator Guide* for configuration information.

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 MOBILE CLIENTS

MiVoice MX-ONE platforms support MiCollab mobile clients. 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

The MiCollab Client CSTA Proxy application supports the call control messaging between MiCollab and the MiVoice MX-ONE platform to support MiCollab Client features such as "Click-to-Call".

1. Log into the MiCollab server manager.
2. Under **Applications**, click **MiCollab Client Service**.
3. Click **Configure MiCollab Client Service**.
4. Click **PBX Nodes**.
5. Double-click the system name or IP Address of the MiVoice MX-ONE
6. Open **CSTA Settings**.
7. In the Port field, enter the number of the CSTA port on the MiVoice MX-ONE (default is 8882).
8. Refer to the help for descriptions of the other fields. Typically, you will not need to change the default settings.
9. Click **Save**.

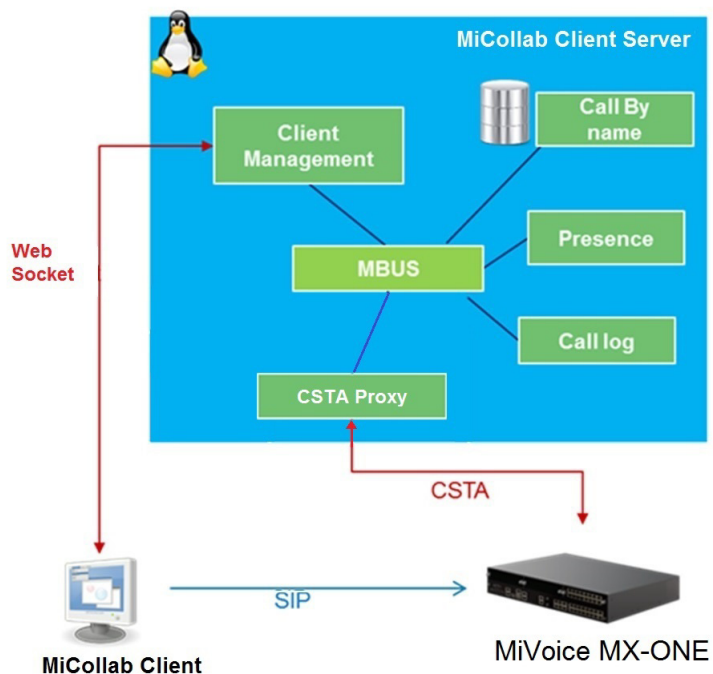


Figure 111: MiCollab Client Integration

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

See "User Provisioning" on page 116 for details.

USER PROVISIONING

The Provisioning Manager is used to create, delete and change users in MiCollab. In MX-ONE 6.1 SP1 and later, there are two supported MiCollab deployment configurations:

- Single MiCollab Server with 5000 users in MiCollab, requiring 10,000 SIP registrations in the MiVoice MX-ONE (based on a SIP deskphone and SIP softphone per user). See
- Multiple MiCollab servers with 40,000 users in MiCollab, requiring 80,000 SIP registrations in MiVoice MX-ONE (based on a SIP deskphone and SIP softphone per user):

Note: Active Directory is not supported for multiple MiCollab servers.

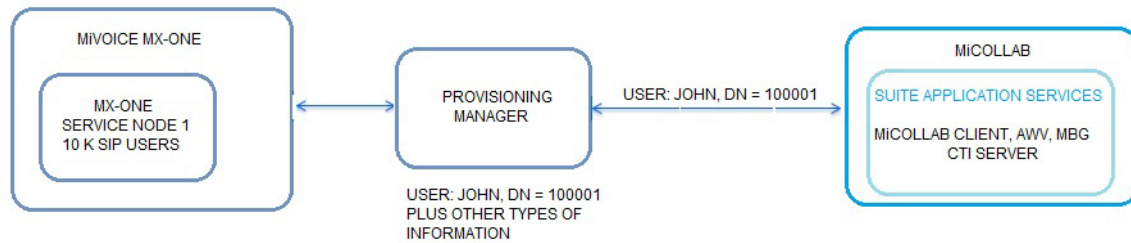


Figure 112: Single MiCollab Server
(5,000 Users in MiCollab and a Minimum of 10,000 SIP Registrations in MX-ONE)

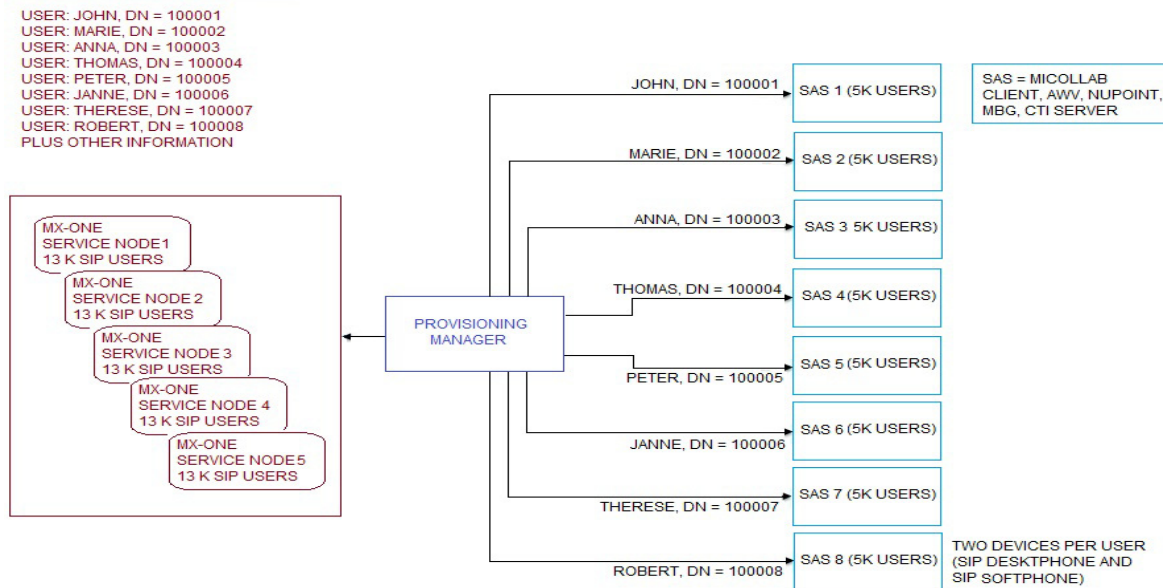


Figure 113: Multiple MiCollab Servers
(40,000 Users in MiCollab and a Minimum of 80,000 SIP Registrations in MX-ONE)

INTEGRATING MICOLLAB SERVERS

If your deployment has one or multiple MiCollab servers, you must add the servers into Provisioning Manager pools (**PM setup > subsystem**).

To integrate the Provisioning Manager with multiple MiCollab servers:

1. Configure MiCollab with Network Elements, Roles, Licenses, and so forth).
2. Create the MiCollab Server in the Provisioning Manager under **System > Subsystem Task**. Figure 114 shows an example of three MiCollab pools; each pool containing eight MiCollab servers.

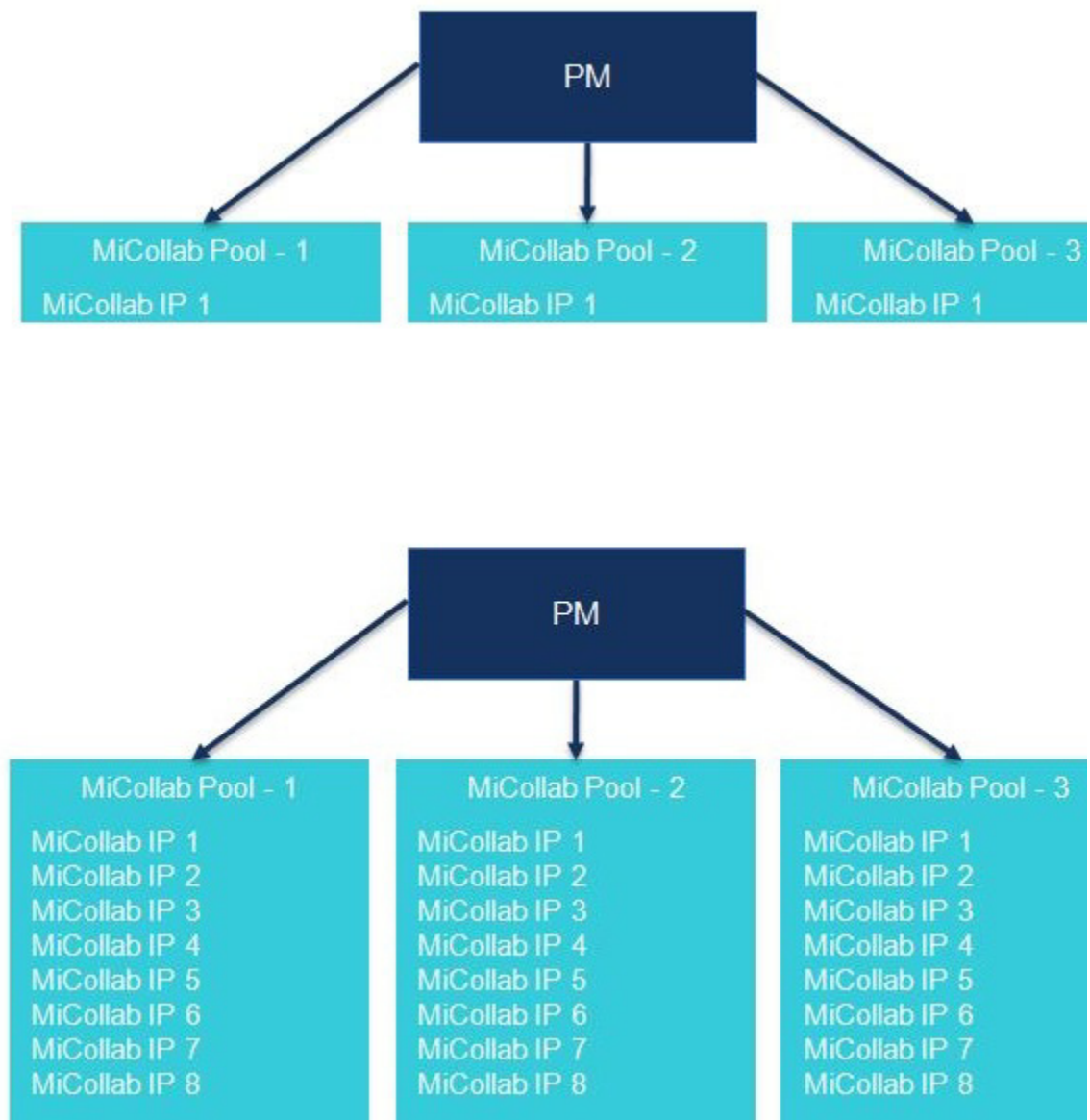


Figure 114: MiCollab Pools

3. Figure 115 shows an example of two MiCollab servers in pool #1.

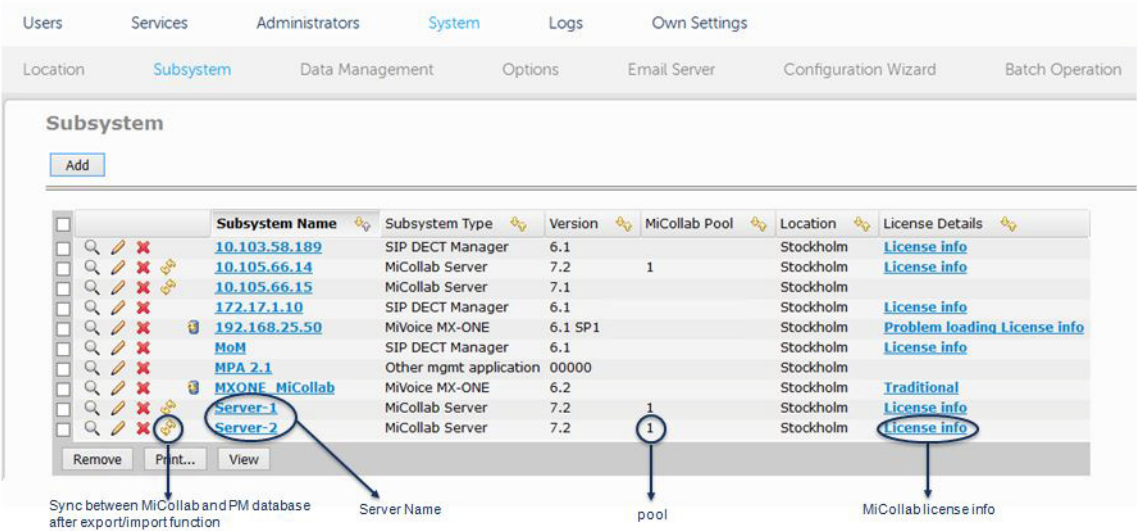


Figure 115: Provisioning Manager – MiCollab Subsystem Example

4. Add the MiCollab servers as subsystems. Ensure that you select the correct release version of the MiCollab.

The figure displays two screenshots of the 'Subsystem - Change' configuration interface, showing the setup for two different MiCollab servers (Server-1 and Server-2).

Subsystem - Change - Server-1

- Subsystem Type: MiCollab Server
- Subsystem Name: Server-1
- Version: 7.2
- IP Address: 10.105.66.17
- User ID in Subsystem: micollab_api
- Password in Subsystem: [Redacted]
- Confirm Password in Subsystem: [Redacted]
- Location: Stockholm
- MiCollab Pool: 1
- Enable MiCollab AD Authentication: [Unchecked]

Subsystem - Change - Server-2

- Subsystem Type: MiCollab Server
- Subsystem Name: Server-2
- Version: 7.2
- IP Address: 10.105.66.19
- User ID in Subsystem: micollab_api
- Password in Subsystem: [Redacted]
- Confirm Password in Subsystem: [Redacted]
- Location: Stockholm
- MiCollab Pool: 1
- Enable MiCollab AD Authentication: [Unchecked]

An annotation points to the 'Version' field (7.2) in the first screenshot, stating: "MiCollab version definition. It is very important to have the correct version, because functionality may vary."

Figure 116: MiCollab Subsystems Example: Pool with 2 MiCollab Servers

- The **Subsystem > View** shows the number of UCC User Licenses currently used by the server. The numbers are updated after the sync.

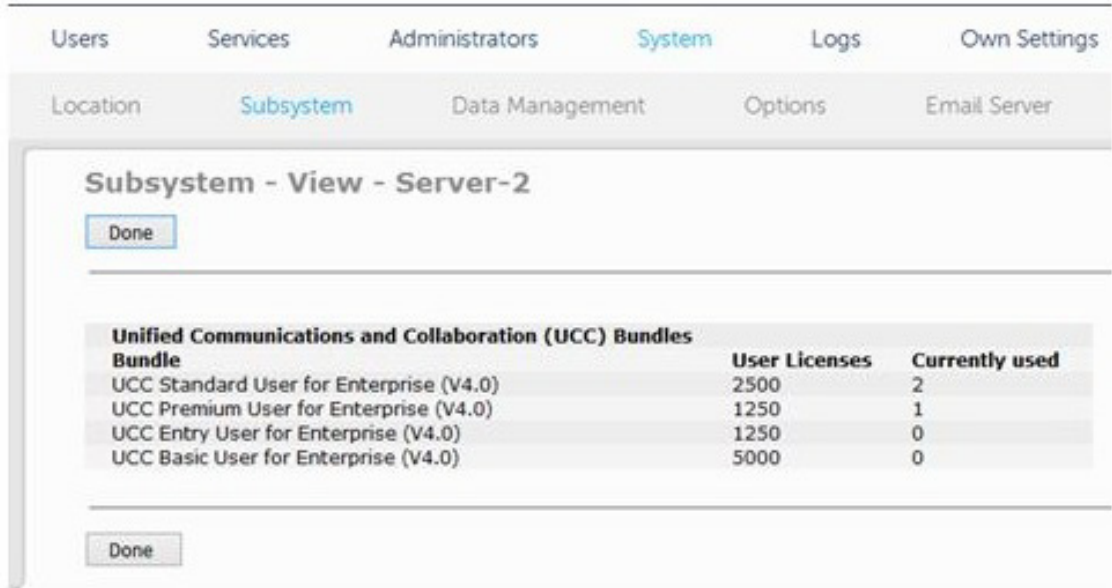
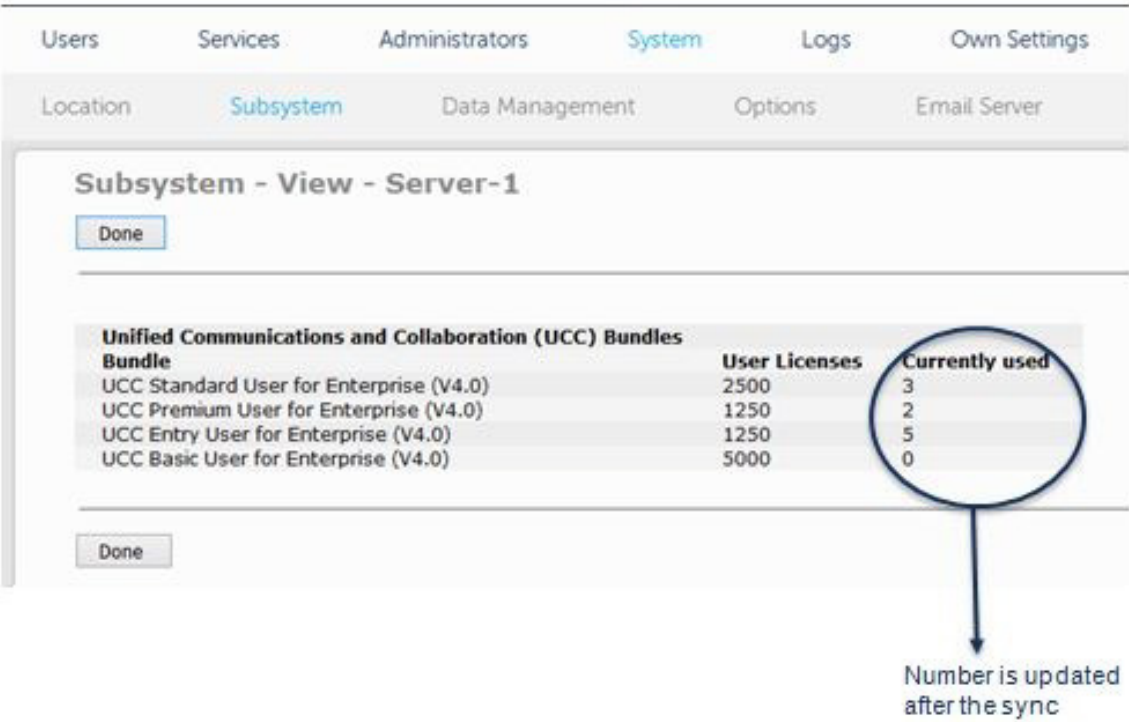


Figure 117: Pool with 2 MiCollab Servers - Licenses

6. Access the **User > User** screen to view the User IDs, MiCollab servers, and MiCollab Roles:

User ID	Last Name	First Name	Extension / MiVoice MX-ONE	Department(s)	Import from	Customer	MiCollab Server	MiCollab Role
admin_rd	RD	Admin	200000 / MXONE_MiCollab	Lab_MiCollab				
andre.freitas	Freitas	André	200001 / MXONE_MiCollab	MiCollab	Active Directory		Server-1	Premium_1
anna.carolina	Carolina	Anna	200019 / MXONE_MiCollab	Lab_MiCollab			Server-2	Standard_1
antonio.moura	Moura	Antonio	200002 / MXONE_MiCollab	MiCollab	Active Directory		Server-2	Entry_1
jchretien	Chretien	Jean	200015 / MXONE_MiCollab	Lab_MiCollab			Server-1	Entry_1
johan.gustavsson	gustavsson	Johan	200018 / MXONE_MiCollab	Lab_MiCollab			Server-1	Standard_1
john.smith	Smith	John	200011 / MXONE_MiCollab	MiCollab	Active Directory			
johnstye	stye	John	200017 / MXONE_MiCollab	Lab_MiCollab			Server-1	Premium_1
jtrudeau	Trudeau	Justin	200012 / MXONE_MiCollab	Lab_MiCollab			Server-1	Standard_1
kcampbell	Campbell	Kim	200016 / MXONE_MiCollab	Lab_MiCollab			Server-1	Entry_1
maria.souza	Souza	Maria	200003 / MXONE_MiCollab	MiCollab	Active Directory		Server-1	Standard_1
mauro.camargo	Camargo	Mauro	200004 / MXONE_MiCollab	MiCollab	Active Directory		Server-2	Standard_1
paulo.severino	Severino	Paulo	200005 / MXONE_MiCollab	MiCollab	Active Directory		Server-1	Premium_1
pmartin	Martin	Paul	200014 / MXONE_MiCollab	Lab_MiCollab			Server-1	Entry_1
sharper	Harper	Stephen	200013 / MXONE_MiCollab	Lab_MiCollab			Server-2	Entry_1
test_12345	something	Test	200009 / MXONE_MiCollab	Lab_MiCollab			Server-1	None
test1234	1234	Test	200017 / MXONE_MiCollab	Lab_MiCollab			Server-1	Entry_1
tuyio.joy	Joy	Tuyio	200006 / MXONE_MiCollab	MiCollab_01	Active Directory		Server-1	Entry_1
yung.lu	Lu	Yung	200007 / MXONE_MiCollab	MiCollab_01	Active Directory		Server-1	Entry_1

It shows in which MiCollab the user is

It shows the role

Figure 118: User List

USER PROVISIONING METHODS

In MX-ONE 6.1 SP1 and later, the method that you use to provision users depends upon the deployment configuration:

- For a single MiCollab Server with 5000 users in MiCollab and a minimum of 10,000 SIP registrations in the MX-ONE (based on a SIP deskphone and SIP softphone per user) you can use the following methods:
 - Method 1:** Provisioning Manager User task
 - Method 2:** Provisioning Manager Export tool or
 - Method 3:** Provisioning Manager Active Directory integration
- For multiple MiCollab servers with 40,000 users in MiCollab and a minimum of 80,000 SIP registrations in MX-ONE (based on a SIP deskphone and SIP softphone per user) you can use either of the following methods.
 - Method 1:** Provisioning Manager User task (you must manually select the MiCollab server of the user) or
 - Method 2:** Provisioning Manager Export tool (you must manually specify the MiCollab server of the user)

Note: Active Directory is not supported for multiple MiCollab servers.

METHOD 1: PROVISIONING MANAGER USER TASK

In Method 1, shown in Figure 119 and Figure 120 users are provisioned from the MiVoice MX-ONE Provisioning Manager.

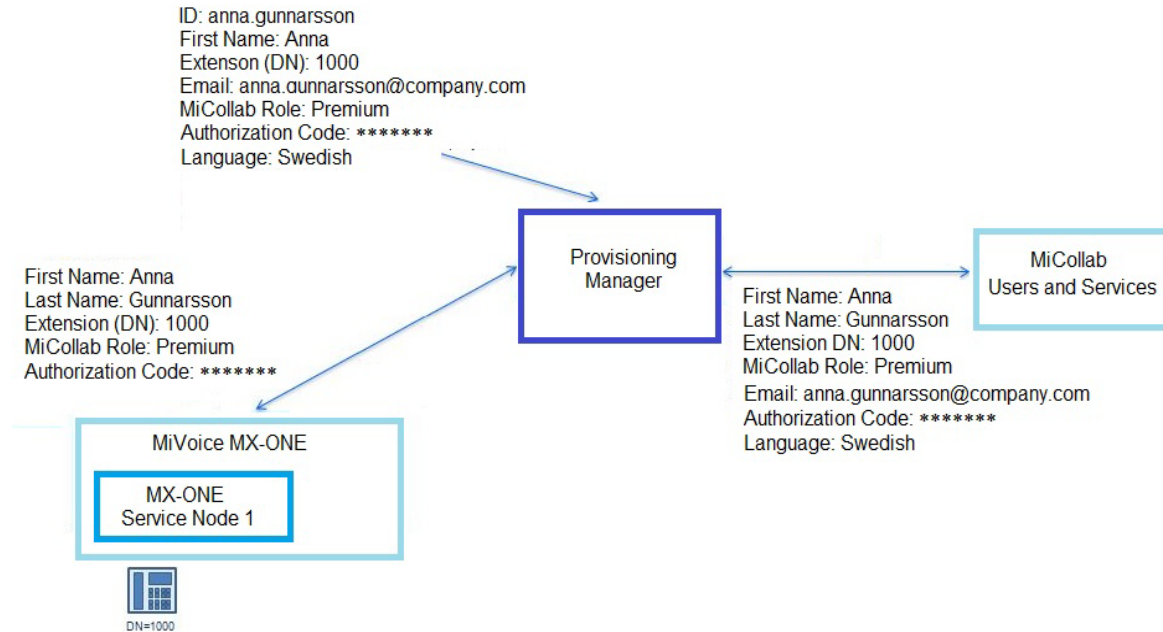


Figure 119: Single MiCollab Server via PM User Task

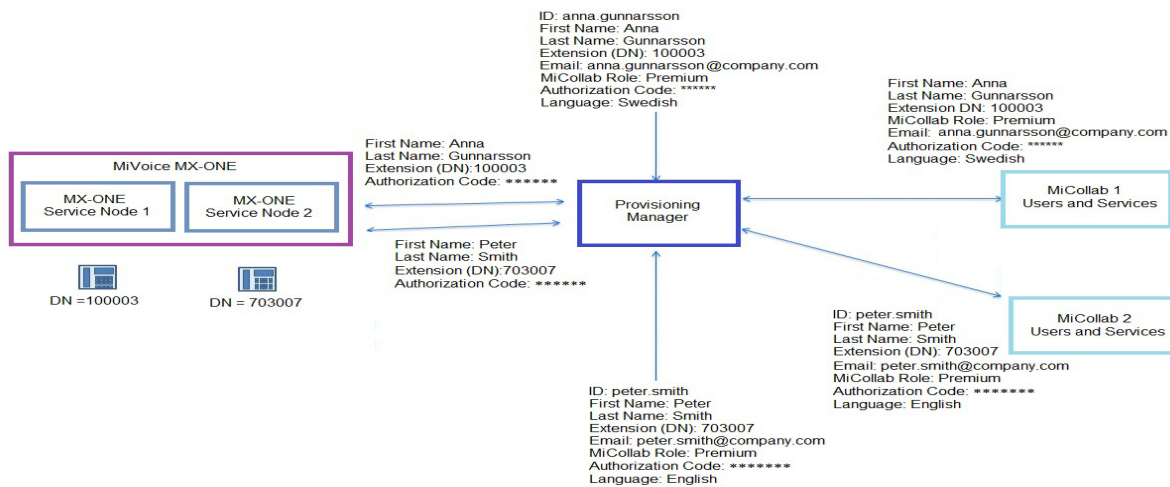


Figure 120: Multi-MiCollab Server via PM User Task

1. Under **Users > User > Add** enter the user's information in Step 1.

Users Services Administrators System Logs Own Settings

User Departments UDF Mapping Unlock

User - Add - Step 1 / 4

User

<- Back Next -> Apply Cancel

First Name:	John	Last Name:	* Smithson
User Id:	* John.smithson	Confirm Password:	*****
Password:	*****	SMS:	
Email Address:	john.smithson@companyA.com	Alternate Last Names:	
Alternate First Names:			
Keywords:			

User Defined Fields

Business:		Business 2:	
Mobile Phone:		Mobile Phone 2:	
Department(s):	* Existing Department(s); Location(s): Mitel Networks Corporation; Stockholm Mitel Networks Corporation\Micollab_Stockholm; Mitel Networks Corporation\Micollab_Stockholm\ Mitel Networks Corporation\Micollab_Stockholm\ Mitel Networks Corporation\MP_Users_for_AD_sy Mitel Networks Corporation\MP_Users_for_AD_sy Mitel Networks Corporation\MP_Users_for_AD_sy Mitel Networks Corporation\MP_Users_for_AD_sy Mitel Networks Corporation\MP_Users_for_AD_sy		

Selected Department(s); Location(s):
Mitel Networks Corporation; Stockholm

Move Up
Move Down

Note: The first department in Selected Department(s) list is primary department

Preferences

Use Last Selection:	<input checked="" type="checkbox"/>
Provisioning Manager Language:	English

<- Back Next -> Apply Cancel

Figure 121: Provisioning Manager User Task

- 2. Assign an existing extension or add a new extension. If the deployment includes multiple MX-ONE service nodes, select the desired node for the extension.

UsersServicesAdministratorsSystemLogsOwn Settings

UserDepartmentsUDF MappingUnlock

User - Add - Step 2 / 4

Service Summary

<- Back

Next ->

Apply

Cancel

Extension

Assign Existing Extension:

Extension Number

MiVoice MX-ONE

MXONE-MICOLLAB

If the extension is already created, type the number. Otherwise create a new.

Template For New Extension:

<Select template>

Add New Extension:

Add...

Add a new SIP Extension

Advanced...

<- Back

Next ->

Apply

Cancel

Figure 122: Provisioning Manager User Task - cont.

- 3. Set the Extension Type to Multi-Terminal.

UsersServicesAdministratorsSystemLogsOwn Settings

UserDepartmentsUDF MappingUnlock

Multistep - Previous task

<- Back

User - Add - Step 2 / 4

Service Summary

Extension - Add - Step 1 / 2

<- Back

Next ->

Continue

Cancel

MX-ONE Service Node:

MXONE-MICOLLAB

Extension Type:

Multi-Terminal

Select Multi-Terminal

<- Back

Next ->

Continue

Cancel

Figure 123: Provisioning Manager User Task - cont.

- 4. Select the Extension Number DN and click the **Add** button next to IP Extension.

Multistep - Previous task

<- Back User - Add - Step 2 / 4 Service Summary

Extension - Add - Step 2 / 2

Multi-Terminal

<- Back Next -> Continue Cancel

General

MX-ONE Service Node: MXONE-MICOLLAB

Extension Number Range: 6001

Extension Number: 6001 → Select the Extension number (DN)

Description:

Server Number : 1

Customer: None

Common Service Profile: 0 - (None)

Phone Language: Default

Backup Answering Position Number:

Allow Security Exception: ☒

Boss/Secretary: None

Home Area Code:

DECT Extension: Add...

Mobile Extension: Add...

IP Extension: Add... → Select IP Extension

SIP Remote Terminal: Add...

SIP Auto-registered Terminal: Add...

Figure 124: User Provisioning Task - cont.

5. Enter the maximum number of terminals (SIP extensions) for the user:

Users Services Administrators System Logs Own Settings

User Departments UDF Mapping Unlock

Multistep - Previous task

< Back Extension - Add - Step 2 / 2 Multi-Terminal

IP Extension - Add

Continue Cancel

BluStar Client Model: None

Allow Third Party SIP Client: ☐

Allow Video Functionality: ☐

Enable MMIC Functionality: ☐

Maximum Terminals: 4

Protocol: ☒ SIP ☐ IP

Allow EDN: ☐

Free on Second Line: Yes, but can be changed via terminal menu

Logged On Status

Registered Phone Type: NOT REGISTERED

Function Keys

Phone Type: Other type

Panel Type: No panel

Function Keys: Change...

IP Phone Server: Enter Manual URL

Domain Folder:

Continue Cancel

Adjust the number of SIP extensions for the user.
2 = 2 SIP Registrations (Deskphone and Softphone)
3 = 3 SIP Registrations (Deskphone, Softphone, Mobile Client)
4 = 4 SIP Registrations (Deskphone, Softphone, Mobile Client and Mobile Extension)

Click continue

Figure 125: User Provisioning Task - Extension Add - Step 1

6. Click Continue.

Extension - Add - Step 2 / 2

Multi-Terminal Extensionpage

<- Back Next -> Continue Cancel

General

? MX-ONE Service Node: MXONE-MICOLLAB

? Extension Number Range: 6001

? Extension Number: 6001

? Description:

? Server Number : 1

? Customer: None

? Extension Type: MultiTerminal

? Common Service Profile: 0 - (None)

? Phone Language: Default

? Backup Answering Position Number:

? Allow Security Exception: ☒

? Boss/Secretary: None

? Home Area Code:

? DECT Extension: Add...

? Mobile Extension: Add...

? IP Extension: 6001

? SIP Remote Terminal: Add...

? SIP Auto-registered Terminal: Add...

Extension page

Name Identity

? First Name: John

? Last Name: Smithson

Authorization Code

? Authorization Codes: Edit... → Setup the Authorization Code . It is mandatory for Standard and Premium

Ring Signal

? Ring Signals: Edit...

Personal Number

? Personal Number List: Edit...

Group Setup

? Hunt Group(s)

Hunt Group Number

? Call Pickup Group: None

? Group Do Not Disturb: None

Advanced...

<- Back Next -> Continue Cancel

Figure 126: User Provisioning Task - Extension Add - Step 2 of 2

7. Edit the Authorization codes (mandatory for Standard and Premium users).
8. Enter the Authorization and Call Logging Codes for the user and click **Apply**.

Users

Services

Administrators

System

Logs

User

Departments

UDF Mapping

Unlock

Multistep - Previous task

<- Back

Extension - Add - Step 2 / 2

Multi-Terminal

Authorization Codes - Add

Apply

Cancel

?

Authorization Code:

*

.....

?

Call Logging Code:

*

.....

?

Customer:

None

?

New Customer:

None

?

Common Service Profile:

0 - (None)

?

Restrict Usage to This Extension Only:☐

Apply

Cancel

Click Apply

Figure 127: Provisioning User Task - cont.

Users

Services

Administrators

System

Logs

Own Set

User

Departments

UDF Mapping

Unlock

Multistep - Previous task

<- Back

Extension - Add - Step 2 / 2

Multi-Terminal

Authorization Codes

Add

Show Autho Codes

☐

Authorization Code

☐

Call Logging Code

☐

Common Service Profile

.....

777777

0

Change...

Remove

Print...

Compare

View

Continue

Continue

Figure 128: Provisioning User Task - cont.

9. Click **Continue**.

10. Select **MiCollab Extension** and click **Next**.

User - Add - Step 2 / 3

Service Summary

< Back Next > Apply Cancel

Extension	Extension Number	MX-ONE Service Node	Servers	MiCollab Extension
Assigned Extensions:	6001	MXONE-MICOLLAB	192.168.25.40	<input checked="" type="checkbox"/>
Assign Existing Extension:	<input type="text"/>	MXONE-MICOLLAB	192.168.25.40	<input type="checkbox"/>

Template For New Extension: <Select template>

Add New Extension: Add...

Select MiCollab

Figure 129: Provisioning User Task cont.

11. Assign MiCollab Extension (service node) and select the MiCollab Server.

Note: Provisioning Manager will fetch the roles for that specific MX-ONE.

12. Assign Secondary Extension to the user (This field will be available only when the selected MiCollab server version is 8.0 or above).

Note: Primary and Secondary extension should be from same MiVoice MX-ONE.

13. Select the MiCollab Prompt language.

Users

Services

Administrators

System

Logs

Own Settings

User

Departments

Unlock

User - Add - Step 3 / 4

MiCollab Configuration

<- Back

Next ->

Apply

Cancel

Assign MiCollab Extension(Extension, LIM IP):

6001,192.168.28.9

Secondary Extension:

6002,192.168.28.9

MiCollab Pool :

1

MiCollab Servers:

MiCollab-Stockholm

MiCollab Role:

UCC Premium MXONE-MiCollab

Prompt Language:

System Default

Enable AD Authentication:

☐

<- Back

Next ->

Apply

Cancel

Figure 130: Provisioning User Task cont.

14. You will receive an on-screen reminder regarding the MiCollab role requirements. Click **OK**. The Add User Result is displayed.

Users Services Administrators System Logs Own Settings

User Departments UDF Mapping Unlock

User - Add - Result

Done

Add operation successful for:

- User Id: john.smithson

Property	Value
User Id	john.smithson
First Name	John
Last Name	Smithson
Email Address	john.smithson@companyA.com
MiCollab Server	10.105.66.15
MiCollab Role	UCC Premium - MX-ONEMiCollab
Servers	192.168.25.40
Prompt Language	Swedish(Sweden)
Department(s)	
Department(s)	Mitel Networks Corporation; Stockholm
Preferences	
Use Last Selection	Yes
Provisioning Manager Language	English

Service Summary

Property	Value
Extensions	
Extension / MX-ONE Service Node	6001/MXONE-MICOLLAB

Information added in MiCollab

Figure 131: Add User Result

15. If you log into the MiCollab Users and Services application, select the user and click **Edit**, the user information is displayed.

The screenshot shows the 'Users and Services' application interface. At the top, there's a header with the title 'Users and Services' and a help icon. Below the header, a descriptive paragraph explains the directory's purpose. A navigation bar contains tabs: 'Users', 'Network Element', 'User Templates', 'User Roles', 'Locations', 'Departments', and 'Bulk User Provisioning'. The 'Users' tab is active. Below the navigation bar, there's a search bar with a search icon and a 'Show All' button. To the right of the search bar, it says 'Unassigned services: 2 (View)' and 'Total number of users: 1'. Below the search bar, there's a 'View' dropdown set to '10 Results' and a 'time' dropdown. The main content area is titled 'Edit User - Smithson, John'. It features a list of users on the left with checkboxes and names, including 'Last Name' and 'Smithson'. The 'Smithson' user is selected. The main form area contains fields for 'First Name' (John), 'Last Name' (Smithson), 'Display Name' (Smithson, John), 'UCC Bundle' (UCC Premium User for Enterprise (V4.0)), 'Department' (Mitel Networks Corporation), 'Location' (Stockholm), 'Prompt Language' (Swedish (Sveden)), 'Primary Email Address' (john.smithson@companyA.com), 'Distinguished Name', and 'IDS Manageable' (checked). Below these fields is the 'Authentication Section' with 'Login' (john.smithson), 'Password', 'Confirm Password', and a 'Generate Password' button. The 'User Information' section is circled in blue.

Figure 132: User Information in MiCollab Users and Services

METHOD 2: PROVISIONING MANAGER EXPORT TOOL

You can provision the MiCollab server(s) with users by exporting the users from the MiVoice MX-ONE Provisioning Manager. You need to

- Create CSV files with a maximum of 2500 users, and
- Set the Export Type to collect MiCollab user data.

1. Access **System > Data Management > Export.**

Users Services Administrators **System** Logs Own Settings

Location Subsystem **Data Management** Options Email Server Configuration Wizard

Compare with Subsystem
Backup & Restore
Import
Export
Scheduling
Active Directory

Export Data - Export - Step 1 / 3

<- Back Next -> Apply Cancel

Export Type :

- ☐ General data
- ☐ CMG
- ☐ Call Accounting API
- ☐ MMC 4 user data for CSV
- ☒ **MiCollab user data**

Select MiCollab User Data

<- Back Next -> Apply Cancel

Figure 133: Export Tool: Select MiCollab User Data

2. Select **MiCollab user data and click **Apply**.**

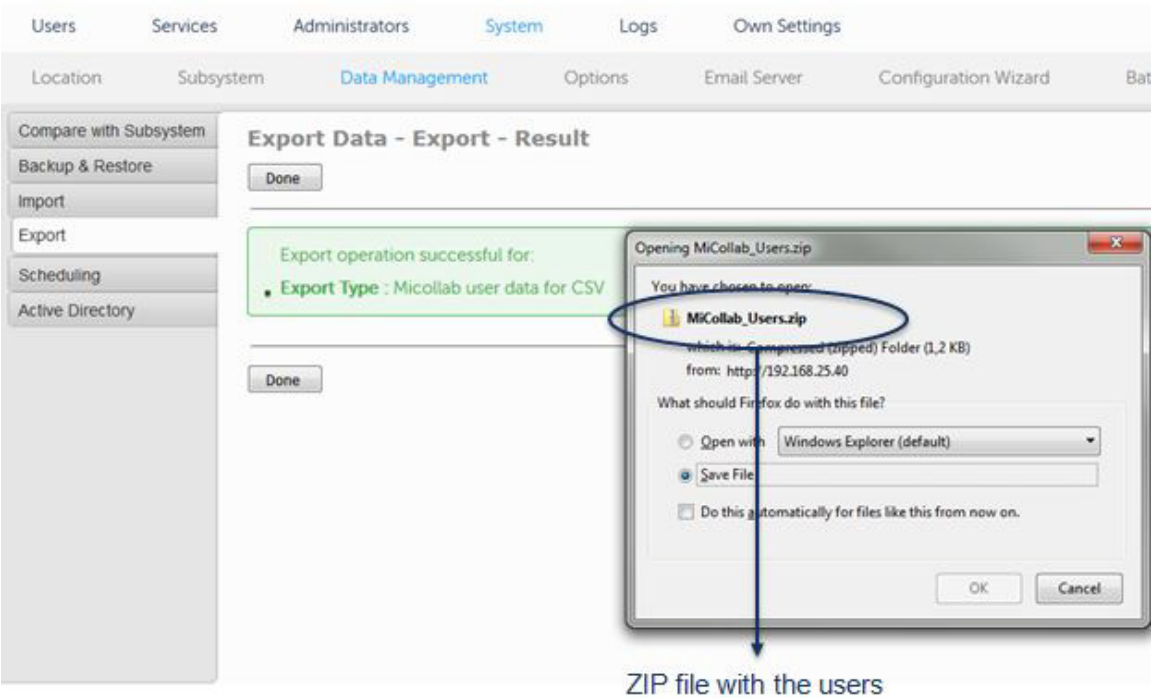


Figure 134: Export User Data

3. Save the MiCollab_Users.zip file to your PC.
4. Unzip it and open in Excel. Below is an example:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	First Name,Last Name,Log n ID,Email Address,Role,Prime Phone,Secondary Phone,External Number,DD Number,SIP Password,ID,Street,City,Country,Postal/Zip Code,Department,Location,Title,Position,Info,Info 2,Fax,Mobile Phone 2																						
2	admin,micollabusertrad,admin_micollab,,UCC BASIC_30,,,,,502,,,,,,,,,,,,,																						
3	John,Smithson,John.smithson,John.smithson@companyA.com,UCC Premium - MX-ONEMiCollab,6001,,,,,7654321,1350,,,,,,,,,,,,,																						
4																							

Name	Type	Compressed size	Password	Size
MiCollabUsers1.csv	Microsoft Excel Comma S...	1 KB	No	
MiCollabUsers2.csv	Microsoft Excel Comma S...	1 KB	No	
MiCollabUsers3.csv	Microsoft Excel Comma S...	1 KB	No	
MiCollabUsers4.csv	Microsoft Excel Comma S...	1 KB	No	

Figure 135: CSV File Example

5. Log into the MiCollab Server manager.
6. Under **Applications**, click **Users and Services**.
7. Click the Bulk User Provisioning tab.
8. Import the CSV file. For detailed instructions see the *Users and Services* application help (see Applications > Users and Services > System Administrator > Provision Users and Services > Bulk User Provisioning)
 - Click **Tools** and then click **Import from File**.
 - Select **Import Bulk Add CSV File**.
 - Click Browse and navigate to the CSV file.
 - Select the file and click **Open**.

- Click **Import**. The data from the file is imported.
- Auto Fill the roles
- Click **Save**.

Figure 136 to Figure 139 show the screens:

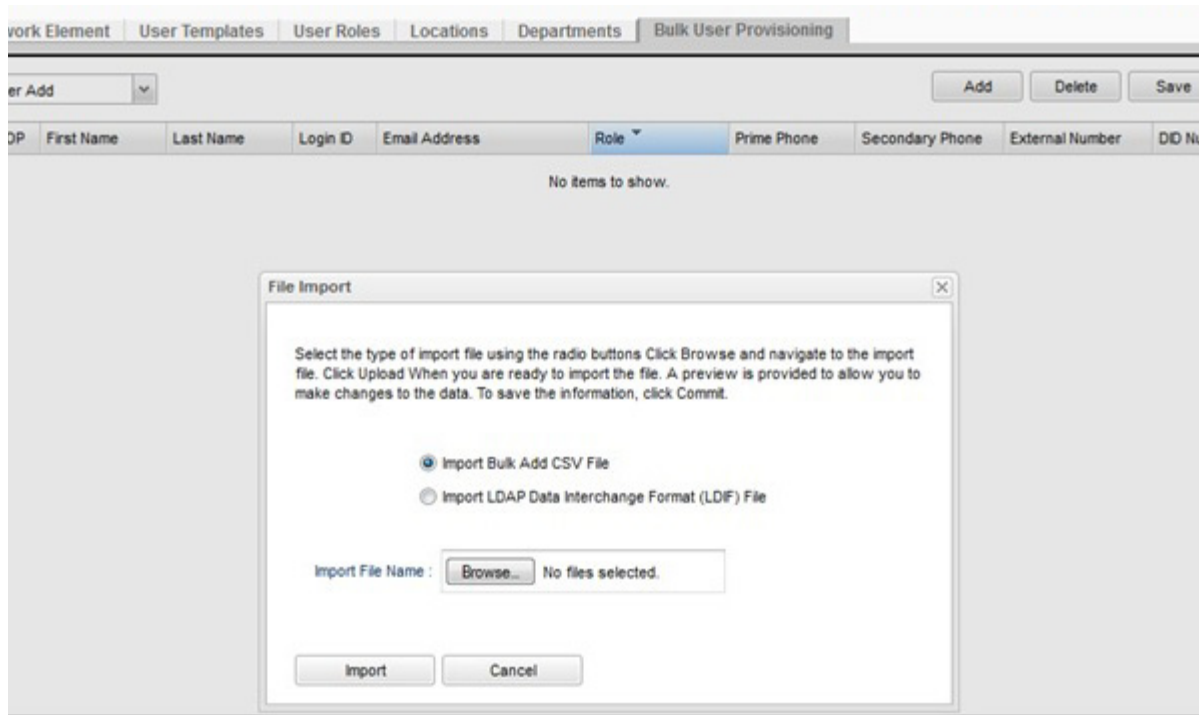


Figure 136: Import CSV File into MiCollab USP Bulk User Provisioning

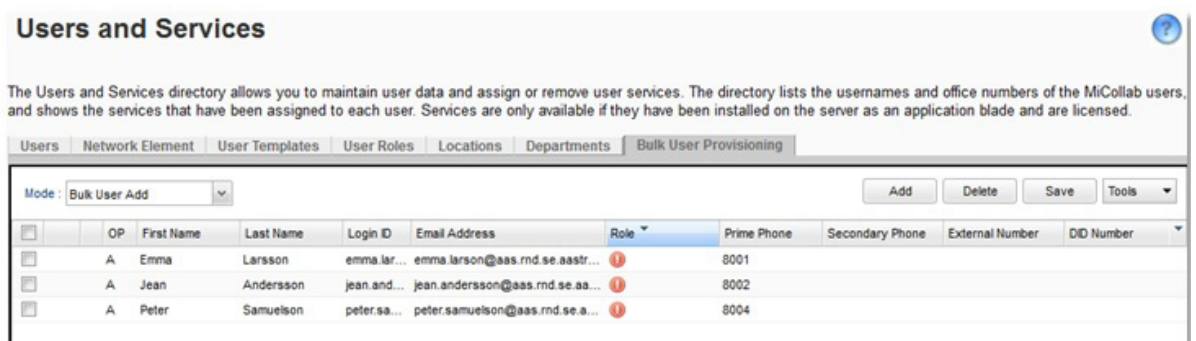


Figure 137: Bulk User Provisioning

Users and Services

The Users and Services directory allows you to maintain user data and assign or remove user services. The directory lists the usernames and office numbers of the MiCollab users, and shows the services that have been assigned to each user. Services are only available if they have been installed on the server as an application blade and are licensed.

UsersNetwork ElementUser TemplatesUser RolesLocationsDepartmentsBulk User Provisioning

Mode: Bulk User Add

AddDeleteSaveTools

	OP	First Name	Last Name	Login ID	Email Address	Role	Prime Phone	Secondary Phone	External Number	DID Number
<input checked="" type="checkbox"/>	A	Emma	Larsson	emma.lar...	emma.larsson@aas.rnd.se.aastr...		8001			
<input checked="" type="checkbox"/>	A	Jean	Andersson	jean.and...	jean.andersson@aas.rnd.se.aa...		8002			
<input checked="" type="checkbox"/>	A	Peter	Samuelson	peter.sa...	peter.samuelson@aas.rnd.se.a...		8004			

Auto Fill Role

Select the role that you want to apply to the selected records. Click Auto Fill to proceed with operation.

Role: UCC (V4.0) Entry

Auto Fill

Figure 138: Auto-Fill Roles

Users and Services

The Users and Services directory allows you to maintain user data and assign or remove user services. The directory lists the usernames and office numbers of the MiCollab users, and shows the services that have been assigned to each user. Services are only available if they have been installed on the server as an application blade and are licensed.

UsersNetwork ElementUser TemplatesUser RolesLocationsDepartmentsBulk User Provisioning

Search: SearchShow All

Unassigned services: 2 (View)Total number of users: 5

View: 10 Results at a time

AddQuick AddEditDeleteSend Service Info E-mail

	Last Name	First Name	Phone(s)	NuPoint Unified Messaging	MiCollab Client	Audio, Web and Video Conferencing	Teleworker
<input checked="" type="checkbox"/>	Andersson	Jean	8002	✓	✓		
<input checked="" type="checkbox"/>	Gunarson	Anna	8000	✓	✓	✓	✓
<input checked="" type="checkbox"/>	Larsson	Emma	8001	✓	✓		
<input checked="" type="checkbox"/>	Samuelson	Peter	8004	✓	✓		
<input checked="" type="checkbox"/>	Smithson	John	6001		✓		

Figure 139: Users Imported into USP Directory

9. After the import is complete check the Provision Manager to verify that the entries have been imported. Figure shows an example:

METHOD 3: PROVISIONING MANAGER WITH ACTIVE DIRECTORY

Only a single MiCollab Server is supported. Active Directory is not supported with multiple MiCollab servers.

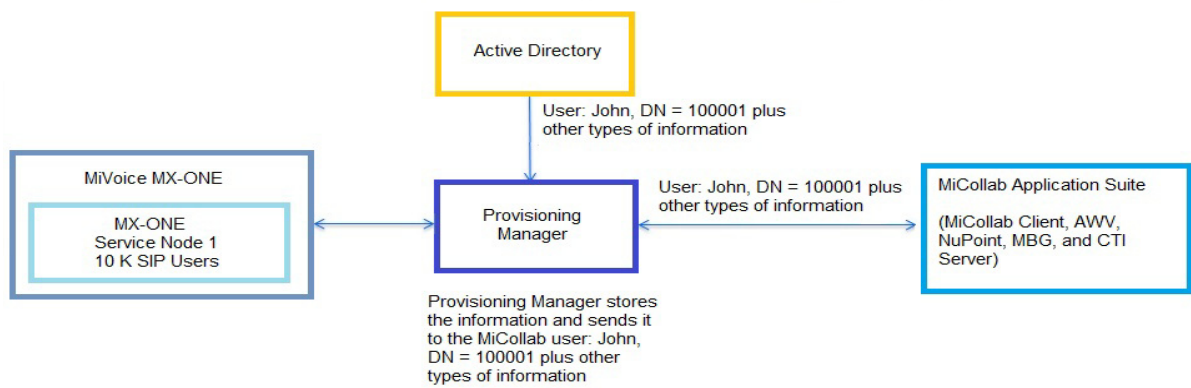


Figure 140: Active Directory Support

10. Set up Active Directory in the Provisioning Manager and sync it (see Figure 141). The user entries from the Active Directory server are added to the Provisioning Manager (see Figure 142).

Compare with Subsystem

Backup & Restore

Import

Export

Scheduling

Active Directory

Active Directory Server - Change

Apply

Server

Configure Domains

General Settings

IP Address:

192.168.25.252

Port :

389

User Name:

aas\provisioning_manager

Password:

Confirm Password:

Notification

Email Address:

provisioning_manager@aas.rnd.se.aastra.com

Rules

Create Default Password:

☒

Automatically Remove Users:

☒

Scan for Removed Users Interval [m]:

2

Extension Handling

Extension/Mailbox Handling:

Try assign otherwise create new extension/mailbox

Extension Number Length:

5

Mailbox Handling

No OneBox Server subsystem is available.Please initiate through Add Subsystem task.

Add OneBox Server

UDF Mapping:

Edit...

Remove Active Directory Server Configuration

Remove Configuration

Apply

Compare with Subsystem

Backup & Restore

Import

Export

Scheduling

Active Directory

Active Directory Server - Change

Apply

Server

Configure Domains

Create

Add

Search Domains

OU=Micollab_Stockholm,DC=aas,DC=rnd,DC=se,DC=aastra,DC=com

Figure 141: Set up and Sync

138

User

[Add]

Enter User Name(s), Extension Number, Department:

Imported from:

View

Maximum rows per page: 200

	User Id	Last Name	First Name	Extension / Telephony System	Department(s)	Import from	Customer
	admin_micollab	micollab	admin		Mitel Networks Corporation		
	andre.freitas	Freitas	André	8010 / MXONE-MICOLLAB	MiCollab	Active Directory	
	anna.gunnarson	Gunnarson	Anna	8000 / MXONE-MICOLLAB	Mitel Networks Corporation		
	antonio.moura	Moura	Antonio	8011 / MXONE-MICOLLAB	MiCollab	Active Directory	
	emma.larson	Larsson	Emma	8001 / MXONE-MICOLLAB	Mitel Networks Corporation		
	jean.andersson	Andersson	Jean	8002 / MXONE-MICOLLAB	Mitel Networks Corporation		
	john.smithson	Smithson	John	6001 / MXONE-MICOLLAB	Mitel Networks Corporation		
	maria.souza	Souza	Maria	8012 / MXONE-MICOLLAB	MiCollab	Active Directory	
	mauro.camargo	Camargo	Mauro	8014 / MXONE-MICOLLAB	MiCollab	Active Directory	
	paulo.severino	Severino	Paulo	8014 / MXONE-MICOLLAB	MiCollab	Active Directory	
	peter.samuelson	Samuelson	Peter	8004 / MXONE-MICOLLAB	Mitel Networks Corporation		

Change... Remove Print... Compare View

Users added in PM from AD

Figure 142: Users Added to Provisioning Manager

Note: User is updated in MiCollab Detained Queue when Active Directory sync is done with single MiCollab Server in Provisioning Manager.

11. Export the MiCollab users from the Provisioning Manager to a CSV file.
12. Import the users into the Users and Services Bulk Provisioning tool.

Users and Services

The Users and Services directory allows you to maintain user data and assign or remove user services. The directory lists the usernames and office numbers of the MiCollab users only available if they have been installed on the server as an application blade and are licensed.

Users Network Element User Templates User Roles Locations Departments Bulk User Provisioning

Mode: Manage Detained Queue

	OP	Timestamp	First Name	Last Name	Domain	Login ID	Email Address	Role	Prime Phone
<input checked="" type="checkbox"/>	A	2015-07-06 11:25:21.255	Mauro	Camargo		mauro.cama...	mauro.camargo@as.rnd.se.aastra...	UCC (V4.0) Entry	8014
<input checked="" type="checkbox"/>	A	2015-07-06 11:25:20.941	André	Freitas		andre.freitas	andre.freitas@as.rnd.se.aastra.com	UCC (V4.0) Entry	8010
<input checked="" type="checkbox"/>	A	2015-07-06 11:25:20.029	Antonio	Moura		antonio.moura	antonio.moura@as.rnd.se.aastra.com	UCC (V4.0) Entry	8011
<input checked="" type="checkbox"/>	A	2015-07-06 11:25:20.636	Paulo	Severino		paulo.severino	paulo.severino@as.rnd.se.aastra.c...	UCC (V4.0) Entry	8013
<input checked="" type="checkbox"/>	A	2015-07-06 11:25:20.332	Maria	Souza					8012

Operation Progress

Current Record (Login ID): mauro.camargo
Operations Processed: 0 out of 5 (0%)
Error count: 0

Cancel

MiCollab Bulk User Provisioning/Manage Detained Queue

Figure 143: Users Added to MiCollab Bulk User Provisioning Detained Queue

13. Import the users from the Bulk User Provisioning tool into the MiCollab directory by selecting the entries and then clicking **Save**. Figure 144 shows the entries imported into the Users and Services application. Figure 145 shows an example entry in the Provisioning Manager.

Users and Services

The Users and Services directory allows you to maintain user data and assign or remove user services. The directory lists the usernames and office number only available if they have been installed on the server as an application blade and are licensed.

Users

Network Element

User Templates

User Roles

Locations

Departments

Bulk User Provisioning

Search: *

Search

Show All

Unassigned services: 2 [View](#)

Total number of users: 10

View: 10 Results

at a time

Add

Quick Add

Edit

Delete


Send Service Info E-mail

<input type="checkbox"/>	Last Name	First Name	Phone(s)	NetPoint Unified Messaging	MiCollab Client	Audio, Web and Video Conferencing	Teleworker
<input type="checkbox"/>	Andersson	Jean	8002	✓	✓		
<input type="checkbox"/>	Camargo	Mauro	8014	✓	✓		
<input type="checkbox"/>	Freitas	André	8010	✓	✓		
<input type="checkbox"/>	Gunarson	Anna	8000	✓	✓	✓	✓
<input type="checkbox"/>	Larsson	Emma	8001	✓	✓		
<input type="checkbox"/>	Moura	Antonio	8011	✓	✓		
<input type="checkbox"/>	Samuelson	Peter	8004	✓	✓		
<input type="checkbox"/>	Saverino	Paulo	8013	✓	✓		
<input type="checkbox"/>	Smithson	John	6001		✓		
<input type="checkbox"/>	Souza	Maria	8012	✓	✓		

Add

Edit

Delete



MiCollab

Users and Services Page

Figure 144: Users Added to USP Directory

User - Change - paulo.severino

Apply

Cancel

User

Service Summary

Scheduling

Extension

? Assigned Extensions:

Extension Number

8014

Telephony System

MXONE-MICOLLAB

Micollab Extension

? Assign Existing Extension:

Extension Number

Telephony System

MXONE-MICOLLAB

Micollab Extension

? Template For New Extension:

<Select template>

? Add New Extension:

Add...

MiCollab Server

? Telephony System:

MXONE-MICOLLAB

? MiCollab Role:

UCC (V4.0) Entry

? Prompt Language:

System Default

Advanced...

Apply

Cancel

Figure 145: Provisioning Manager User Page

MAPPING ACTIVE DIRECTORY FIELDS TO PROVISIONING MANAGER

1. Under **Users > UDF Mapping** select the Active Directory Field that needs to be mapped to Provisioning Manager.

UDF Mapping - Users

Apply Cancel

PM	UDF Field Type	Active Directory Fields	Read Only
UDF1:	None	None	<input type="checkbox"/>
UDF2:	None	None	<input type="checkbox"/>
UDF3:	None	None	<input type="checkbox"/>
UDF4:	None	None	<input type="checkbox"/>
UDF5:	None	None	<input type="checkbox"/>
UDF6:	None	None	<input type="checkbox"/>
UDF7:	None	None	<input type="checkbox"/>
UDF8:	None	None	<input type="checkbox"/>
UDF9:	None	None	<input type="checkbox"/>
UDF10:	None	None	<input type="checkbox"/>
UDF11:	None	None	<input type="checkbox"/>
UDF12:	None	None	<input type="checkbox"/>
UDF13:	None	None	<input type="checkbox"/>
UDF14:	None	None	<input type="checkbox"/>
UDF15:	None	None	<input type="checkbox"/>
UDF16:	None	None	<input type="checkbox"/>
UDF17:	None	None	<input type="checkbox"/>
UDF18:	None	None	<input type="checkbox"/>
UDF19:	None	None	<input type="checkbox"/>
UDF20:	None	None	<input type="checkbox"/>
UDF21:	None	None	<input type="checkbox"/>
UDF22:	None	None	<input type="checkbox"/>
UDF23:	None	None	<input type="checkbox"/>
UDF24:	None	None	<input type="checkbox"/>

Fields from Active Directory that can be mapped to Provisioning Manager

Figure 146: UDF Mapping User Page

2. Enter the Provisioning Manager name select UDF Field Type.

Note: Deselect the **Read Only** button to allow user information editing in Provisioning Manager. By default **Read Only** option is selected.

UDF25: UDF26: UDF27: UDF28: UDF29: UDF30: UDF31: UDF32: UDF33: UDF34:

Business Business 2 Mobile Phone Mobile Phone 2

None None None None None None HOME PHONE OTHER HOME PHONE MOBILE NUMBER OTHER MOBILE NUMBER

None None None None None None Home Phone Home Phone (others) Mobile Number Mobile Number (others)

☐ Read Only ☐ Read Only ☐ Read Only ☐ Read Only ☐ Read Only ☐ Read Only ☒ Read Only ☒ Read Only ☒ Read Only ☒ Read Only

Apply Cancel

Names can be changed

Phone Numbers that can be mapped to the MiCollab Client

Default in PM

Figure 147: UDF Mapping User Page - cont.

3. Click **Apply**.

ACTIVE DIRECTORY FIELDS

IN PROVISIONING MANAGER

- Click **Users > User > Change - anagram** to display the UDF mapped information.

Note: Names of the Active Directory fields can be changed in UDF Mapping.

The screenshot shows the 'User - Change - anagram' form in the Provisioning Manager. The form is divided into several sections: 'User', 'Service Summary', 'MCollab Configuration', and 'Scheduling'. The 'User' section contains fields for First Name, Last Name, User ID, Password, Extension Number, Email Address, SMS, Alternate First Names, and Alternate Last Names. The 'Service Summary' section contains fields for DID Number, External Number, City, Country, Business, Business 2, Mobile Phone, and Mobile Phone 2. The 'MCollab Configuration' section contains a 'Department(s)' field. The 'Scheduling' section contains a 'Selected Department(s); Location(s)' field. Annotations with arrows point to the 'First Name' and 'Last Name' fields, stating 'Names can be changed in the UDF mapping'. Another annotation points to the 'Business' and 'Mobile Phone' fields, stating 'Phone Numbers that can be mapped to the MCollab Client'.

Figure 148: Active Directory Fields in Provisioning Manager

IN MICOLLAB

1. Log into the MiCollab server manager.
2. Under **Applications**, click **Users and Services**.
3. Click the **Users** tab.

The screenshot shows the 'Users and Services' interface in MiCollab. The left sidebar contains navigation menus for Applications, ServiceLink, Administration, and Configuration. The main area displays a table of users with columns for Last Name, First Name, Phone(s), NuPoint Unified Messaging, MiCollab Client, Audio, Web and Video Conferencing, and Teleworker. A circled area highlights the phone numbers for user 'Ana' (39527, 39528, 39529, 39530) and an arrow points to the text 'Phone Numbers received from Provisioning Manager'.

Last Name	First Name	Phone(s)	NuPoint Unified Messaging	MiCollab Client	Audio, Web and Video Conferencing	Teleworker
Gram	Ana	+ 39527 + 39528 + 39529 + 39530 41411	✓	✓	✓	
Gram	Bravo	41412	✓	✓	✓	
Gram	Charlie	41413	✓	✓	✓	
Gram	Delta	41205	✓	✓	✓	
Gram	Echo	41100	✓	✓	✓	
Gram	Foxtrot	41505	✓	✓	✓	
Gram	Golf	41101	✓	✓	✓	
Gram	Hotel	41506	✓	✓	✓	

Figure 149: Active Directory Fields in MiCollab

4. Click on a User to see the details.
5. Click on **Phones** tab.

The screenshot shows the 'Edit User - Gram, Ana' interface in MiCollab. The left sidebar contains navigation menus for Applications, ServiceLink, Administration, and Configuration. The main area displays the 'Phones' tab with a list of phone numbers and their service details. A circled area highlights the phone numbers (39527, 39528, 39529, 39530) and an arrow points to the text 'Phone Numbers received from Provisioning Manager'.

Phone Number	Service Label	*Number
+ 39527	Home Phone 2	+ 39527
+ 39528	Mobile Number 2	+ 39528
+ 39529	Mobile Number	+ 39529
+39530	Home Phone	+ 39530

Below the phone numbers, there are fields for SIP Password, Confirm SIP Password, Deployment Profile, and Status (Deployed).

Figure 150: Active Directory Fields in MiCollab - cont.

6. Under **Applications**, click **MiCollab Client Service**.
7. Click **Configure MiCollab Client Service** and then select **Accounts** tab.
8. Click on a User to see the details.
9. Select **Phone Numbers**.

Applications

- Users and Services
- Audio, Web and Video Conferencing
- MiVoice Border Gateway
- NuPoint Web Console
- MiCollab Client Service**
- MiCollab Client
- Deployment
- Licensing Information

ServiceLink

- Install Applications
- Status

Administration

- Web services
- Backup
- View log files
- Event viewer
- System information
- System monitoring
- System users
- Shutdown or reconfigure
- Virtualization

Configuration

- Integrated Directory Service
- MiCollab Client Integration Wizard
- MiCollab Settings
- MiCollab Language
- Vidyo Settings
- Networks
- E-mail settings
- Google Apps
- DHCP
- Date and Time
- Hostnames and addresses
- Domains
- IPv6-in-IPv4 Tunnel

Account Details

Login Settings

First name: Ana

Middle name:

Last name: Gram

Login ID (case insensitive): anagram

Password:

PBX node: 192.168.133.2 (Jan2.MX-01)

Mailbox number: 41411

Voice mail server:

Voice mail public number:

Language: [Default]

Country: United Kingdom

☐ Reset dynamic statuses on save

☒ Allow user to upload display picture

[Upload New Photo...](#)

Licensed Features

Phone Numbers

[Add](#) [Delete](#)

Type	PRG	Label	Number	MAC Address	Published	Video Capable
<input type="checkbox"/> Voice Mail		Voicemail	41900		No	No
<input type="checkbox"/> Desk Phone		DeskPhone	41411		Yes	No
<input type="checkbox"/> SIP Softphone		SoftPhone	41411		Yes	No
<input type="checkbox"/> Phone		Home Phone	39530		Yes	No
<input type="checkbox"/> Phone		Mobile Number	39529		Yes	No
<input type="checkbox"/> Phone		Home Phone 2	39527		Yes	No
<input type="checkbox"/> Phone		Mobile Number 2	39528		Yes	No

Phone Numbers received from Provisioning Manager

Figure 151: Active Directory Fields in MiCollab - cont.

IN LEGACY MICOLLAB CLIENT

1. Log into the **Legacy MiCollab Client**.
2. Right click on a user and select **Contact Information**.

Ana Gram - Contact Information

Name:

Company Name:

☐ Notify me when this user logs in.

Phone Numbers

Type	Description	Number	Account Code	Default
Desk phone		41411		<input checked="" type="radio"/>
Softphone		41411		<input type="radio"/>
Home Phone		+ 39530		<input type="radio"/>
Mobile Number		+ 39529		<input type="radio"/>
Home Phone 2		+ 39527		<input type="radio"/>
Mobile Number 2		+ 39528		<input type="radio"/>

E-mail Addresses

Description	Email Address	Default
	.com	<input checked="" type="radio"/>

IM Addresses

Type	Description	Account ID	Default
UC IM		anagram@lab133mas01.rnd.s...	<input checked="" type="radio"/>

Other information

Type	Value
Company address country	Sweden
Business Fax	+ 911
Location	Globen

Phone Numbers received from Provisioning Manager

Figure 152: Active Directory Fields in MiCollab Client

MICOLLAB ADVANCED MESSAGING SETUP IN PROVISIONING MANAGER

ADD EXISTING MAILBOX

1. In provisioning manager, click **Users > User > Service Summary**.
2. Select **MiCollab AM** in the drop down menu.

Note: MiCollab Advanced Messaging Server option is available only if MiCollab Advanced Messaging Server is defined in the sub-system.

User - Change - teriksson [Help](#)

Apply Cancel

User Service Summary **MiCollab Configuration** Scheduling

Extension

Assigned Extensions: Extension Number 67118 MiVoice MX-ONE 1. Inhouse

Assign Existing Extension: Extension Number MiVoice MX-ONE 1. Inhouse

Template For New Extension: <Select template>

Add New Extension: Add...

Mailbox

Assign Existing Mailbox: Mailbox Number 67118 MiCollab Advanced Messaging Server MiCollab AM

Add New Mailbox: Add... Advanced...

Apply Cancel

Figure 153: Add Existing Mailbox

3. Enter the extension number for the user in **Mailbox Number** and click **Apply**.

CREATE NEW MAILBOX

1. In provisioning manager, click **Users > User > Service Summary**.
2. Click **Add** under Mailbox section.

User - Change - teriksson [Help](#)

Apply Cancel

User Service Summary **MiCollab Configuration** Scheduling

Extension

Assigned Extensions: Extension Number 67118 MiVoice MX-ONE 1. Inhouse

Assign Existing Extension: Extension Number MiVoice MX-ONE 1. Inhouse

Template For New Extension: <Select template>

Add New Extension: Add...

Mailbox

Assign Existing Mailbox: Mailbox Number MiCollab Advanced Messaging Server

Add New Mailbox: Add... Advanced...

Apply Cancel

Figure 154: Create New Mailbox

3. Select **MiCollab AM** in the drop down menu and click **Next**.

Multistep - Previous task
<- Back User - Change Service Summary

Mailbox - Add - Step 1 / 2 [Help](#)

<- Back Next -> Continue Cancel

MiCollab Advanced Messaging Server: MiCollab AM

<- Back Next -> Continue Cancel

Figure 155: Mailbox - Add

4. Enter **Mailbox Id**, **Mailbox Extension**, and **Subscriber Name** to setup the mailbox.

Multistep - Previous task
<- Back User - Change Service Summary

Mailbox - Add - Step 2 / 2

<- Back Next -> Continue Cancel

MiCollab Advanced Messaging Server: MiCollab AM

Mailbox Id: 67118

Mailbox Extension: 67118

Subscriber Name: Tomas Eriksson

Class of Service: None

Message Retention: ☒ Unlimited ☐ Number of days

Security Code

Password:

Confirm Password:

Message Waiting Indicator

Enable MWI: ☐

Current MWI: ☐

Clear On: ☒ Inbox is empty ☐ First unread message read ☐ All unread messages read

Messaging Presentation

Presentation: ☐ Auto play first message ☐ Sort urgent first

Listen by Type: ☐

Order by: ☐ First in first out ☒ Last in first out

E-mail

E-mail Server: None

E-mail Address:

E-mail Display Name:

Message Access by Client Application: ☐ None ☐ Unified message ☒ ICA/WPM

Alternate Extension

Extension Number

Extension 1:

Extension 2:

Extension 3:

Advanced...

<- Back Next -> Continue Cancel

Figure 156: Mailbox - Add - cont.

5. Click **Continue**.

Note: MiCollab Advanced Messaging Server is setup in the MiCollab.

User - Change - teriksson

Apply Cancel

User Service Summary **MiCollab Configuration** Scheduling

Extension

Assigned Extensions: Extension Number 67118 MiVoice MX-ONE 1. Inhouse

Assign Existing Extension: Extension Number MiVoice MX-ONE 1. Inhouse

Template For New Extension: <Select template>

Add New Extension: Add...

Mailbox

Assigned Mailboxes: Mailbox Number 67118 MiCollab Advanced Messaging Server MiCollab AM

Assign Existing Mailbox: Mailbox Number MiCollab Advanced Messaging Server MiCollab AM

Add New Mailbox: Add... Advanced...

Apply Cancel

Figure 157: Create New Mailbox - cont.

6. Click **Apply**.
7. Under **MiCollab Configuration** tab, select the MiCollab details.

User - Change - MiCollabUserTest

Apply Cancel

User Service Summary **MiCollab Configuration** Scheduling

Assign MiCollab Extension(Extension, LIM IP): 6001.192.168.28.9

Secondary Extension: 6002.192.168.28.9

MiCollab Pool: 1

MiCollab Servers: MiCollab-Stockholm

MiCollab Role: UCC Premium MXONE-MiCollab

Prompt Language: System Default

Enable AD Authentication: ☐

Apply Cancel

Figure 158: MiCollab Configuration

8. Click Apply.

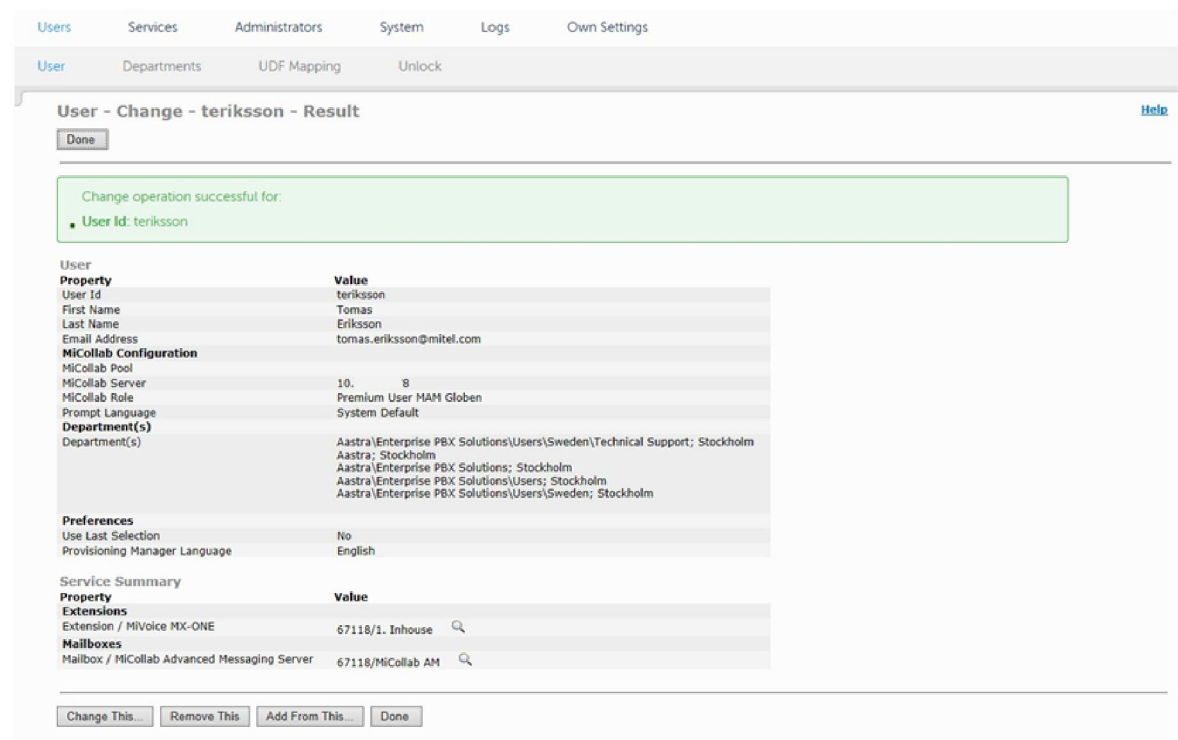


Figure 159: User - Change - Result

MIVOICE MX-ONE MESSAGE DIVERSION PROFILES AND FEATURE CODES

MiCollab Client uses the following default Message Diversion Profiles and associated feature codes (*23*<digit 0-9>#):

Digit	Status
0	Lunch break
1	Gone for the day
2	Away from desk
3	In a meeting
4	Business trip
5	Visiting customer
6	Vacation
7	Not available
8	Back soon
9	Sick-leave

You can reorder the Message Diversion activities list:

1. Create a script.txt file with the profiles and feature codes:

Example:

```

Diversion Profiles;LunchBreak;0
Diversion Profiles;GoneForTheDay;8
Diversion Profiles;AwayFromDesk;2
Diversion Profiles;InAMeeting;3
Diversion Profiles;BusinessTrip;4
Diversion Profiles;VisitingACustomer;5
Diversion Profiles;Vacation;6
Diversion Profiles;NotAvailable;7
Diversion Profiles;BackSoon;1
Diversion Profiles;SickLeave;9

```

2. Copy the file to directory "/opt/CstaProxy/config"
3. Open a terminal and switch to this directory
4. Run the following two commands:

```

sqlite3 csta_config.sqlite "delete from ini where section = 'diversion profiles';"
echo -e '.separator ";"\n.import script.txt ini' | sqlite3 csta_config.sqlite

```


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.

#	PROMPT NAME	SCRIPT
0	TURN_OFF_MUSIC	To turn off the music, press one.
1	WELCOME	Welcome to the conference center.
2	ENTER_PIN	Enter an access code, and then press #. To cancel, press *.
3	CANCELLED_RETRY	Cancelled. Please try again.
4	FIRST_BADPIN	That access code isn't recognized — please try again.
5	NEXT_BAD_PIN	That access code isn't recognized.
6	REENTER_PIN	To enter another code, press *.
7	REENTER_END	To enter another code, press *, or to end this call, press #.
8	REENTER_ASSIST	To enter another code, press *, or for assistance, press zero.
9	SAY_NAME	At the tone, say your name and then press #. <beep>
10	NO_LEADER	The leader hasn't activated this call yet. Please stay on the line.
11	GOODBYE	Thank you for calling the conference center. Goodbye.
12	CONNECTING	One moment while your call is connected.
13	TOO_EARLY	That conference hasn't started yet.
14	TOO_LATE	That conference has already ended.
15	CALL_NOT_AVAIL	That conference isn't available now.
16	NO_OPER	I'm sorry, the operator isn't available now.
17	FIRSTCALLER	You're the first person in this conference. Please stay on the line.
18	CAN'T_COMPLETE	Sorry, we're unable to complete your call.
19	CALLER_UNAVAIL	That person isn't available right now.
20	ZERO	Zero
Page 1 of 6		

#	PROMPT NAME	SCRIPT
21	ONE	One
22	TWO	Two
23	THREE	Three
24	FOUR	Four
25	FIVE	Five
26	SIX	Six
27	SEVEN	Seven
28	EIGHT	Eight
29	NINE	Nine
30	ONE_MOMENT	One moment, please.
31	NO_PORTS	All circuits are busy. Please try again in a few minutes.
32	DBL_POUND	At any time, you may press the # key twice for a list of options.
33	RECORDING_END	The recording has ended. To start again, press one. Otherwise, you may hang up.
34	PAUSED	Paused. To resume, press two.
35	RECORDINGS	Recordings
36	DIALOUT_CONFIRM	You've been invited to a conference call. To join, press one. To decline, press two.
37	DECLINED	Invitation declined. Goodbye.
40	LIST_NAMES	For a list of names, press three.
41	PLACE_CALL	To place a call, press two.
42	NO_NAMES	Names are not available.
43	RETURN_CONF	To return to the conference, press *.
44	INVALID_OPTION	Sorry, that's not a recognized option.
45	OPTION_NA	Sorry, that option isn't available.
46	RETURNING	Returning to conference.
47	2ND_LEG_2WAY	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.

#	PROMPT NAME	SCRIPT
48	BUSY	That number is busy.
49	CALL_2WAY	To return to the conference, press *. To try another number, press one.
50	CANT_JOIN	I'm sorry. The call leader hasn't given approval for you to join this conference. Goodbye.
51	HUNG_UP	The person you called is no longer on the line.
52	INCOMPLETE_CALL	Sorry, we couldn't complete your call.
53	JOINING	Now joining...
54	NAME_2WAY	I'm not sure if you recorded a name. To keep this recording, press one. To try again, press two.
55	NEXT_NO_NAME	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.
56	NO_ANSWER	There's no answer at that number.
57	MAGIC_KEY	Ready to place a call. To return to the conference at any time, press the * key twice.
58	NO_NAME	Sorry, I didn't hear you say a name.
59	RECORD_CANCELLED	Recording cancelled.
60	ROLLCALL	To cancel the list at any time, press *.
61	ROLLCALL_2WAY	To return to the conference, press *. To repeat the list, press one.
62	CANCELLED	Cancelled.
63	ENTER_NUMBER	Enter a phone number. When you have finished, press #.
64	DIAL_ANOTHER	Cancelled. You may dial another number now, or to return to the conference, press *.
65	INVALID_PHONE	Sorry, we're unable to call that number. You may dial another number now, or to return to the conference, press *.
66	INVALID_PHONE2	Sorry, that phone number isn't valid.
67	COUNT1	There are...
68	COUNT2	...people in this call.
69	TEN	Ten
70	ELEVEN	Eleven
71	TWELVE	Twelve
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#	PROMPT NAME	SCRIPT
72	THIRTEEN	Thirteen
73	FOURTEEN	Fourteen
74	FIFTEEN	Fifteen
75	SIXTEEN	Sixteen
76	SEVENTEEN	Seventeen
77	EIGHTEEN	Eighteen
78	NINETEEN	Nineteen
79	TWENTY	Twenty
80	THIRTY	Thirty
81	FORTY	Forty
82	FIFTY	Fifty
83	SIXTY	Sixty
84	SEVENTY	Seventy
85	EIGHTY	Eighty
86	NINETY	Ninety
87	HUNDRED	Hundred
88	OPTIONS	Options.
89	DROPPED	The call has been dropped.
90	ONE_CALLER	There is one person in this call.
91	MUTE	To mute your line, press one.
92	UNMUTE	To unmute your line, press one.
93	NUMCALLERS	To hear the number of callers, press three.
94	CHECK_RETURN	To return to the conference, press * now. Otherwise select from the following options...
95	NAMES	Names.
96	DIALOUT_NO_PORTS	All circuits are busy. Please try your call again in a few minutes.

#	PROMPT NAME	SCRIPT
97	RECORD	This call is being recorded.
98	REC_STOP	The recording has been stopped.
99	TRY_LATER	Please try your call again in a few minutes.
100	JOIN_TONE	<Rising beep tone>
101	LEAVE_TONE	<Descending beep tone>
102	MUTE_TONE	<double beep tone>
103	UNMUTE_TONE	<triple beep tone>
104	DIALTOJOIN	To join the call press one.
105	EOCP_CONFWILLEND	This conference will end in...
106	EOCP_MINUTES	...minutes.
107	EOCP_ENDNOW	Please conclude your conference now to avoid being disconnected when this conference terminates.
108	EOCP_LDREXTEND	The designated leader will now be asked to extend this conference. You may continue this conference while the leader is away.
109	EOCP_LDRMNU1	Extend conference. Press the * key to cancel and return to the conference at any time.
110	EOCP_LDRMNU2	To extend the conference for 15 minutes, press one; for 30 minutes, press two, for 45 minutes, press three; for 60 minutes, press four.
111	EOCP_EXTGOOD	This conference has been extended successfully.
112	EOCP_EXTFAIL	I'm sorry, currently there are not enough ports available to extend this conference for that length of time.
113	EOCP_TOOLONG	Please select a shorter extension period...
114	EOCP_ENDED	This call has ended. Goodbye.
115	EOCP_LDRMNU3	...or press the * key to return to the conference.
116	AUDIO_LOCKED	This conference has been locked by the leader.
117	AUDIO_LK_MNU1	To lock this conference, press 5.
118	AUDIO_LK_MNU2	To unlock this conference, press 5.
119	AUDIO_LK_ST_1	This meeting is now locked.
120	AUDIO_LK_ST_2	This meeting is now unlocked.
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#	PROMPT NAME	SCRIPT
121	PID_TOGGLE	To enter a Personal ID, press star.
122	PID_SELECT	Enter your Personal ID, then press pound.
123	ACODE_TOGGLE	To enter an Access Code, press star.
124	PID_SKIP	To skip your Personal ID, press star.
125	PID_RETRY	That Personal ID isn't recognized, please try again.
126	PID_FINAL	That Personal ID isn't recognized.
127	PID_APPROVAL	Access to this conference requires leader approval.
128	PID_LEADER	Contact your Conference Leader to accept your request to attend this conference.
129	PID_MNU_4	To enter your Personal ID, press 4.
130	PID_MNU_RET	To return to the conference, press star.
131	PID_NOT_REG	That Personal ID isn't registered for this conference.
132	PID_CHG_FAIL	There was an error when attempting to change your Personal ID.
133	ACODE_SELECT	Enter an Access Code, then press pound.
134	JOIN_MUTED	Your audio is muted. You can hear the conference but cannot speak unless enabled by the conference leader.
135	DUPLICATE_PID	This conference restricts duplicate Personal IDs. That Personal ID is already in use.
136	AUDIO_ONLY_CONF	You have accessed an audio-only conference. Video is not available.
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