



A MITEL  
PRODUCT  
GUIDE

# MiCollab

## ACD WebRTC Pro Softphone Integration Guide

July 2023

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# What's New in this Document

1

This section describes the changes in this document due to new and changed functionality in the WebRTC Pro solution.

**Table 1: Revision History**

| Update                                   | Location | Publish Date   |
|--|----------|----------------|
| Initial publish at GA                    | -        | 29th Aug 2022  |
| Second publication with MiCollab 9.7 SP1 |          | 13th July 2023 |

This chapter contains the following sections:

- [ACD WebRTC Pro Softphone](#)
- [Functionality](#)

This document describes how to provision and set up the MiCollab ACD WebRTC Pro Softphone in MiCollab, MiVoice Business (MiVB), and MiContact Center (MiCC). It includes the steps for setting up a new agent on MiCC, MiCollab, MiVB, and MiVoice Border Gateway (MBG) for the MiCollab ACD WebRTC Pro softphone to function.

## 2.1 ACD WebRTC Pro Softphone

The WebRTC Pro solution focuses on provisioning a real-time seamless solution to contact center agents who work remotely. Although this solution is primarily targeted at the contact center market, the WebRTC phone is equally useful for non-contact center users. The solution greatly simplifies deployment rules and removes the dedicated limits that were applicable with the earlier WebRTC offering.

One of the requirements for WebRTC is the capability for hot-desking, which enables the user to easily switch between phone devices. Because WebRTC is not dependent on contact center, it offers availability for general users in similar deployment situations, such as working from home and/or hot-desking in the office.

WebRTC Pro uses standard web browsers to provide a certain level of audio (and video) streaming with adequate user control. It can emulate many phone functions.

When the **WebRTC Pro** option is enabled on an MBG, the ability to support **WebRTC Anonymous Mode** on the same MBG is no longer available. Enabling this option impacts certain features of **MiCollab AWW** which use anonymous WebRTC. Specifically, the AWW web client option to **Join Audio from the PC** is not supported when the MBG is in WebRTC Pro mode. To connect audio via the PC the user must call into the AWW bridge from the MiCollab WebRTC softphone or make the call from a dedicated desk phone.

The MBG provides the WebRTC gateway function, which allows the web browser connection to emulate a SIP phone providing SIP phone functionality and call handling capability. Information about the MBG configuration for this is also included in this guide.

## 2.2 Functionality

The key functionality for WebRTC Pro is provided through MiCollab. In this initial release, only MiVoice Business supports this feature.

Additional agent call control capability is provided by integration with MiContact Center Business through the Web Ignite client, which then manages the call routing via MiVoice Business call control through Computer Telephone Integration. So also, additional call handling functions are made available through the Teleworker capability of the MBG.

**Note:**

Support of ACD features such as Barge-in (invoke), Whisper Coach (invoke), Call Recording (stop/start phone-based), and Silent Monitor (invoke) are available when the SIP softphone is integrated with the MiContact Center Business Web Ignite client at MiContact Center Business release 9.5 onwards. They are not available natively on the SIP softphone without the Web Ignite integration, except to some limited capacity through use of dial up feature codes.

**Table 2: MiContact Center Business 9.5 Features**

| Feature                                 | MiCollab WebRTC Pro Softphone + Web Ignite |
|---|--|
| Make a call                             | Via Web-Ignite keypad                      |
| Answer a call                           | Button in Ignite                           |
| Transfer a call                         | Button in Ignite                           |
| Invoke Hold                             | Button in Ignite                           |
| Invoke Conference                       | Button in Ignite                           |
| Silent Monitor (party to)               | Yes  |
| Silent Monitor (invoke)                 | Key on Web Ignite, or Feature Access code  |
| Barge-In (party to)                     | Yes  |
| Barge-In (invoke)                       | Key on Web Ignite                          |
| Whisper Coach (party to)                | Yes  |
| Whisper Coach (invoke)                  | Key on Web Ignite                          |
| Call Recording (party to)               | Yes  |
| Call Recording (stop/start phone based) | Key on Web Ignite                          |

| Feature             | MiCollab WebRTC Pro Softphone + Web Ignite |
|---------------------|--|
| Call Swap           | Available                                  |
| Hot-Desk            | Available                                  |
| External Resiliency | Available                                  |
| Internal Resiliency | Available                                  |

The WebRTC Pro softphone is also treated as a hot-desk device by the MiVoice Business, as it allows users to move between hot-desk devices. This facilitates hot-desk operations, and also simplifies remote provisioning by allowing users to simply be enabled as Teleworker device users who can use the available web browser at any public location.

Being built on an existing web browser architecture, WebRTC Pro retains some of the user-friendly features of standard web browsers. Google Chrome 50 or later is the only browser currently supported.

# Product Compatibility

## 3

The WebRTC Pro solution is not a phone by itself but emulates many phone functions through use of appropriate web pages and integration with other unified communication products. The following products are required to implement WebRTC:

- MiContact Center Business for agent capabilities
- MiVoice Business for call control and call routing
- MiCollab for web page and phone operation
- Mitel Border Gateway for phone/WebRTC registration, and delivery of multiple phone functions associated with Teleworker users. All users of the WebRTC function will connect as Teleworkers.

The following table shows the products and the product releases that are compatible with WebRTC Pro:

| Products                  | Release         |
|---------------------------|-----------------|
| MiVoice Business          | 9.4             |
| MiCollab                  | 9.6 SP1 onwards |
| MiContact Center Business | 9.4 onwards     |
| MiVoice Border Gateway    | 11.4 SP1        |



The deployment with WebRTC Pro builds on the existing Call Control deployment architectures for the key applications - MBG, MiCollab, and MiVB. The WebRTC initially establishes a connection to MiCollab, and after registering with MiCollab, the WebRTC Pro softphone registers with Mitel Border Gateway (MBG) as a Teleworker device. MBG then registers this device with the MiVoice Business (MiVB) call control as a SIP device and provides the conversion between WebRTC Pro browser functions and internal SIP connectivity.

# Setting up WebRTC Pro Solution

## 5

This chapter contains the following sections:

- [Creating an ICP in MBG](#)
- [Adding a New User on MiCollab Client](#)
- [Managing Web Server Certificate](#)
- [Configuring WebRTC Pro on MBG](#)
- [Syncing MiVB in MiCC](#)
- [Synchronizing YourSite](#)
- [Adding Agent](#)

The procedure explained in this section includes the set up for MiCollab, MiVoice Border Gateway (MBG), MiVoice Business (MiVB) and MiContact Center Business (MiCC B). See [Licensing](#) for information on licenses required for this solution.



### Note:

It is assumed that MBG and MiVB are already installed and licensed appropriately.

## 5.1 Creating an ICP in MBG

Complete the following steps to create an ICP on the MBG, if one has not been already created for this solution:



### Note:

This MBG must be clustered with the MiCollab unit.

1. Log in to MBG, on the main page, click the **Network** tab and click **ICPs**.
2. Click the **+** sign.
3. Enter **ICP information** as required and then click **Save**.

**Note:**

Refer to the *MBG Online Help* for detailed instructions for adding the ICP information.

## 5.2 Adding a New User on MiCollab Client

The preferred method for adding and updating a user configuration is through MiCollab, because this links MiCollab, MiVB, and MBG updates. Updates can be verified on MiVB or MBG directly.

### 5.2.1 Adding MiCollab Client

You must add a SIP Teleworker user on MiCollab. The MiCollab Client user will make WebRTC calls, which MBG converts to SIP. Refer to the *MiCollab* documentation for detailed instructions.

Create a deployment profile on **MiCollab Client** to set up **WebRTC Pro SIP Host** with the following **General** and **Softphone** settings. Make note of the **Profile** name.

#### General Settings

|                                |                                     |                        |                             |
|--------------------------------|-------------------------------------|------------------------|-----------------------------|
| Name *                         | WebRTC Pro                          | Log Level              | DEBUG                       |
| Use Teleworker                 | on                                  | Call mode              | Audio                       |
| Use Softphone                  | on                                  | Office number          |                             |
| MBG                            | local                               | Office number pause    | 0                           |
| RTP timeout detection          | <input checked="" type="checkbox"/> | Config download host * | MiCollab Server FQDN        |
| Prefer mobile network for VoIP | <input type="checkbox"/>            | MBG SIP host *         | MBG's FQDN                  |
|                                |                                     | MBG-WebRTC SIP host *  | MBG's FQDN                  |
|                                |                                     | PBX SIP host           | Default                     |
| Override user email            | <input type="checkbox"/>            | Conference access code | *40                         |
| Deployment email address       |                                     | Emergency numbers      | 000,110,112,118,119,911,999 |

Softphone Settings

|                               |  |
|-------------------------------|--|
| PBX type                      | MV Business  |
| SIP transport protocol        | TLS<br><small>TLS is suggested, please see documentation</small> |
| SRTP mode                     | Off  |
| SIP port                      | 0  |
| SIP DTMF method               | RFC 2833 / RFC 4733  |
| Default audio codec           | Best quality (G.722)   |
| Max video TX rate (kbit/s) *  | 768  |
| Max video RX rate (kbit/s) *  | 768  |
| DSCP SIP                      | Class selector 3   |
| DSCP RTP audio                | Expedited forwarding   |
| DSCP RTP video                | Assured forwarding 41  |
| Verify TLS-server-certificate | <input checked="" type="checkbox"/>                              |
| TLS-server-certificate CA     | Mitel CA   |

|                                  |  |
|----------------------------------|--|
| Teleworker type                  | MBG  |
| SIP transport protocol           | TLS<br><small>TLS is suggested, please see documentation</small> |
| SRTP mode                        | Off  |
| SIP port                         | 0  |
| SIP DTMF method                  | RFC 2833 / RFC 4733  |
| Default audio codec              | Best quality (G.722)   |
| Max video TX rate (kbit/s) *     | 768  |
| Max video RX rate (kbit/s) *     | 768  |
| DSCP SIP                         | Class selector 3   |
| DSCP RTP audio                   | Expedited forwarding   |
| DSCP RTP video                   | Assured forwarding 41  |
| Verify TLS-server-certificate    | <input checked="" type="checkbox"/>                              |
| TLS-server-certificate CA        | Mitel CA   |
| TLS-server-certificate CA Upload | <input type="button" value="Choose File"/> No file chosen        |

Creating a User Template

Create a user template for **ACD WebRTC Pro** Softphone user.

Add User Template

Label:

Description:

---

**User Information**

UCC Bundle:

Department:

Location:

Prompt Language:

Password: ☐ Same as Primary Phone Extension  
☐ Randomly Generate  
☒ Use this value

TUI Passcode: ☐ Same as Primary Phone Extension  
☐ Randomly Generate  
☒ Use this value

☒ IDS Manageable

---

**Service Information**

☒ Include Primary Phone

Service Label:

☐ Private

Network Element:

Secondary Element:

☐ Use DID Service Number as Outgoing DID Number

CESID:

☒ Hot Desking User  
☒ ACD Agent  
☒ Enable SIP Softphone for MiCollab Client  
☐ External Hot Desk License

Deployment Profile:

Preferred Set:

☒ Include Teleworker Service

Service Level:

Zone ID:

Call Coverage Service Number:

|                       | Day                             | Night 1                         | Night 2                         |
|-----------------------|---------------------------------|---------------------------------|---------------------------------|
| Class Of Service:     | <input type="text" value="74"/> | <input type="text" value="74"/> | <input type="text" value="74"/> |
| Class Of Restriction: | <input type="text" value="1"/>  | <input type="text" value="1"/>  | <input type="text" value="1"/>  |

---

☐ Include Secondary Phone  
☐ Include Other Phone  
☐ Include Group  
☐ Include Speech Auto Attendant  
☒ Include MiCollab Client Service

Feature Profile:

User Profile:

Desk phone extension:

Soft phone extension:

Deployment Profile:

☐ MiTeam Classic

---

☐ Include NuPoint Unified Messaging Voicemail  
☐ Include Audio, Web and Video Conferencing

## Adding a User

Following is the procedure for adding a user:

1. Go to **Quick Create User**, under **Users and Services** and specify the new user details.

**Quick Create User**

Save Cancel

User Role  
Role: ACD SIP Softphone User

User  
First Name: MiCollab \*Last Name: ACDSofthphone  
Department: <none>  
Location: <none>  
\*Login: micollabacd  
\*Primary Email Address: acd@test.com

Primary Phone  
Service Label: ACD SIP Softphone  
\*Network Element: KAN\_AG1  
\*Number: 1234  
DID Service Number:   
Save Cancel

2. Click the **MiCollab Client** tab and specify details of the **MiCollab Client** for the ACD softphone.

**Edit User - ACDSofthphone, MiCollab**

Save Cancel Connect to MiVB System Tool

User Phones NuPoint Unified Messaging **MiCollab Client** Audio, Web and Video Conferencing Teleworker

MiCollab Client for MiCollab ACDSofthphone  
Feature Profile: UCC (V4.0) Premium  
User Profile: Default User Profile  
Desk phone extension: None  
Soft phone extension: 1234 (on KAN\_AG1)  
Mailbox number: None  
Deployment Profile: qasharedmbg  
Number:   
Status: Deployed  
Save Cancel

3. Under the **Teleworker** tab, add a number for the teleworker. Note that you add a user as Teleworker, specifying a phone number, for this feature to function.

**Edit User - ACDSofthphone, MiCollab**

Save Cancel Connect to MiVB System Tool

User Phones NuPoint Unified Messaging MiCollab Client Audio, Web and Video Conferencing **Teleworker**

New Teleworker  
\*Phone: 1234 (on KAN\_AG1)  
Status: Enabled  
Note: These fields are not applicable for SIP Device types.  
Save Cancel

## 5.3 Managing Web Server Certificate

In the left pane menu, go to **Security > Web Server**, and download the certificate from the primary MBG (and the secondary MBG, if applicable). This step is optional, depending on the type of certificate you use.

Mitel Standard Linux

Applications

MiVoice Border Gateway

ServiceLink

Blades

Status

Administration

Web services

Backup

Restore

View log files

Event viewer

System information

System monitoring

System users

Shutdown or reboot

Virtualization

Security

Remote access

Port forwarding

Syslog

Web Server

MBG client certificates

Configuration

Networks

E-mail settings

Google Apps

Cloud Service Provider

DHCP

Date and Time

Hostnames and addresses

Domains

IPv6-in-IPv4 Tunnel

SNMP

Ethernet Cards

Review configuration

Miscellaneous

Support and licensing

Help

Configure Web Server

Web Server Certificate

Certificate Authority Trust

TLS

Manage Web Server Certificate

The following web server certificate is currently installed:

|                    |   |
|--------------------|---|
| Issuer:            | C=--, ST=--, L=Ottawa, O=XYZ Corporation, OU=Main   |
| Certificate Name:  | C=--, ST=--, L=Ottawa, O=XYZ Corporation, OU=Main   |
| Alternate Name(s): | *,qashared.micc.local<br>10.46.56.93<br>qashared.micc.local<br>qasharedmbg<br>qasharedmbg.qashared.micc.local |
| Valid From:        | Apr 14 11:42:59 2021 GMT  |
| Expires:           | Apr 12 11:42:59 2031 GMT  |

Third Party Certificate

• Using Let's Encrypt certificate authority (free certificate)

Let's Encrypt is a free, automated, and open certificate authority (CA). You can obtain a free trusted web server certificate using the Let's Encrypt service. Let's Encrypt certificate

|                    |                                 |
|--------------------|---------------------------------|
| Status:            | disabled                        |
| Contact E-Mail:    | admin@qashared.micc.local       |
| Common Name:       | qasharedmbg.qashared.micc.local |
| Alternate Name(s): |                                 |

Modify Request

You can request a certificate by clicking 'Get Certificate'. You may also click 'Get Certificate' to renew.

• Using other third-party certificate authority

If you would like to automatically enroll for a web server certificate issued by a local Enterprise CA via the Simple Certificate Enrollment Protocol (SCEP), then select the SCEP enr

If you would like to install a web server certificate that is issued by another third-party Certificate Authority (CA), you must first generate a Certificate Signing Request (CSR) whi

Once the Certificate Authority has issued you a web server certificate, you can upload it using the 'Upload and install' option below. This option may also be used if you want to in

To download the currently installed web server certificate and private key, select the 'Download' option below. The resulting file will be a ZIP file containing the private key, the cu

Select operation to perform:

☐ Enterprise CA - SCEP Enrollment  
☐ Generate a new Certificate Signing Request (CSR)  
☐ Upload and install a web server certificate  
☒ Download the current web server certificate

## 5.4 Configuring WebRTC Pro on MBG

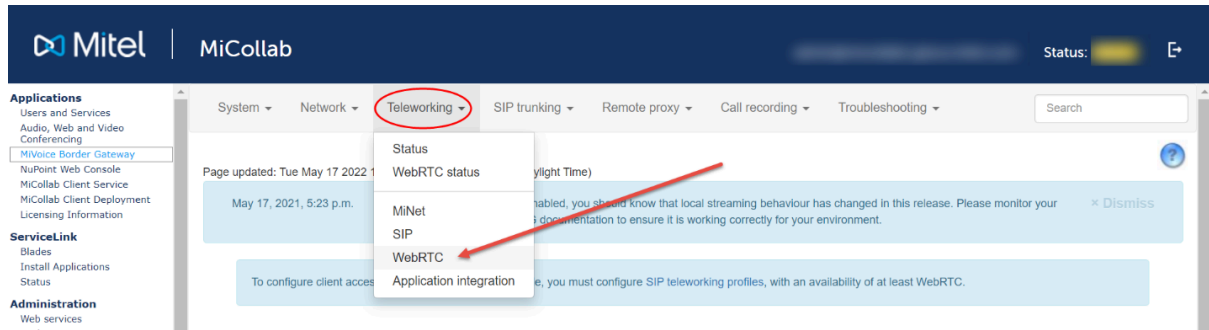
After you have added a user, you must configure the MBG:

1. From the **MBG** main menu, click **Teleworking** > **SIP**. Verify that the newly added user is displayed.

### Note:

Because MBG emulates a SIP phone for the WebRTC connection, the user status will be identified under SIP devices.

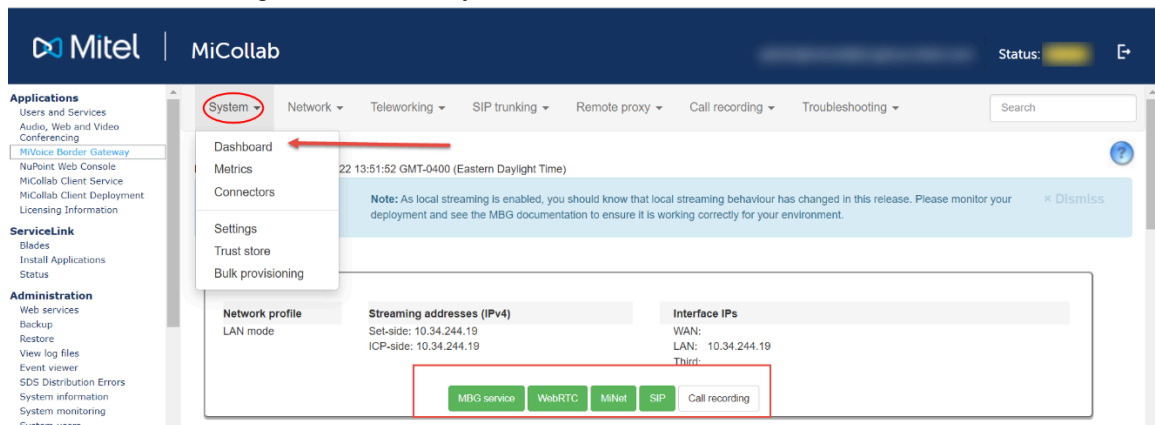
- Click **Teleworking > WebRTC** from the MBG main menu after verifying that the user has been added. Refer to the *MBG Online Help* for detailed information about WebRTC setup.



- Select **WebRTC Pro** from the **Operating Mode** drop-down list.

The screenshot shows the 'WebRTC status' configuration page. The 'Enabled' checkbox is checked. The 'Operating Mode' dropdown is set to 'WebRTC Pro'. The 'Client Mode' dropdown is set to 'Anonymous'. The 'WebRTC permit/deny mode' is set to 'Permit and Deny'. The 'Transcoding enabled' checkbox is unchecked. The 'LDAP DN' and 'LDAP password' fields are empty. The 'Voicemail digits' field is empty. The 'Save' button is visible at the bottom right.

- Click **Save**.
- Click **System > Settings** from the MBG main menu to enable the SIP option on MBG.
- Scroll to the **SIP Options** pane, enable the **UDP, TCP and TCP/TLS SIP** support protocols.
- Go to **System > Dashboard**. if the MBG, WebRTC, and SIP buttons are displayed in green, it indicates that the MBG is configured successfully.



## 5.5 Syncing MiVB in MiCC

Perform a sync to the MiVB in MiCC.



**Note:**

MiVB does not automatically write to MiCC; therefore, this must be performed manually.

## 5.6 Synchronizing YourSite

Log in to **YourSite** Explorer to verify the newly created agent.

The screenshot shows the 'YourSite Explorer' application. The 'Agents' tab is selected, displaying a table with one agent entry:

| Reporting number | First name | Last name    | Media server   | Employee | Real time                           | Is active                           | Last modified       | Last modified by             |
|------------------|------------|--------------|----------------|----------|-------------------------------------|-------------------------------------|---------------------|------------------------------|
| 1234             | MiCollab   | ACDSOFTPHONE | 10.46.56.72... |          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 5/9/2022 4:04:22 PM | Data Synchronization Service |

Below the table, the details for the selected agent 'MiCollab ACDSoftphone' are shown:

**General**

Employee:

First name:

Last name:

Agent login ID:

Media server:

☐ Disable real-time monitoring and data collection on this device

**3300 ICP options**

COS:

COR:

Fallover media server:

**External hot desk agent**

☐ External hot desk user enabled

External dialing prefix:

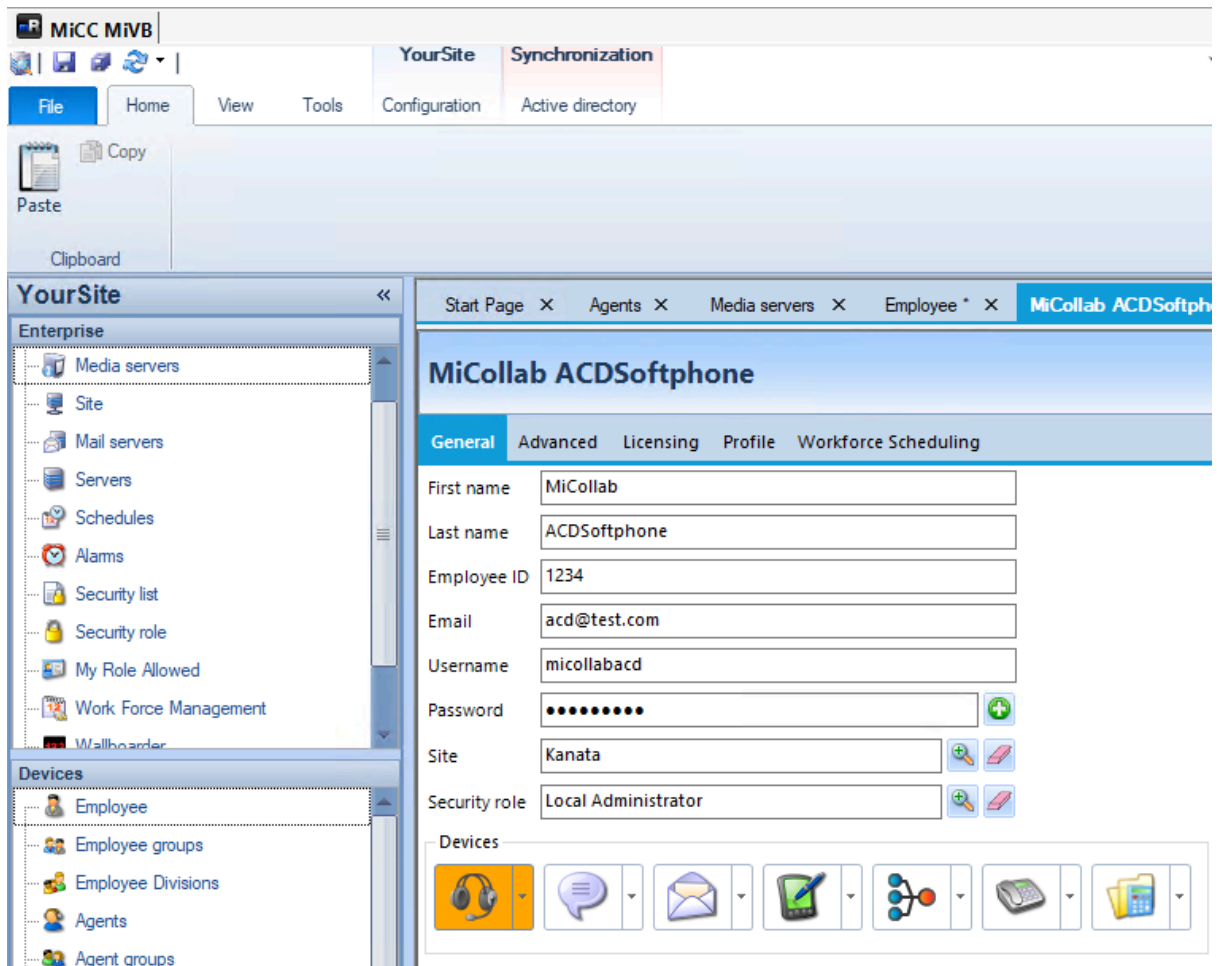
External dialing number:

## 5.7 Adding Agent

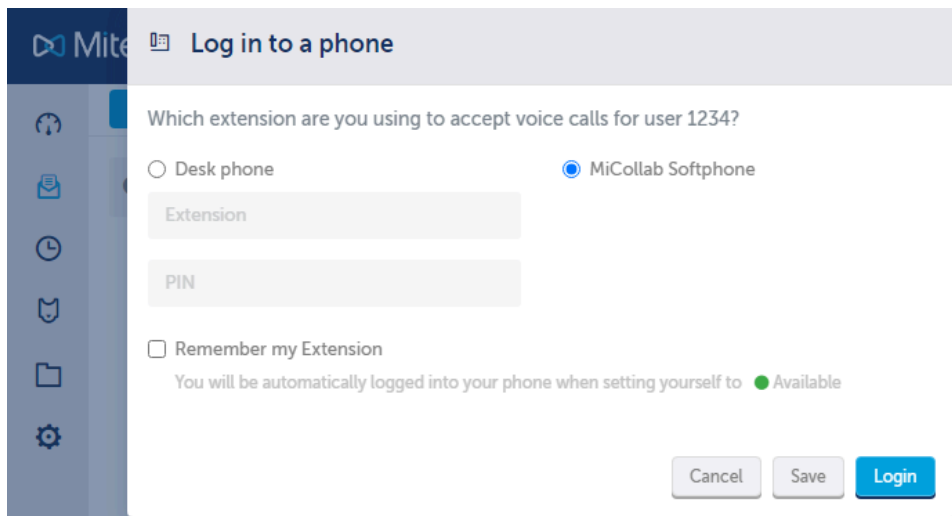
Create a new employee or add the agent to an existing employee.

Or

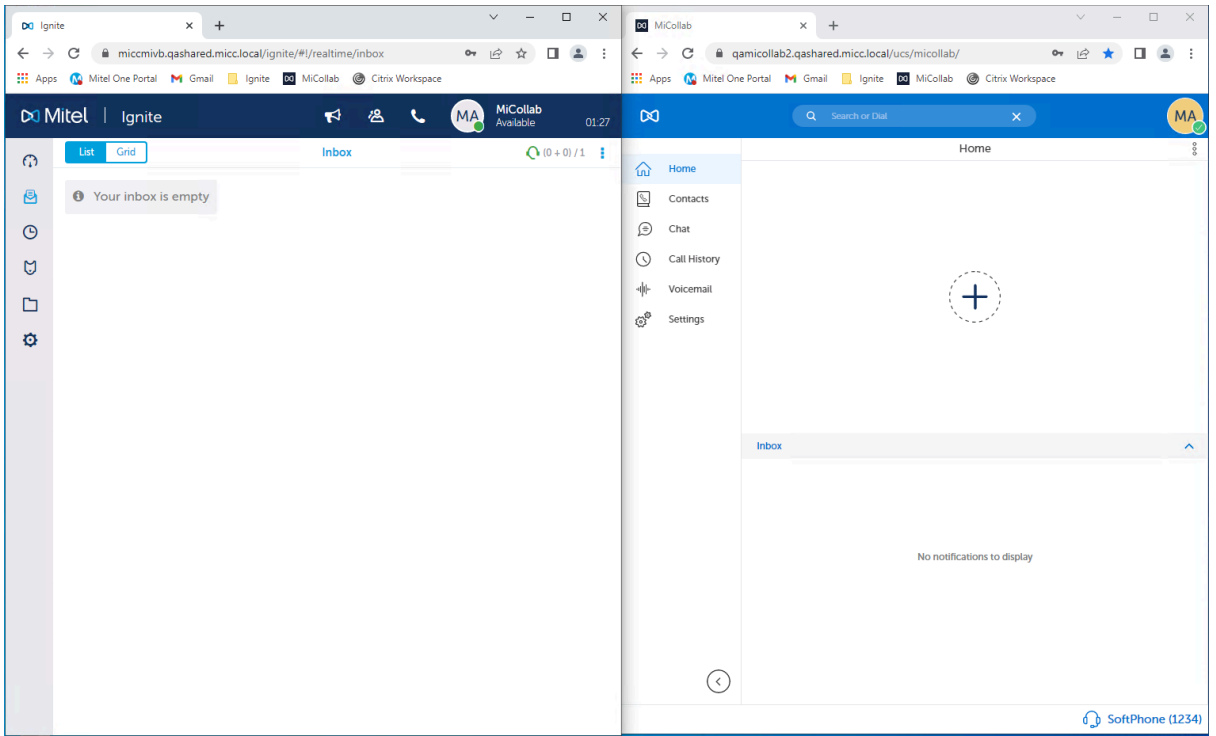
You can add to an existing Agent group, or create a new group, and add to it.



Log in to MiCC Ignite and enable the MiCollab Softphone.



A successful connection will appear in Ignite and in MiCollab as shown in the following figure.



The WebRTC softphone uses the existing license structure:

- Teleworker licenses in MBG,
- MiCollab Desktop and Softphone Client licenses,
- Device (SIP) licenses on MiVB, and
- Concurrent Voice Agent licenses on MiContact Center.

No additional licenses specific to WebRTC Pro are required to deploy and operate the solution. However, use of the WebRTC softphone does require a Teleworker license to be provisioned in MBG, and the user or agent must include a MiCollab Desktop and Softphone Client license. Even if the user is in the office, a Teleworker license is needed as the WebRTC softphone terminates at the MBG.

- [MiCollab Server Manager Help](#)
- [MiCollab Installation and Maintenance Guide](#)
- [MiCollab Administrator Guide](#)
- [MiVoice Business System Administration Tool Help](#)
- [MiContact Center – MiVoice Business User Guide](#)
- [MiContact Center – MiVoice Business Installation and Administration Guide](#)
- [MiVoice Border Gateway Help](#)
- [MiVoice Border Gateway Engineering Guidelines](#)

