



A MITEL
PRODUCT
GUIDE

IP48x Desktop Phone and MiVoice Business Interoperability Guide

MiVoice Business (MiVB) Integration with IP48x Series Phones

Release Number 1.0

Revision 03

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Mitel Desktop Phone Interoperability Guide

Release 1.0 – August 2026

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About This Document

This guide provides a reference for Mitel Authorized Solutions Providers on configuring **MiVoice Business** to support the **IP48x** series as a **Generic SIP Phone**. While the IP48x and associated endpoints can be deployed in multiple network configurations depending on the VoIP solution in use, this document focuses on a **basic SIP configuration** using MiVoice Business, including key provisioning and option programming requirements.

In addition to configuration guidance, this document also includes references to **Product Lifecycle Information** to ensure that partners deploying or supporting IP48x devices are fully aware of lifecycle planning implications and support timelines. The reference includes:

- Current product lifecycle phase
- Guidance for ongoing support and software availability
- Recommendations for future-proofing deployments
- Reference to official lifecycle documentation for compliance and customer communication

For detailed and up-to-date lifecycle status of IP48x devices and related systems, please consult the official **Mitel Product Lifecycle Documentation** available through the below portal.

Refer: <https://nuxeo.unify.com/nuxeo/site/proxy/nxdoc/view/raw/93ee0db1-ed3d-4a5f-ae3e-3727b7105ad3?source=SAMLSSO>

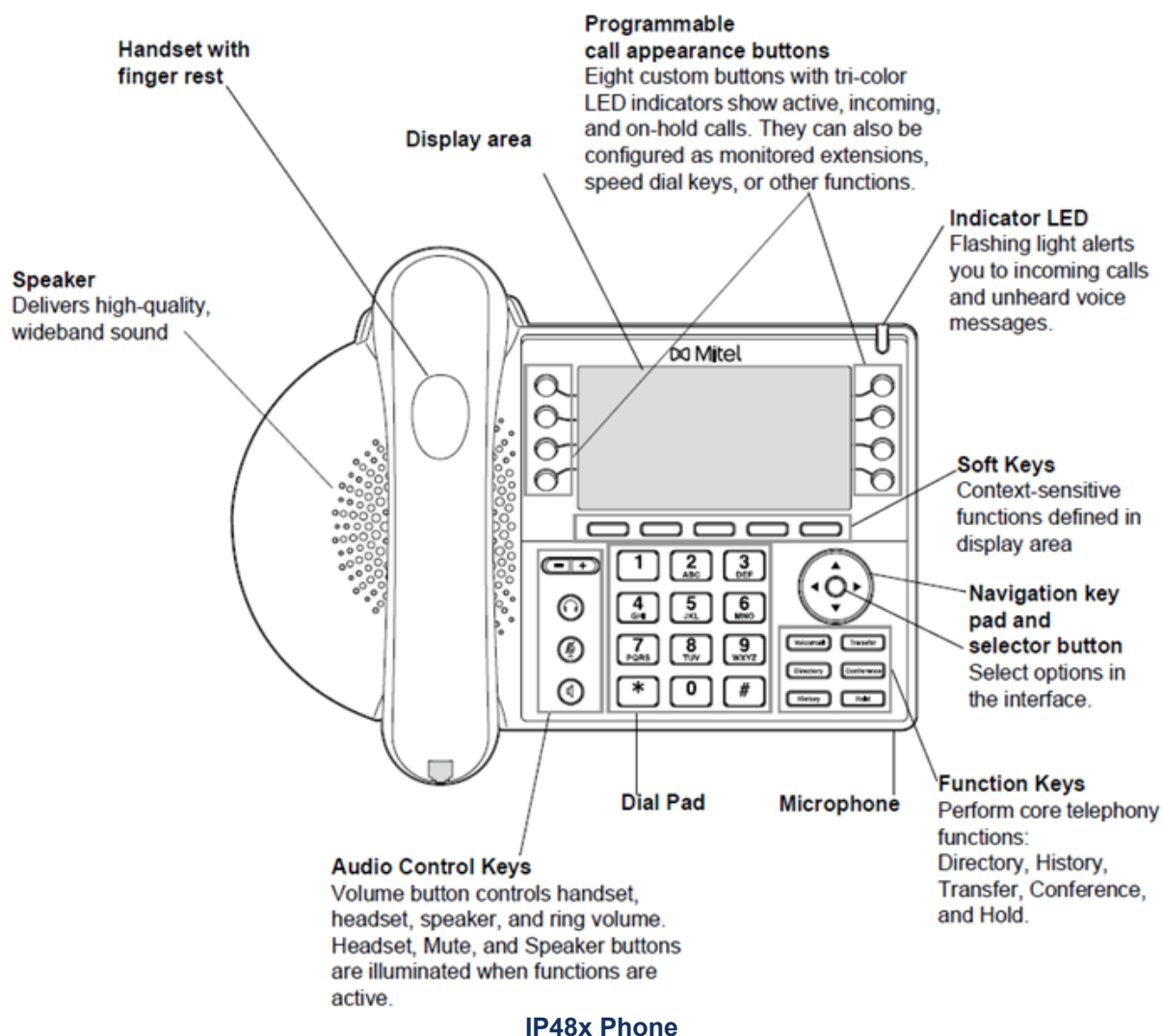
Supported Phone Models

The following IP400 phone models are supported:

- IP480
- IP480g
- IP485g

The following IP400 phone models are not supported:

- IP420
- IP420g



Note: The physical Voicemail key on IP48x phones running Generic SIP firmware does not invoke MiVoice Business voicemail and cannot be configured to do so.

Supported Phone Features

The following is an overview of the features supported.

Feature	Feature Description
Basic Call	Making and Receiving calls
Registration/Authentication	Device registration and authentication
DTMF Signal	Sending DTMF after call setup (i.e. mailbox password)
Call Hold	Putting a call on hold
Call Transfer	Transferring a call to another destination
Call Forward	Forwarding a call to another destination
Conference	Conferencing multiple calls together

Feature	Feature Description
Redial	Last Number Redial
Personal Ring Group	Multiple sets ringing when one number dialed
MWI	Message Waiting Indication
TLS/SRTP	Making and Receiving calls using TLS/SRTP
Teleworker	Making and Receiving calls using UDP and TLS/SRTP
Long Duration Calls	Basic Incoming & Outgoing long duration calls
Resiliency	Device able to handle resiliency when primary MiVB or MBG goes down

Detailed list on the MiVoice Business (MiVB) supported features on IP48x Phone are listed in the [MiVoice Business \(MiVB\) Supported Features for IP48x Series Phones](#) section.

Resiliency

The IP48x device supports the following resiliency mechanisms when connected to MiVoice Business.

Scenario	Description	Behavior
DNS-Based Resiliency	Resiliency is achieved by using DNS servers that return multiple IP addresses for a single FQDN, typically through DNS SRV or A records.	The device resolves the FQDN and automatically moves to the next available IP address if the primary becomes unreachable
Primary and Backup Outbound Proxy	Used in environments where DNS SRV is not applicable. The device is configured with both a primary and backup outbound proxy.	If the primary proxy becomes unreachable, the device automatically redirects SIP requests to the backup proxy.
Enhanced Failover Using OPTIONS Ping	Builds on DNS-Based Resiliency and Primary and Backup Outbound Proxy by adding active monitoring. The device sends OPTIONS requests ("pings") to the active server to detect failure more rapidly.	If an OPTIONS request times out, the device immediately switches to the alternate server for all future requests. This provides significantly faster failure detection, allowing the device to fail over to an alternate MiVoice Business system much more quickly and with minimal user interruption. Faster detection reduces the likelihood that the user will notice any loss of service, as failover can occur almost immediately.

Supported Hardware and Software/Firmware Environment

The table below summarizes the hardware and software/firmware environment supported.

Product	Software/Firmware Version	Additional Applicable Variants
MiVoice Business	10.x	All MIVB variants
MBG - Teleworker	12.x	Not Applicable
IP48x SIP	6.2.1.1079/ 6.2.1.1080	6.2.1.1079 for IP480 and IP480g; 6.2.1.1080 for IP485g
MiCollab Server	10.x	Not Applicable

IP48x Firmware Upgrade Process

This section provides a complete guide for upgrading IP48x phones to SIP firmware compatible with MiVoice Business (MiVB). It covers pre-migration preparation, firmware upgrade stages, verification, and optional updates.

Note: During firmware upgrades, the phones may reboot one or more times. This is expected behavior.

Supported Firmware Versions

IP48x phones must first be upgraded to **804.2210.1600.0** before installing the Generic SIP firmware that works with MiVB. The following versions mentioned in the below table supports upgrade of IP48x devices to **804.2210.1600.0** version.

Build Series	Build Version	Comments
Azure	800.0.0.1 – 800.x.x.x	Supported. Phones must first upgrade within Connect to 804.2210.1600.0 before using the IP400 upgrade process. Factory default versions are included.
	801.5.4160.0 and later	Supported for web-based upgrade process.
Brazos	802.x.xxxx.x	Any 802 build
Colorado	803.x.xxxx.x	Any 803 build
Connect	804.x.xxxx.x	Any 804 build

Once upgraded to 804.2210.1600.0, the phones must be further upgraded to Generic SIP firmware (6.2.1.1079 for IP480/IP480G and 6.2.1.1080 for IP485G).

Unsupported Firmware Versions

Build Series	Comments
<= 800.0.0.0	Not supported for upgrade.
801.0.0.0 – 801.5.4159.x	Supports only SSH-based upgrades where the server must initiate a TCP connection to the phone. Not compatible with the automated web-based upgrade process.

Pre-Migration Setup

PROVISION CONFIG SERVER

The IP48x phones must have the **configServer** parameter set. This can be done in two ways:

1. **Via DHCP Option 156** (recommended for multiple phones)
2. **Manually** on each phone using the admin menu

Notes:

1. Default admin password during migration: **1234**
2. Post-migration admin password: **22222**
3. Passwords are used for log uploads and configuration changes.

CONFIGURE DHCP OPTION 156 (PREFERRED)

Configure the enterprise DHCP server to include **Option 156** in DHCP replies:

Environment	configServer Setting	IP Address Equivalent
Production	ip400.mitelcloud.com	34.111.177.55

Note: Phones receiving this DHCP option will automatically populate the configServer parameter.

CONFIGURE INDIVIDUAL PHONES (MANUAL)

For environments where DHCP cannot be modified:

1. Factory Reset

- Press the **Mute** key, then use the dial pad to enter 25327# (CLEAR#); the phone will reset and reboot.

2. Set Config Server

- Press the **Mute** key, then use the dial pad to enter 73887# (SETUP#).
- Go to **Admin Options** > Enter admin password **1234** > **Services** > **Config Server** and enter the configuration server information as described below.

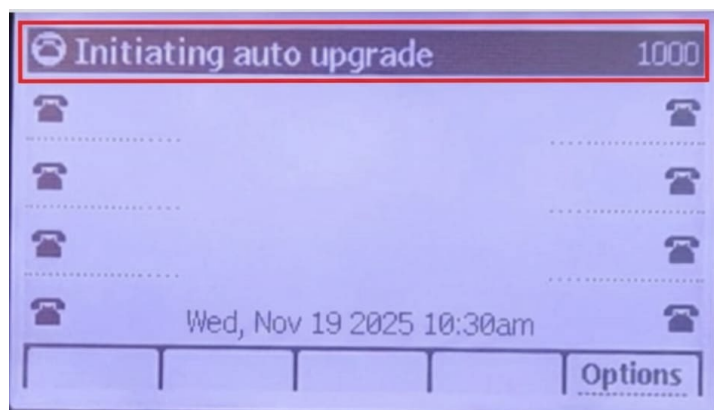
Set Config Server 1:

Environment	configServer Setting	IP Address Equivalent
Production	ip400.mitelcloud.com	34.111.177.55

Note: When manually entering an IP address using the phone keypad, press the * key to insert a dot (.) between numbers.

3. Wait a few seconds; the phone registers automatically with the **IP400Migration** service (default extension: 1000).

4. The display will show “Initiating auto upgrade”.



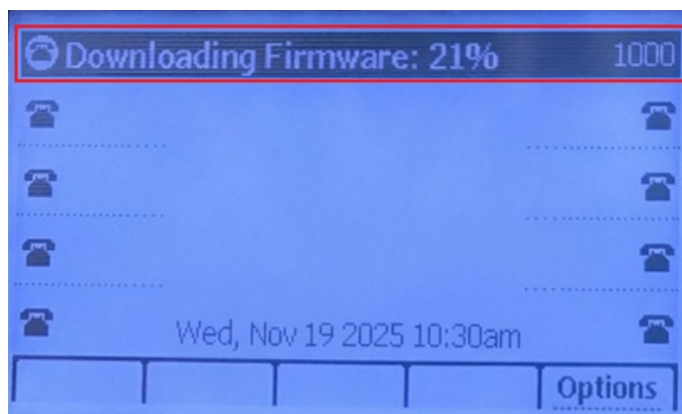
Note: IP48x phones with firmware versions between **800.2841.9111.0** and **801.5.1460.0** may display **Unsupported firmware** after pre-migration (factory reset and configServer configuration). This status indicates that the current firmware is below the minimum supported level but does **not** block the upgrade path. In this case, users can still proceed with the documented firmware upgrade process.

Firmware Upgrade Stages

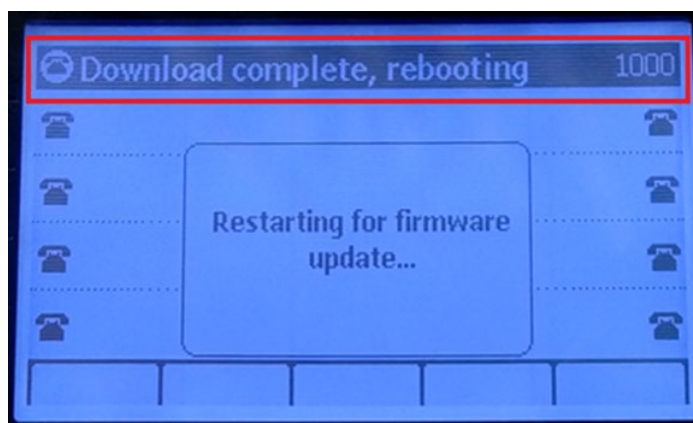
Firmware upgrades are divided into **two stages**. Stages are sequential and must be completed in order.

STAGE 1: UPGRADE TO LATEST 804 FIRMWARE

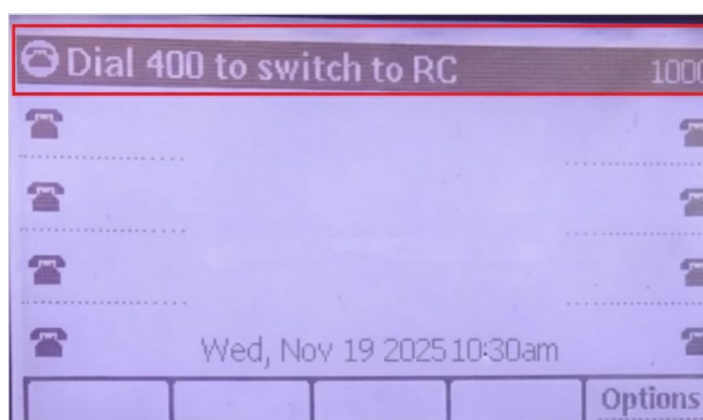
1. After pre-migration, the phone automatically starts upgrading to **804 firmware**.
 - If auto-upgrade does not start, dial **804** manually on the keypad.
2. The phone displays “Downloading Firmware”.



3. Upon completion, the phone **reboots** and loads the latest **804 firmware**.

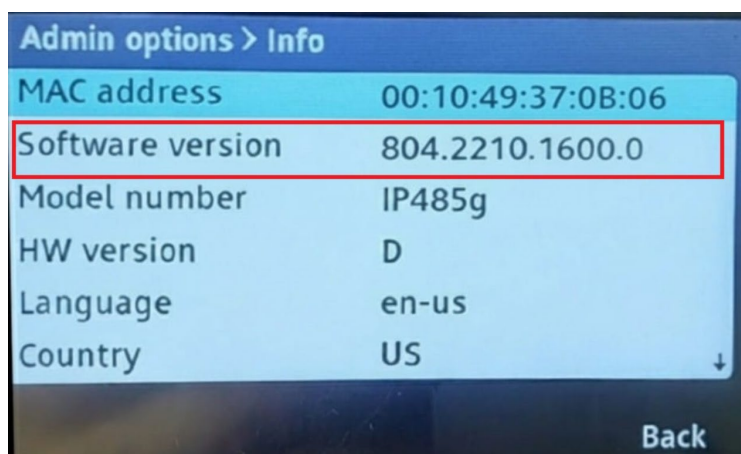


4. After reboot, the screen displays “Dial 400 to switch to RC”.



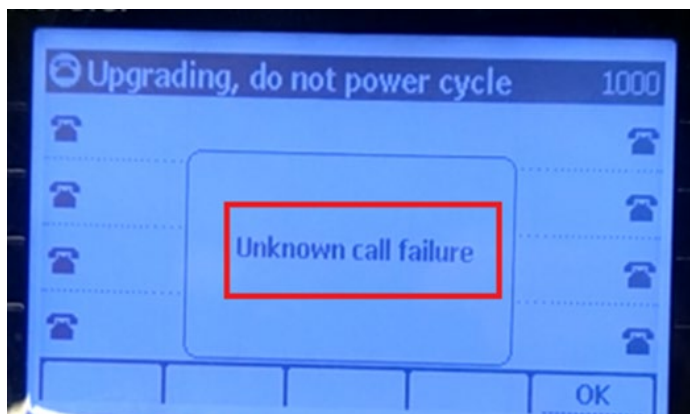
5. Verify Firmware Version

- Press the **Mute** key, then use the dial pad to enter 73887# (SETUP#).
- Go to **Admin Options > Phone Information**
- Press **Cancel** when prompted for Admin password

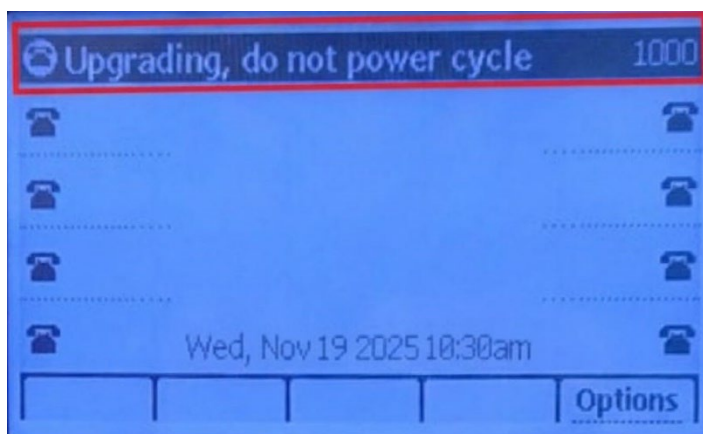


STAGE 2: UPGRADE TO GENERIC SIP FIRMWARE

1. Dial **400** on the keypad. The phone may display “**Unknown call failure**” — press **OK**.

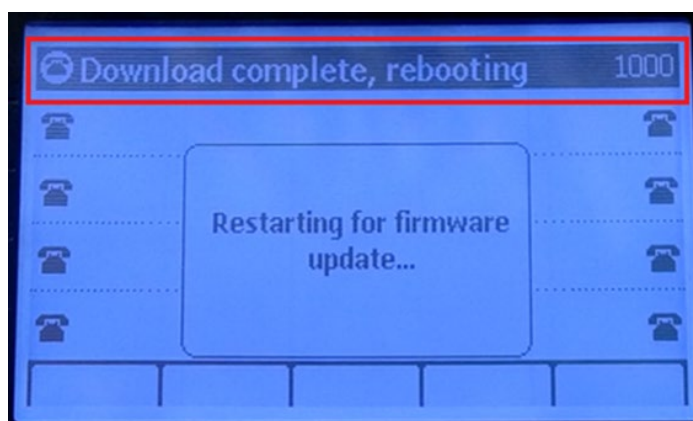


2. Wait **2–3 minutes**; the firmware downloads silently in the background. Do not power off the phone.



3. The phone **reboots automatically** and loads the **Generic SIP (ST) firmware**.

Note: IP480 and IP480g may undergo multiple reboots, while the IP485g reboots once.



4. Verify Generic SIP Firmware Version
 - Press **Settings > Status > Firmware Info > Phone Info**.
 - The firmware version is:

- IP480/IP480g: 6.2.1.1079
- IP485g: 6.2.1.1080

Important Advisory: Upgrading to the Generic SIP firmware is a one-way operation. After migration, the device cannot be downgraded to the original firmware.

User Password

A user or an administrator can change the user passwords on the phone using the Mitel Web UI.

Use the following procedures to change the user password.

1. Click on **Operation > User Password**.

The screenshot shows the Mitel Web UI interface. On the left is a navigation menu with categories: Status (System Information, License Status), Operation (User Password, Phone Lock, Softkeys and XML, Keypad Speed Dial, Directory, Reset), Basic Settings (Preferences), and Advanced Settings. The 'User Password' option under 'Operation' is selected. The main content area is titled 'Reset User Password' and contains a section 'Please enter the current and new passwords' with three input fields: 'Current Password', 'New Password', and 'Password Confirm'. Below these fields is a 'Save Settings' button.

2. In the **Current Password** field, enter the current user password.
3. In the **New Password** field, enter the new user password.
4. In the **Password Confirm** field, enter the new user password again.
5. Click **Save Settings** to save your changes.

Resetting a User Password

If a user forgets his password, either the user or an administrator can reset it so a new password can be entered. The reset user password feature resets the password to the factory default.

Use the following procedure to reset a user password using Mitel Web UI.

1. Click on **Operation > Phone Lock**.

The screenshot shows the Mitel Web UI interface. On the left is a navigation menu with categories: Status (System Information, License Status), Operation (User Password, Phone Lock, Softkeys and XML, Keypad Speed Dial, Directory, Reset), Basic Settings (Preferences), and Advanced Settings. The 'Phone Lock' option under 'Operation' is selected. The main content area is titled 'Phone Lock' and contains a section 'Settings' with a text input field for 'Emergency Dial Plan' containing the value '911(999)112/110'. Below this is a section 'Lock or unlock the phone' with two buttons: 'Lock' and 'Reset'. At the bottom is a 'Save Settings' button.

2. In the **Reset User Password** field, click **Reset**. The following screen displays:

This screenshot is identical to the one in the first image, showing the 'Reset User Password' page with the 'Please enter the current and new passwords' section and the 'Save Settings' button.

3. Leave the **Current Password** field blank if using the default password. If the password has been changed, enter the current password.
4. In the **New Password** field, enter a new password for the user.
5. In the **Password Confirm** field, re-enter the new user password.
6. Click **Save Settings** to save the new user password.

MiVoice Business (MiVB) Configuration

This section provides the required configuration steps on MiVoice Business to support registration and operation of IP48x phones running Generic SIP firmware.

Network Requirements

To ensure high-quality SIP audio, the network must meet the following requirements:

- **Bandwidth:** Approximate consumption per voice session:
 - **G.711:** ~85 Kb/s
 - **G.729:** ~29 Kb/s (Assumes 20 ms packetization.)

Example: For 20 simultaneous SIP calls

- G.711: ~1.7 Mb/s
- G.729: ~0.6 Mb/s

Typical enterprise LAN environments support this without special engineering. Refer to **MiVoice Business Engineering Guidelines** for detailed recommendations.

- **Quality Requirements:**
 - Packet loss: < 1%
 - Jitter: < 30 ms
 - One-way delay: < 80 ms

Assumptions for MiVB Programming

- SIP signaling uses **UDP port 5060**.
- For TLS deployments, use **TLS port 5061**.

Configuration Overview

The following MiVB forms must be programmed to enable successful interoperability with IP48x Generic SIP phones:

- Software Licensing
- Multiline IP Set Configuration (or User Configuration)
- Class of Service Assignment
- SIP Device Capabilities
- Station Attributes

SOFTWARE LICENSE – SIP LICENSING

Allocate the number of licenses (0-5000) for Single Line Users. The licenses can be used to configure a Generic SIP Phone as a Single Line Phone. Changes from a non-zero value to any other value are updated immediately without a reboot. Changes from zero to any value require a reboot.

This can be verified in the **Licenses > Licenses and Option Section (LOS) > Single Line Users** section.

The screenshot shows the Mitel MiVoice Business web interface. The left sidebar contains a navigation menu with 'Licenses' highlighted. The main content area is titled 'License and Option Selection on mivb1'. It features a table with columns for license categories, current values, and options. The table is organized into sections: ACD Active Agents, HTML Applications, Single Line Users, MiVoice Business Console Active Operators, Multi-device Users, Multi-device Suites, Messaging, Embedded Voice Mail, Embedded Voice Mail PMS, Trunking / Networking, Digital Links, Compression, FAX Over IP (T.38), and SIP Trunks.

License Category	Current Value	Option Value	Option 2	Option 3	Option 4	Option 5	Option 6
ACD Active Agents	0	20	0	20	Unrestricted	No	
HTML Applications	0	1000	0	1000	Unrestricted	Yes	
Single Line Users	0	200	0	200	Unrestricted	Yes	
MiVoice Business Console Active Operators	0	10	0	10	Unrestricted	No	
Multi-device Users	0	200	0	200	Unrestricted	Yes	
Multi-device Suites	0	0	0	0	0	No	
Messaging							
Embedded Voice Mail	30	30	0	20	Unrestricted	Yes	
Embedded Voice Mail PMS	0	No	1	0	Unrestricted	Yes	
Trunking / Networking							
Digital Links	0	0	2	0	Unrestricted	Yes	
Compression		256	0	256	Unrestricted	Yes	
FAX Over IP (T.38)		4	0	4	Unrestricted	Yes	
SIP Trunks	0	2000	0	2000	Unrestricted	Yes	

MULTILINE IP SET CONFIGURATION

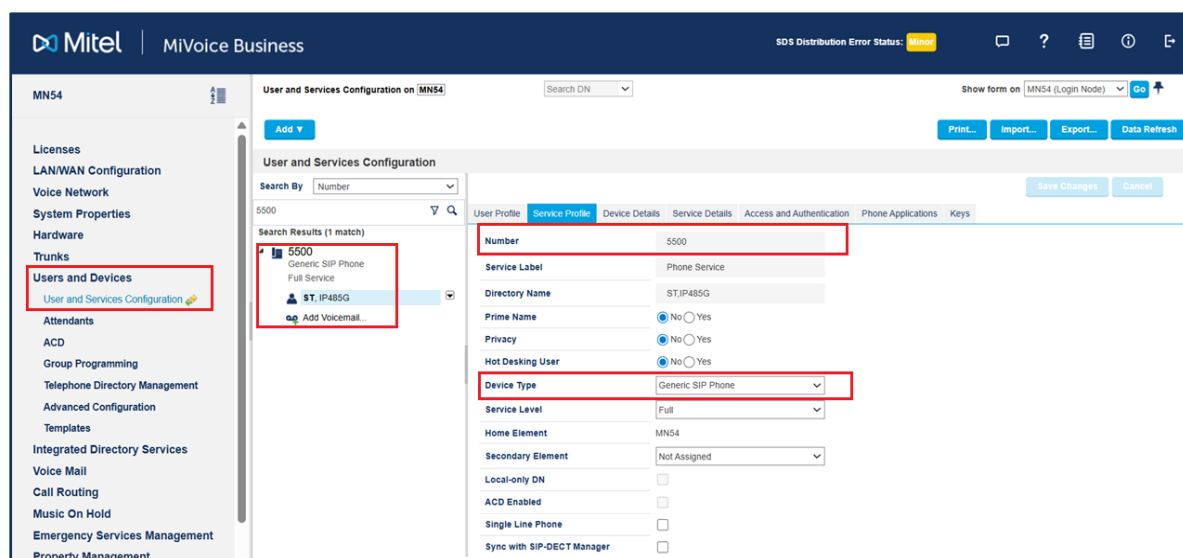
Multiline IP Sets are used for generic SIP phones to enable advanced call handling features, including conferencing, transfer, hold, call waiting, and multi-call appearances.

You may configure them using either of these MiVB forms:

- **User Configuration**
- **Multiline IP Set Configuration**

Required Fields

- **Number (DN):** Directory Number assigned to the phone.
- **SIP Password:** SIP authentication password used by the IP48x.
- All remaining fields may remain default unless site requirements dictate otherwise.
- **Conference Requirement (IP48x):** To use the Conference feature, you must configure the phone with two appearances of the same DN.



CLASS OF SERVICE ASSIGNMENT

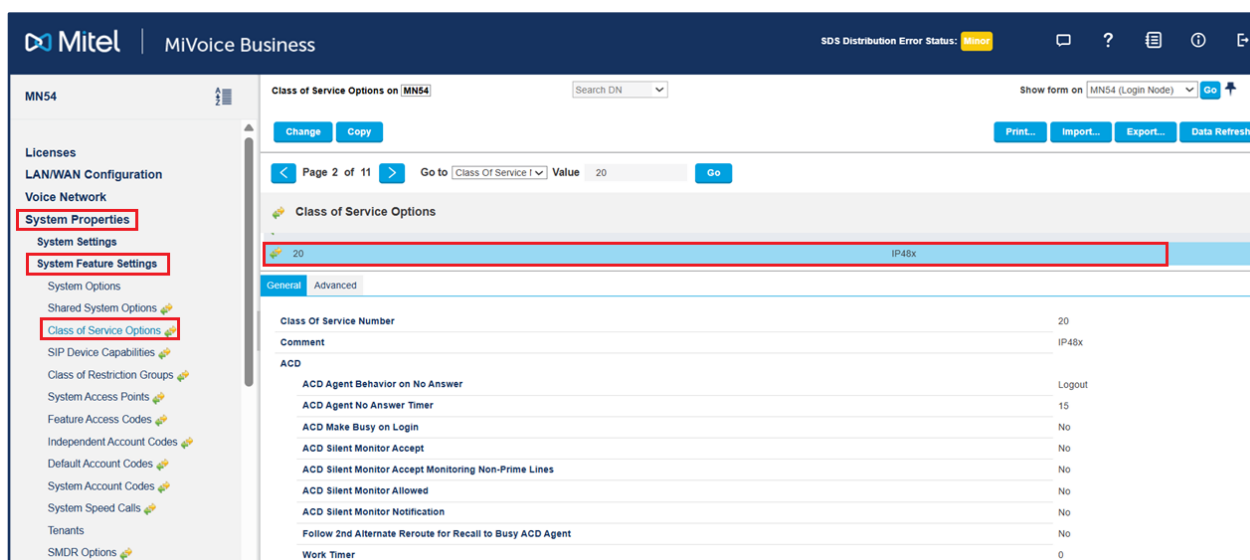
The **Class of Service (COS)** defines the feature permissions available to each SIP endpoint. Many COS options may vary depending on site requirements; however, the IP48x Generic SIP Phone requires a specific set of COS values for correct operation.

The **Class of Service (COS) Options** form defines feature permissions for SIP devices. COS numbers are later assigned through the Station Attributes form.

The following COS options **must be changed from default** for Generic SIP devices to function correctly with MiVB:

COS Option	Default Value	IP48x value
Call Park – Allowed to Park	No	Yes
Auto Campon Timer	10	Blank (No fixed value)
Public Network Access via DPNSS	No	Yes

Note: Other COS options may be modified depending on deployment needs.



SIP DEVICE CAPABILITIES

The **SIP Device Capabilities** form creates a SIP profile applied to Generic SIP Phones. This profile defines how MiVB interacts with third-party SIP endpoints.

Required Settings for IP48x:

SIP Device Capabilities Number	Default	IP48x
Replace System based with Device based In-Call Features	No	Yes
Allow Device To Use Multiple Active M-Lines	No	Yes
Force sending SDP in initial Invite message	No	Yes
Prevent the Use of IP Address 0.0.0.0 in SDP Messages	No	Yes
Allow Display Update	No	Yes
Require Reliable Provisional Responses on Outgoing Calls	No	Yes
Allow MWI notification without subscription*	No	Yes
Session Timer	0	1800

Note: You can allow MWI notification without subscription either from MIVB SIP Device Capabilities form (recommended method) or from IP48x phone web UI.

SIP Device Capabilities on MN54

Change Copy Print... Import... Export...

SIP Device Capabilities

20 IP48x

Basic SDP Options Signaling and Header Manipulation Distinctive Ring Tones Timers Key Press Event Called Party Inward Dialing Modification Record Information Advanced

SIP Device Capabilities Number 20

Comment IP48x

Call Routing and Administration Options

Outbound Proxy MBG Cluster

Outbound Proxy Server

Emergency Info Provided by Device No

Replace System based with Device based in-Call Features Yes

Allow MWI Notifications without Subscription No

Enable Digit Collection in Busy Or Alerting State No

TL S Only No

Notes:

- For TLS/SRTP deployments:
 - Set **AVP Only Device** = No
 - Set **Force Sending SDP** = No

STATION ATTRIBUTES

To each IP48x Generic SIP Phone, use the **Station Attributes** form to assign:

- Class of Service (Day/Night1/Night2)**
- SIP Device Capability Number**

Example Assignment:

- SIP Device Capability Number: 20**
- Class of Service (Day/Night1/Night2): 20**

Note: The form supports **Range Programming** for multiple phones.

Station Attributes on MN54

Change Print... Import... Export... Data Refresh

Page 9 of 11 Go to Number Value 5500 Go

Station Attributes

Number	Intercept Number	Class of Service - Day	Class of Service - Night1	Class of Service - Night2	Class of Restriction - Day	Class of Restriction - Night1	Class of Restriction - Night2	Call Coverage Service Number	Default Acct. Code	Zone Assignment Method	Zone ID	SIP Device Capabilities
5493	1	12	12	12	1	1	1	1	1	Default	1	1
5495	1	12	12	12	1	1	1	1	1	Default	1	1
5496	1	12	12	12	1	1	1	1	1	Default	1	1
5500	1	20	20	20	1	1	1	1	1	Manual	1	20
5501	1	20	20	20	1	1	1	1	1	Manual	1	20
5503	1	2	2	2	1	1	1	1	1	Manual	1	1
55100	1	1	1	1	1	1	1	1	1	Manual	1	1
55101	1	1	1	1	1	1	1	1	1	Default	1	1
5511	1	20	20	20	1	1	1	1	1	Manual	1	20
5601	1	6	6	6	1	1	1	1	1	Default	1	1
5602	1	6	6	6	1	1	1	1	1	Default	1	1

MiVoice Border Gateway Configuration for Teleworkers

This section describes the configuration required on the MiVoice Border Gateway (MBG) to enable teleworker connectivity for the IP48x Generic SIP Phone. The configuration assumes that MiVoice Business programming is already complete and that the MBG is operational within the deployment environment.

Overview

MBG acts as the secure gateway for remote IP48x SIP phones connecting over the public internet. The steps below outline how to register the MiVoice Business (MiVB) as an ICP within MBG and how to add IP48x Generic SIP devices for teleworker use.

Network Requirements

- Ensure the MBG is deployed according to the **Mitel Border Gateway Engineering Guidelines**.
- Verify adequate bandwidth, firewall rules, and public IP requirements for SIP teleworkers.

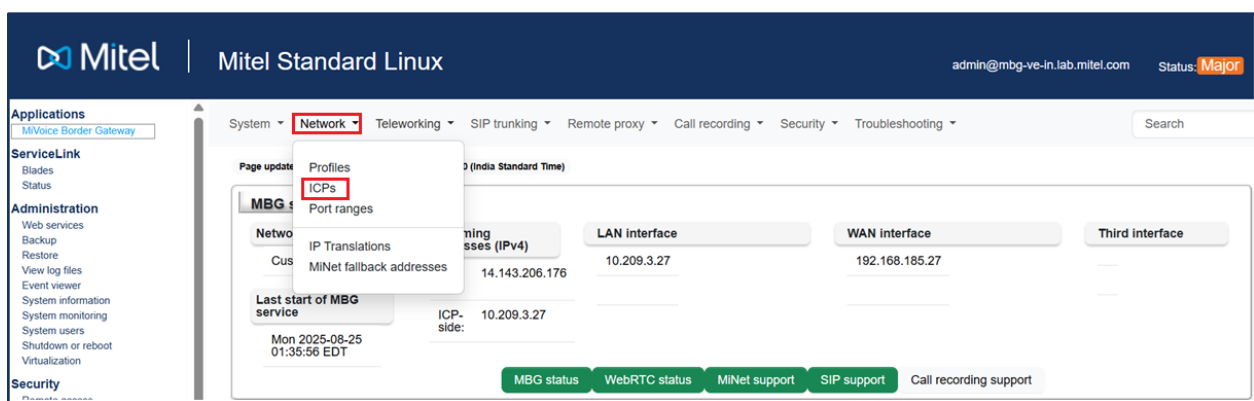
Configuration Assumptions

The following configuration prerequisites are assumed:

- MiVoice Business has been fully configured as outlined in the **MiVoice Business (MiVB) Configuration** section.
- SIP signalling between MiVB and MBG uses:
 - **UDP Port 5060** for standard SIP
 - **TLS Port 5061** for secure SIP
- The MBG server is installed, licensed, and configured to support SIP clients.

Adding MiVoice Business (ICP) to MBG

1. In the MBG interface, navigate to **Network > ICPs**.
2. Select **+ Add ICP**.



3. Enter the required ICP details:
 - ICP Name
 - Fully Qualified Domain Name (FQDN) or IP Address
 - ICP Type (MiVoice Business)

- Click **Save**.

System ▾ Network ▾ Teleworking ▾ SIP trunking ▾ Remote proxy ▾ Call recording ▾ Security ▾ Troubleshooting ▾

Page updated: Thu Nov 13 2025 16:28:29 GMT+0530 (India Standard Time)
The following is a form for modifying an icp entry. You may edit this information as you wish, and click on the "Save" button below when you are done.

Manage ICP

Name	mn140	Hostname or IP address	172.19.68.140
Type	MiVoice Business ▾	MiNet installer password	12345
SIP capabilities	UDP, TCP, TLS ▾ Export root cert ⚙	Indirect call recording capable	☐

Save

Adding IP48x Generic SIP Devices

To enable teleworker registration, configure each IP48x as a SIP device in MBG.

- Navigate to **Teleworking > SIP**

Mitel | Mitel Standard Linux

admin@perfaz-tejas-mbg.az.ucs.mitel.io Status: Warning

Applications ▾ ServiceLink ▾ Administration ▾ Security ▾ Configuration ▾

System ▾ Network ▾ Teleworking ▾ SIP trunking ▾ Remote proxy ▾ Call recording ▾ Troubleshooting ▾

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Below is a list of devices for this M...

Note: To configure SIP profiles, see the Bulk provisioning page.

Sets per page: 20

Status: ☒ Either ☐ Enabled ☐ Disabled

Simple filter:

Bulk edit Refresh

- Select **+ Add** to create a new SIP device.

SIP profile information

Enabled	Set-side username	ICP-side username	Availability	Configured ICP	Description	Local streaming between devices		
✓	1002	1002	Everywhere	MIVB1	WebRTC	Use global setting		
✓	1003	1003	Everywhere	MIVB1	1003	Use global setting		

Number of sip users: 2.

Page 1 of 1

- In the SIP Device configuration screen, enter the following:

Set-Side Credentials

- Username
- Password

(These must match the SIP credentials provisioned on the IP48x phone.)

ICP-Side Credentials

- SIP Password
- Directory Number (DN)
(These must match the SIP extension programming on MiVoice Business.)

4. Complete all other required fields based on deployment needs, then click **Save**.

IP48x Configuration

Pre-requisites

Before configuring the IP48x device:

- Ensure the unit is powered on and connected to the network.
- Confirm that your PC is connected to the same TCP/IP network.
- A web browser is required to access the full configuration interface.
- If connecting directly to the IP48x, ensure the phone is powered via PoE.

Note: The IP48x phone, by default, obtains its IP address from the DHCP server in the network. If a DHCP server is not available, the IP48x phone can be configured with a static IP address, as described in the **Network Settings** section below.

Accessing the IP48x Web GUI

1. Ensure both the IP48x and your computer are connected to the LAN. A direct cable connection requires PoE.
2. Open a supported web browser and navigate to the phone's IP address, for example:
<https://192.168.10.35>

3. When prompted, enter the default credentials:
 - Username: admin
 - Password: 22222
4. Upon successful login, the Web GUI Home Page appears.

Configuration Settings Using the IP48x Phone Display

1. Press **Settings** on the phone display.
2. Go to **Advanced**.
3. Enter the password **22222** and press **Enter**.
4. Navigate to **Network**.
5. Scroll down to **Settings**.
6. Uncheck **Use DHCP?**.
7. Enter the **IP address**.
8. Enter the **Subnet Mask**.
9. Enter the **Gateway**.
10. Enter the **Primary** and **Secondary DNS**.
11. Select **Save**.
12. When prompted, click **Yes** to restart the phone.

Network Settings

Use DHCP?	☐
DHCP User Class	
DHCP Download Option	Any
IP Address	10.211.26.164
Subnet Mask	255.255.255.0
Gateway	10.211.26.1

Save**Cancel**

Configuration Settings Using the IP48x Web GUI

SIP CONFIGURATION

1. Navigate to **Advanced Settings > Global SIP**
2. Configure the following:
 - **Basic SIP Authentication Settings:**
 - Phone Number
 - Caller ID
 - Authentication Name
 - Authentication Password
 - **Basic SIP Network Settings:**
 - Enter MiVB/MBG FQDN or IP details:
 - Proxy Server
 - Proxy Port
 - Registrar Server
 - Registrar Port
 - **Advanced SIP Settings:**
 - Transport Protocol:
 - Explicit MWI Subscription: Enabled
 - Set to **UDP**
 - Port: **5060**

MESSAGE WAITING INDICATION (MWI)

The ability of an extension to receive a Message Waiting Indication (MWI) in the form of an LED.

You can configure the MWI from MiVB SIP Device Capabilities form or from IP48x Phone web UI.

Method 1 – MiVB SIP Device Capabilities (recommended method)

1. In MiVB click on **System Properties > System Feature Settings > SIP Device Capabilities** form.
2. **Basic > Call Routing and Administration Options > Allow MWI Notifications without Subscription.**
3. Change the value from **NO** (default) to **YES**.

Method 2 – IP48x Phone Web UI

1. Click on **Advanced Settings > Global SIP > Advanced SIP Settings**.
2. Enable **Explicit MWI Subscription**.
3. Click **Save Settings**.
4. You must restart the phone for the selection to take effect.

Mitel

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Global SIP Settings

Basic SIP Authentication Settings
Screen Name
Screen Name 2
Phone Number
Caller ID
Authentication Name
Password
BLA Number
Line Mode
Call Waiting

Basic SIP Network Settings
Proxy Server
Proxy Port
Backup Proxy Server
Backup Proxy Port
Outbound Proxy Server
Outbound Proxy Port
Backup Outbound Proxy Server
Backup Outbound Proxy Port
Registrar Server
Registrar Port
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Advanced SIP Settings
Explicit MVI Subscription
Explicit MVI Subscription Period
MVI for BLA account
As-Feature-Event Subscription
As-Feature-Event Subscription Period
UA-Profile-Event Subscription
UA-Profile-Event Subscription Period
Send MAC Address in REGISTER Message
Send Line Number in REGISTER Message
Session Timer
T1 Timer
T2 Timer
Transaction Timer
Transport Protocol
Local SIP UDP/TCP Port
Local SIP TLS Port
Registration Failed Retry Timer
Registration Timeout Retry Timer
Registration Renewal Timer
BLF Subscription Period
ACD Subscription Period

192.168.10.94
5060
0.0.0.0
0
0.0.0.0
0
0.0.0.0
0
192.168.10.94
5060
0.0.0.0
0
0
0
4000
UDP
5060
5061
1800
120
15
3600
3600

Enabled
86400
Enabled
3600
Disabled
86400
Enabled
Enabled
0
0
0
4000
UDP
5060
5061
1800
120
15
3600
3600

CODEC SETTINGS

Navigate to the Codec Settings section to ensure codecs align with MiVB expectations (G.711 / G.729 based on deployment).

BLA Subscription Period
Blacklist Duration
Park Pickup Config
Whitelist Proxy
XML SIP Notify

RTP Settings
RTP Port
Force RFC2833 Out-of-Band DTMF
DTMF Method
RTP Encryption

Codec Preference List
Note: Basic Codecs Include G.711u (8K), G.711a (8K), G.729

Codec 1
Codec 2
Codec 3
Codec 4
Codec 5
Codec 6
Codec 7
Codec 8
Codec 9
Codec 10
Packetization Interval
Silence Suppression

Autodial Settings
Autodial Number
Autodial Timeout

300
300

☐ Enabled
☐ Enabled

3000
☒ Enabled
RTP
SRTP Disabled

All
None
None
None
None
None
None
None
None
None
30
☒ Enabled

0

Save Settings

REGISTRATION STATUS

To confirm successful MiVB/MBG registration:

1. Navigate to **Status** → **System Information**
2. Verify that the **Registration Status** shows the SIP account as **Registered**.

Mitel

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Advanced Settings

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Global SIP

Line 1

Line 2

Line 3

Line 4

Line 5

Line 6

Line 7

Line 8

Line 9

Line 10

Line 11

Line 12

System Information

Network Status

Attribute	LAN Port	PC Port
Link State	Up	Down
Negotiation	Auto	Auto
Speed	1000Mbps	10Mbps
Duplex	Full	Half

Hardware Information

Attribute	Value
MAC Address	00:10:49:45:4B:3E
Platform	ip485g Rev. D

Firmware Information

Attribute	Value
Firmware Version	6.2.1.2020
Firmware Release Code	SIP
Date/Time	May 5 2023 04:16:17
Boot Version	803.0.0002.1 2022-08-12 19:44:30

SIP Status

Line	SIP Account	Status	Backup Registrar Used?
1	1000@10.211.122.49:5060	Registered	No
2	1000@10.211.122.49:5060	Registered	No

TLS/SRTP Configuration on IP48x SIP Phone

To enable secure signaling and media, the IP48x SIP Phone supports TLS (for SIP signaling) and SRTP (for RTP media encryption).

IMPORT ROOT CERTIFICATES AND CONFIGURATION FILE

Depending on your deployment, import the appropriate files into the IP48x:

- **Direct MiVB Registration**
Import:
 - **MiVB Root CA Certificate**
 - **startup.cfg** (contains required TLS/SRTP parameters)
- **MBG / Teleworker Deployment**
Import:
 - **MBG Root CA Certificate**
 - **startup.cfg** (same file)

Required Parameters in startup.cfg:

- sips persistent tls: 0
- sip persistent tls keep alive: 60
- sip send sips over tls: 0
- sips trusted certificates: CA.pem

Note: These files can be uploaded via **FTP**, **TFTP**, **HTTP**, **HTTPS**, based on your provisioning setup.

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Line 21
Line 22
Line 23

Configuration Server Settings

Settings [HTTP ▼]
Download Protocol [0.0.0.0]
Primary Server [0.0.0.0]
Alternate Server [0.0.0.0]
Use Alt TFTP ☐ Enabled
FTP Server
FTP Path
FTP Username
FTP Password
HTTP Server [10.211.26.232]
HTTP Path [Newfolder/TW/]
HTTP Port [80]
HTTPS Server
HTTPS Path
HTTPS Port [443]
Auto-Resync [None ▼]
Mode [00:00 ▼]
Time (24-hour) [15]
Maximum Delay [0]
XML Push Server List(Approved IP Addresses)
[]
Save Settings

Upon successful certificate upload, the trusted certificate filename automatically populates as CA.pem.

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TLS Support

Configure File Names
Root and Intermediate Certificates Filename
Local Certificate Filename
Private Key Filename
Trusted Certificates Filename [CA.pem]
Save Settings

CONFIGURE TLS TRANSPORT

Navigate to **Advanced Settings > Global SIP**

- Change **Transport Protocol** to **Persistent TLS**
- Set SIP signaling port to **5061**

Global SIP Settings

Basic SIP Authentication Settings

Screen Name
Screen Name 2
Phone Number
Caller ID
Authentication Name
Password
BLA Number
Line Mode
Call Waiting

Basic SIP Network Settings

Proxy Server
Proxy Port
Backup Proxy Server
Backup Proxy Port
Outbound Proxy Server
Outbound Proxy Port
Backup Outbound Proxy Server
Backup Outbound Proxy Port
Registrar Server
Registrar Port
Backup Registrar Server
Backup Registrar Port
Registration Period
Conference Server URI

Advanced SIP Settings

Explicit MWI Subscription
Explicit MWI Subscription Period
MWI for BLA account
As-Feature-Event Subscription
As-Feature-Event Subscription Period
UA-Profile-Event Subscription
UA-Profile-Event Subscription Period
Send MAC Address in REGISTER Message
Send Line Number in REGISTER Message
Session Timer
T1 Timer
T2 Timer
Transaction Timer

Transport Protocol
Local SIP UDP/TCP Port
Local SIP TLS Port
Registration Failed Retry Timer
Registration Timeout Retry Timer
Registration Renewal Timer
BLF Subscription Period
ACD Subscription Period

CONFIGURE SRTP FOR MEDIA ENCRYPTION

Navigate to **Advanced Settings > RTP Settings** and set **RTP Encryption** to **SRTP Only**

RTP Settings

RTP Port
Force RFC2833 Out-of-Band DTMF
DTMF Method
RTP Encryption
Codec Preference List
Note: Basic Codecs Include G.711u (8K), G.711a (8K), G.729
Codec 1
Codec 2
Codec 3
Codec 4
Codec 5
Codec 6
Codec 7
Codec 8
Codec 9
Codec 10
Packetization Interval
Silence Suppression
Autodial Settings
Autodial Number
Autodial Timeout

Save Settings

MiVoice Business (MiVB) Supported Features for IP48x Series Phones

The table below lists the MiVoice Business (MiVB) features supported on the IP48x phone. For detailed configuration information, refer to MiVoice Business Online Help.

MiVB Features	Supported on IP48x Phone
Account Codes - Default	Yes
Account Codes - System	Yes
Account Codes - Verified and Non-verified	No
Add Held	No
Auto-Answer	No
Auto-Hold	Yes
ACD Support	No
ACD Agent Hot Desking (including ACD Express)	No
Broker's Call	Yes
Call Duration Display	Yes
Call Forward - Cancel All	Yes
Call Forward	Yes
Call Forward - Delay	No
Call Forward - Follow Me - End Chaining	No
Call Forward - Follow Me - Reroute when Busy	Yes
Call Forward - Forced	No
Call Forward - Override	Yes
Call History	Yes
Call Park/Group Park	Yes
Call Park Retrieve/Group Park Retrieve	Yes
Call Pickup (Dialed, Directed, Clustered)	Yes
Call Pickup - Display Calling/Called Party	No
Call Privacy	No
Call Screening	No
Call Waiting - Swap Automatic	No
Callback	Yes
Camp-on	Yes
Clear All Features	Yes
Compression Support	Yes (G.711, G.729)
Conference	Yes
Conference Split	No
Corporate Directory	No
Direct Outward Dialing (DOD)	Yes
Direct Page - Initiate	Yes
Direct Page - Receive	No
Direct Station Select/Busy Lamp Field (DSS/BLF)	No
Directed Voice Call - Initiate	Yes
Directed Voice Call - Receive	No

MiVB Features	Supported on IP48x Phone
Do Not Disturb	Yes
Feature Keys	No
Flash - Calibrated	No
Flash - Switchhook	No
Flash - Trunk	No
Gigabit Ethernet Stand Support	No
Ground Button	No
Group Listen	No
Group Page - Initiate	Yes
Group Page - Receive	No
Group Presence - Join/Leave Group	Yes
Group Presence - Join All/Leave All Groups	No
Handsfree Answerback	No
Handsfree Operation	Yes
Handoff Support	No
Headset Operation	Yes
Headset Mute Switch	Yes
Hold	Yes
Hold on Hold	No
Hold Key Retrieves Last Held Call	Yes
Hot Desking	No
Hot Line	No
Language Change	No
Last Group Member Routing (LGMR)	Yes
Line Types and Appearances	No
Long Key Press	No
Meet-Me Answer	No
Meet-Me Conference	Yes
Messaging - Advisory	No
Messaging - Callback	No
Messaging - Dialed	No
MobileLink (Smartphone pairing)	No
Multi-color LED	No
Multilingual Name Display/Multilingual Name Display Using External LDAP	No
Multiple Message Waiting Indication	No
Music	No
Mute Key	Yes
Night Service	Yes
Off-Hook Voice Announce	No
Override Busy	Yes
Override Security	Yes
Paging	No
PC Port (for 2nd LAN connection; see Note 11)	No
Personal Directory	Yes

MiVB Features	Supported on IP48x Phone
Phonebook	No
Phone Lock	Yes
Privacy Release	No
PKM Support	No
Record-A-Call	No
Redial	Yes
Redial - Saved Number	No
Resiliency Support	No
Ring Group Membership	Yes
Ringing Line Select	No
Silent Monitor	Yes
Softkey Support	No
SuperKey	No
Swap	No
Tag Call (Malicious Call Trace)	Yes
Teleworker Support (Mitel Border Gateway)	Yes
Transfer	Yes
Transport Layer Security	Yes
Trunk Answer From Any Station (TAFAS)	Yes
Trunk Select - Direct	No
VIP Status and Wakeup (Hospitality)	Yes
Visual Voicemail	No
Voice Mail	Yes
Whisper Coach	No

Troubleshooting

State:

The phone displays "Unsupported firmware" after initial setup or during upgrade.

Cause:

The device is running a factory-installed firmware version below the supported threshold for direct automated upgrade.

Action:

Proceed with the documented firmware upgrade process. The device will successfully upgrade to a supported firmware version.

