

April 23, 2019

# Configure MiVoice Business 9.0 SP1 PR1 for use with North Supply Call Recorder Using MBG

**Description:** This document provides a reference to Mitel Authorized Solutions providers for configuring the MiVoice Business to connect to the North Supply Call Recorder using MBG.

**Environment:** MiVoice Business 9.0 SP1 PR1 (9.0.1.23), MiVoice Border Gateway 10.1.0.250, Mitel 68XX Phone and Mitel 69XX Phone 5.1.0.1024, Mitel 69XX MiNET 01.04.00.80.

## NOTICE

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks™ Corporation (MITEL®). The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Mitel Networks Corporation.

## TRADEMARKS

Mitel is a trademark of Mitel Networks Corporation.

Windows and Microsoft are trademarks of Microsoft Corporation.

Other product names mentioned in this document may be trademarks of their respective companies and are hereby acknowledged.

Mitel Technical Configuration Notes – Configure MiVoice Business 9.0 SP1 PR1 for use with North Supply Call Recorder Using MBG.

Mitel Configuration Guide HO3154

April 2019

®, ™ Trademark of Mitel Networks Corporation

© Copyright 2019, Mitel Networks Corporation

All rights reserved

## Table of Contents

Configure MiVoice Business 9.0 SP1 PR1 for use with North Supply Call Recorder Using MBG.....	i
Overview .....	1
Interop History .....	1
Interop Status.....	1
Software & Hardware Setup .....	2
SRC CRE Feature Matrix .....	2
Tested Features.....	3
Device Limitations and Known Issues .....	4
Configuration Notes.....	6
MiVoice Business Configuration Notes .....	6
Configure North Supply Call Recording.....	16
MiVoice Border Gateway Configuration for SRC .....	21
Glossary.....	24

## Overview

This document provides a reference to Mitel Authorized Solutions providers for configuring the Mitel MiVB to connect to North Supply Call Recorder using MBG. The different devices can be configured in various configurations depending on your VoIP solution. This document covers a basic setup with required option setup.

## Interop History

Version	Date	Reason
1	April 2019	Interop with Mitel MiVB 9.0 SP1 PR1 (9.0.1.23) and North Supply Call Recorder Using MBG.

## Interop Status

The Interop of North Supply Call Recorder with MiVB using MBG has been given a Certification status. This Call recording device will be included in the Mitel Interoperability Reference Guide (IRG). The status North Supply Call Recording system achieved is:

 COMPATIBLE	The most common certification which means North Supply Call Recording system has been tested and/or validated by the Mitel Third-Party Interop Team. Mitel Product Support will provide all necessary support related to the interop, but issues unique or specific to the 3rd party will be referred to the 3rd party as appropriate.
--	--

## Software & Hardware Setup

This was the test setup to generate call between North Supply Call Recording and the MiVB using MBG.

**Note – Although this testing was performed on the below tested variants, the scope of this testing can be extended to other product variants that work with the same firmware. The list of components for which this testing can be considered applicable is given in the “Additional Applicable Variants” column of the following table –**

Manufacturer	Tested Variants	Software Version	Additional Applicable Variants
Mitel	MiVoice Business	Release 9.0 SP1 PR1 (9.0.1.23)	NA
Mitel	MBG-SRC	10.1.0.250	NA
Mitel	MiTai SDK MiTai Library	6.4 v14.1	NA
Mitel	69XX SIP and 68XX SIP 69XX MiNET	5.1.0.1024 01.04.00.80	NA
North Supply	Call Recorder  SRC Protocol Version	Client V:5.4.2.4 Logger V:5.4.7.3 1.3	NA

## SRC CRE Feature Matrix

The following table lists various features of SRC. North Supply Recorder provides support for these features as listed in the table

SRC Feature	Supported by CRE (Yes/No)
Support for Static Taps	No
Support for Dynamic Taps	Yes
Separate query commands to SRC	No
SIP Support	Yes
Tone Injection/Recording Indicator Beep	No
SRC Clustering	Yes
SRC Load balancing	Yes
Support for Transcoded Taps (G.729)	Yes
Support for Encrypted Taps	No
MiTAI Call Information	Yes
Indirect Call Recording (as of SRC 1.3)	No
Support for SIP Trunking via SRC	No

## Tested Features

This is an overview of the features tested during the Interop test cycle and not a detailed view of the test cases.

Feature	Feature Description	Issues
Basic Call	Making and receiving a call	✓
Call Hold/Retrieve	Putting a call on hold/retrieve with MOH	✓
Call Transfer	Transferring a call to another destination	✓
Conference	Conferencing multiple calls together	✓
Call Forward	Forwarding calls to another destination using ESM	✓
Teleworker	Mitel remote connectivity with Teleworker	✓
Codec	Making and receiving calls Using G711 and G729 Codec	✓
SRTP Transcoding	Transcoding from SRTP to RTP from SRC to CRE	✓
Codec Transcoding	SRC only Supports Transcoding between G711 and G729A.	✓
SRC Resiliency	Call Recording happens via Secondary SRC when Primary SRC Down	✓

✓ - No issues found

✗ - Issues found, cannot recommend using

⚠ - Issues found

## Device Limitations and Known Issues

This is a list of problems or unsupported features when North Supply Call Recorder with MBG is connected to the MiVB.

Feature	Problem Description
Indirect Call Recording	Not Supported by North Supply Recorder <b>Recommended:</b> Contact North Supply for more Details
Secure RTP Recording	Not Supported by North Supply Recorder <b>Recommended:</b> Contact North Supply for more Details
SIP Trunking recording	North Supply doesn't support recording SIP trunking recording using SRC. The recorder is on SRC 1.3 and it doesn't support P-Call-Leg-ID parameter <b>Recommended:</b> Contact North Supply for more Details
SIP Trunk call from the monitored extension	When SIP trunk call is made (MBG configured as SIP trunk SBC) from monitored MiNET extension, only one-way audio is recorded. Recommendation – Upgrade to SRC 1.6 to get rid of this issue <b>Recommended:</b> Contact North Supply for more Details
Multiline calls	When there are two simultaneous calls on the monitored extension, it's recorded as merged conversation, but not as two different calls CDR reflects the details for the first call but doesn't indicate anything about the second one <b>Recommended:</b> Contact North Supply for more Details

Network Topology

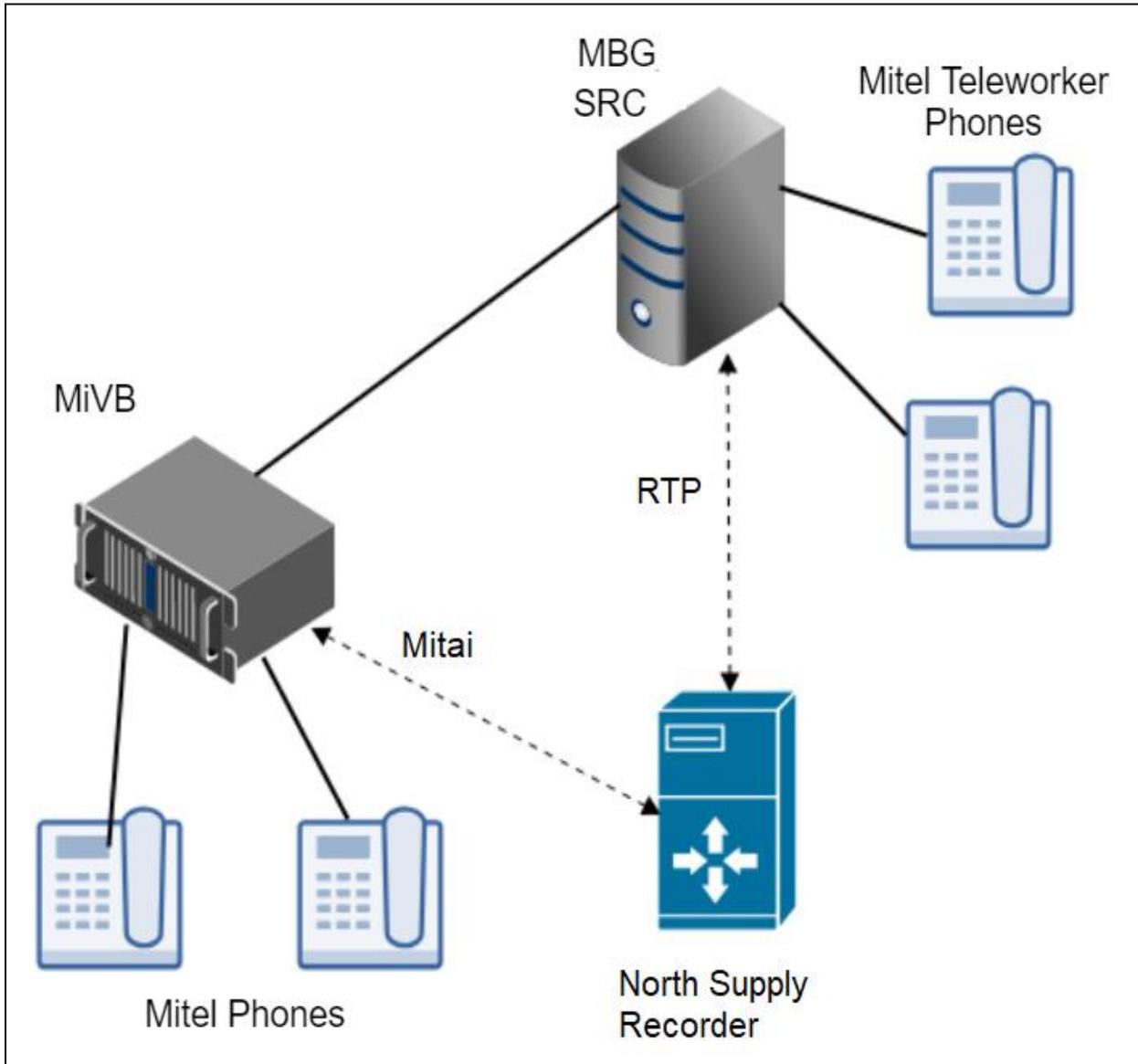


Figure 1 – Network Topology

## Configuration Notes

This section is a description of how the SIP Interop was configured. These notes should give a guideline how a device can be configured in a customer environment and how North Supply Call Recorder with MiVB using MBG programming was configured in our test environment.

*Disclaimer: Although Mitel has attempted to setup the interop testing facility as closely as possible to a customer premise environment, implementation setup could be different onsite. YOU MUST EXERCISE YOUR OWN DUE DILIGENCE IN REVIEWING, planning, implementing, and testing a customer configuration.*

### MiVoice Business Configuration Notes

The following steps show how to program a MiVB to interconnect with North Supply Call Recorder using MBG.

#### *Configuration Template*

A configuration template can be found in the same Mitel Knowledge Management System (KMS) article as this document. The template is Microsoft Excel spreadsheet (.CSV format) **solely** consisting of the SIP Device capabilities option settings used during Interop testing. All other forms should be programmed as indicated below. Importing the template can save you considerable configuration time and reduce the likelihood of data-entry errors. Refer to the MIVB documentation on how the Import functionality is used.

#### *Network Requirements*

- There must be adequate bandwidth to support the voice over IP. As a guide, the Ethernet bandwidth is approx 85 Kb/s per G.711 voice session and 29 Kb/s per G.729 voice session (assumes 20ms packetization). As an example, for 20 simultaneous SIP sessions, the Ethernet bandwidth consumption will be approx 1.7 Mb/s for G.711 and 0.6Mb/s. Almost all Enterprise LAN networks can support this level of traffic without any special engineering. Please refer to the MiVB Engineering guidelines for further information.
- For high quality voice, the network connectivity must support a voice-quality grade of service (packet loss <1%, jitter < 30ms, one-way delay < 80ms).

#### *Assumptions for MIVB Programming*

The SIP signaling connection uses UDP on Port 5060.

#### *Licensing and Option Selection – SIP Licensing*

Ensure that the MiVoice Business is equipped with enough IP Users licenses for the connection of SIP

end points. This can be verified within the License and Option Selection form. See **Figure 2**

The screenshot displays the Mitel MiVoice Business interface. The left sidebar shows a navigation menu with 'Licenses' highlighted in red. The main content area is titled 'License and Option Selection on Local\_43'. Below this, there is a 'Change' button and a 'Show form on' dropdown set to 'Not Accessible'. The interface shows 'Online Licensing with the Application Management Center' and an 'Application Record ID' of 59171922. A table displays system information, including 'System Type' (Enterprise), 'License Sharing' (No), and 'Hardware Identifier' (1bd72f30-6161-4ab5-bc7c-34f0e38a7798). Below this, a 'Licensed Options' table is shown with columns for 'Locally Consumed', 'Locally Allocated', 'Available for Allocation', 'Purchased', and 'Local Limits' (Licenses Allowed, Can be Over Allocated). The 'Users' section is highlighted in red, showing a table with the following data:

Users	Locally Consumed	Locally Allocated	Available for Allocation	Purchased	Licenses Allowed	Can be Over Allocated
IP Users	19	550	0	550	Unrestricted	Yes
External Hot Desk Users	0	10	10	0	Unrestricted	Yes
ACD Active Agents	0	50	0	50	Unrestricted	No
HTML Applications	0	250	0	250	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

Figure 2 – Licenses

### Multiline IP Set Configuration

On the MiVoice Business, a SIP device can be programmed either in the User Configuration form or the Multiline IP Set Configuration form and are programmed as a “Generic SIP Phone”. Enterprise Manager can also be used to provision where this application is installed.

The User PIN is the SIP authentication password and the Number is the Directory Number (DN is a telephone number). The Number and User PIN must match the information in the SIP phone settings. All other field names should be programmed per the site requirements or left at default. See an example in **Figure 3**.

**Change**

**Change Range Programming - Multiline IP Sets** Help

This form allows you to change one or more records, starting at the following record:

Device Id	Hot Desk User	Device Type	Auxiliary Module	Number	Local-only DN	User PIN	SIP Password	ACD Enabled
14	No	Generic SIP Phone	None	5000	False	*****	*****	No

1. Enter the number of records to change:

2. Define the Change Range Programming Pattern:

Field Name	Change action	Value to change	Increment
<b>Device Id</b>	-	14	-
<b>Hot Desk User</b>	<input type="text" value="Change to"/>	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
<b>Device Type</b>	<input type="text" value="Change to"/>	<input type="text" value="Generic SIP Phone"/>	-
<b>Auxiliary Module</b>	<input type="text" value="Change to"/>	<input type="text" value="None"/>	-
<b>Number</b>	<input type="text" value="Change to"/>	<input type="text" value="5000"/>	-

Figure 3 (A)– Multiline IP Set Configuration

Local-only DN	Change to ▾	<input type="checkbox"/>	-
User PIN	Change to ▾		-
Confirm User PIN	Change to ▾		-
<b>SIP Password</b>	Change to ▾	.....	-
<b>Confirm SIP Password</b>	Change to ▾	.....	-
ACD Enabled	Change to ▾	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
Line Type	-	Multicall	-
Interconnect Number	Change to ▾	1	-
External Hot Desk User License	Change to ▾	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
Hot Desk User External Dialing Prefix	Change to ▾		-
Hot Desk User External Number	Change to ▾		-
Language	-	English	-
Max Call History Records	Change to ▾	0	-
MAC Address	Change to ▾		-
Tenant Number	Change to ▾	1	-
Lock Default Configuration	Change to ▾	<input checked="" type="radio"/> No <input type="radio"/> Yes	-

Figure 3 (B)– Multiline IP Set Configuration

Lock Default Configuration	Change to ▾	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
HTML Infrastructure License	Change to ▾	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
HTML GUI Application	Change to ▾	▾	-
New Page Application1	Change to ▾	▾	-
New Page Application2	Change to ▾	▾	-
New Page Application3	Change to ▾	▾	-
Notification Application1	Change to ▾	▾	-
Notification Application2	Change to ▾	▾	-
Notification Application3	Change to ▾	▾	-
Branding Application	Change to ▾	▾	-
Screen Saver Application	Change to ▾	▾	-
Service Level	-	Full	-
Pin Security Status	Change to ▾	Weak or Expired	-

Figure 3 (C)– Multiline IP Set Configuration

*Multiline Set Key Assignment*

You use the Multiline Set Key Assignment form to assign the line type, ring type, and directory number to each line selected on the device

Multiline Set Keys on Local\_43 Search DN  Show form on Not Accessible

Multiline Set Keys Search:

Search Scope:  Local\_43  Admin Group

Find a field named:  that has a value of:

---

**Multiline Set Keys**

3000	Ring	Multicall	mitel,NorthSupply
3001	Ring	Multicall	SIP,Mitel

Page 1 of 4

**Programmable Keys**

Button Number	Label	Line Type	URL	Button Directory Number	Ring Type	MiXML Application Feature	Phone Application Feature
2		Multicall		3000	Ring	Not Assigned	

Figure 2 – Multiline Set Key Assignment

### *Class of Service Assignment*

The Class of Service Options form is used to create or edit the Class of Service and specify its options. Classes of Service, identified by Class of Service numbers, are referenced by the Station Attributes form for the SIP device.

Many different options may be required for your site deployment, but the options below are required to be changed from the default for a Generic SIP Device to work with the MiVoice Business. (See example in Figure 5)

#### **Under General tab:**

Navigate to section HCI and ensure:

- HCI/CTI/TAPI Call Control Allowed set to **Yes**
- HCI/CTI/TAPI Monitor Allowed set to **Yes**

**Under Advanced tab:**

Navigate to section Conference and ensure:

- Conference Call set to **Yes**

Navigate to section Message Waiting and ensure:

- Message Waiting set to **Yes**

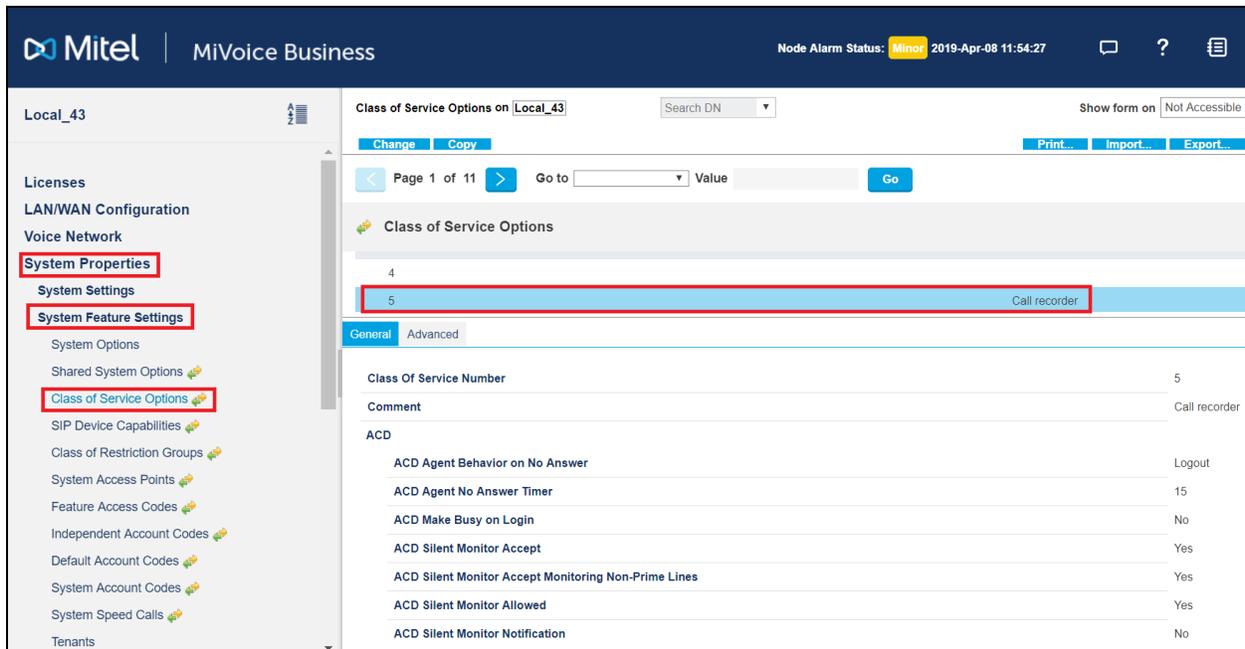


Figure 5 – Class of Service

**SIP Device Capabilities**

This form provides configuration options that can be applied to various types of SIP devices. The association between the SIP device and the form is like how the Class of Service options work. The SIP Device Capabilities number provides a SIP profile that can be applied to particular SIP devices to allow for alternate capabilities as recommended through the Mitel interop process.

In the SIP Device Capabilities form, program a SIP Device Capabilities Number for the SIP phone. The form below depicts how the options were set for the interop testing.

SIP Device Capabilities on Local\_43 Search DN Show form on Not Accessible Go

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

SIP Device Capabilities

SIP Device Capabilities Number	Comment
1	

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 1

Comment

Call Routing and Administration Options

Outbound Proxy Server	
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
TLS Only	No

Figure 6– SIP Device Capabilities – Basic

Set SDP Options as shown in Figure 7.

SIP Device Capabilities on Local\_43 Search DN Show form on Not Accessible Go

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

SIP Device Capabilities

SIP Device Capabilities Number	Comment
1	

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

Allow Device To Use Multiple Active M-Lines	No
Allow Using UPDATE For Early Media Renegotiation	No
AVP Only Device	Yes
Enable Mitel Proprietary SDP	No
Force sending SDP in initial Invite message	Yes
Ignore SDP Answers in Provisional Responses	No
IP Media Default	ipv4
Limit to one Offer/Answer per INVITE	No
Prevent SDP Renegotiation If Peer Initiated Hold	No
Prevent the Use of IP Address 0.0.0.0 in SDP Messages	Yes
Renegotiate SDP To Enforce Symmetric Codec	No

Figure 7 – SIP Device Capabilities – SDP Options

Note:

Disable Force Sending for Secure RTP calls, if not disable Secure calls will fail

Set Signaling and Header Manipulation as shown in Figure 8.

The screenshot shows the 'SIP Device Capabilities' configuration page for 'Local\_43'. The page includes a search bar, a 'Show form on' dropdown set to 'Not Accessible', and buttons for 'Change', 'Copy', 'Print...', 'Import...', 'Export...', and 'Data Refresh'. The main content area is titled 'SIP Device Capabilities' and contains a table with two columns: 'SIP Device Capabilities Number' and 'Comment'. The first row has the number '1'. Below the table is a tabbed interface with the following tabs: 'Basic', 'SDP Options', 'Signaling and Header Manipulation' (highlighted with a red box), 'Distinctive Ring Tones', 'Timers', 'Key Press Event', 'Called Party Inward Dialing Modification', 'Record Information', and 'Advanced'. The 'Signaling and Header Manipulation' tab is active and displays a list of configuration options with their corresponding values:

Option	Value
Allow Display Update	Yes
Allow FQDN for Resiliency	No
Disable Reliable Provisional Responses	Yes
Disable Use of User-Agent and Server Headers	No
Fail REFER To Keep Call Active On Mid-Call Feature	No
If TLS use 'sips:' Scheme	No
Mode for Out-of-Band DTMF	RFC 4733 DTMF
Multilingual Name Display	No
Override Auto-Answer Headers	No
Override Auto-Answer Headers With	
Q.850 Reason Headers	No

Below this list, there are additional configuration options:

Q.850 Reason Headers	No
Remove Anonymous User	No
Require Reliable Provisional Responses on Outgoing Calls	No
Suppress Redirection Headers	No
Use P-Asserted Identity Header	Yes
Use user=phone	No

Figure 8 – SIP Device Capabilities – Signaling and Header Manipulation

SIP Device Capabilities on Local\_43 Search DN  Show form on Not Accessible

### SIP Device Capabilities

SIP Device Capabilities Number	Comment
1	

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

Registration Period Minimum	300
Session Timer	0
Session Timer: Local as Refresher	No
Subscription Period	3600
Subscription Period Minimum	300
Subscription Period Refresh (%)	80
Invite Ringing Response Timer	0

Figure 9 – SIP Device Capabilities – Timers

### Station Attributes

Use the Station Attributes form to assign the previously configured Class of Service and SIP Device Capability number to each of the SIP phone in the MiVoice Business. This form utilizes Range Programming.

Select the SIP phone's number then select Change. Enter the previously configured SIP Device Capability number and Class of Service for Day, Night 1 & Night 2.

See an example in **Figure 10** below.

### Change

Change Range Programming - Station Attributes

This form allows you to change one or more records, starting at the following record:

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
5000	1	5	5	5	1	1	1	1	1	Manual	2	1

1. Enter the number of records to change:

2. Define the Change Range Programming Pattern:

Field Name	Change action	Value to change	Increment by
Number	-	5000	-
Intercept Number	<input type="button" value="Change to"/>	<input type="text" value="1"/>	<input type="text"/>
Class of Service - Day	<input type="button" value="Change to"/>	<input type="text" value="5"/>	<input type="text"/>
Class of Service - Night1	<input type="button" value="Change to"/>	<input type="text" value="5"/>	<input type="text"/>
Class of Service - Night2	<input type="button" value="Change to"/>	<input type="text" value="5"/>	<input type="text"/>

Class of Restriction - Day	Change to ▾	1	
Class of Restriction - Night1	Change to ▾	1	
Class of Restriction - Night2	Change to ▾	1	
Call Coverage Service Number	Change to ▾	1	
Default Acct. Code	Change to ▾	1	
Zone Assignment Method	Change to ▾	<input type="radio"/> Default <input checked="" type="radio"/> Manual	-
Zone ID	Change to ▾	2	
SIP Device Capabilities	Change to ▾	1	

Figure 10 – Station Attributes

## Configure North Supply Call Recording

- Login into Call Recording Admin

General localhost client V:5.4.2.4 logger V:5.4.7.3

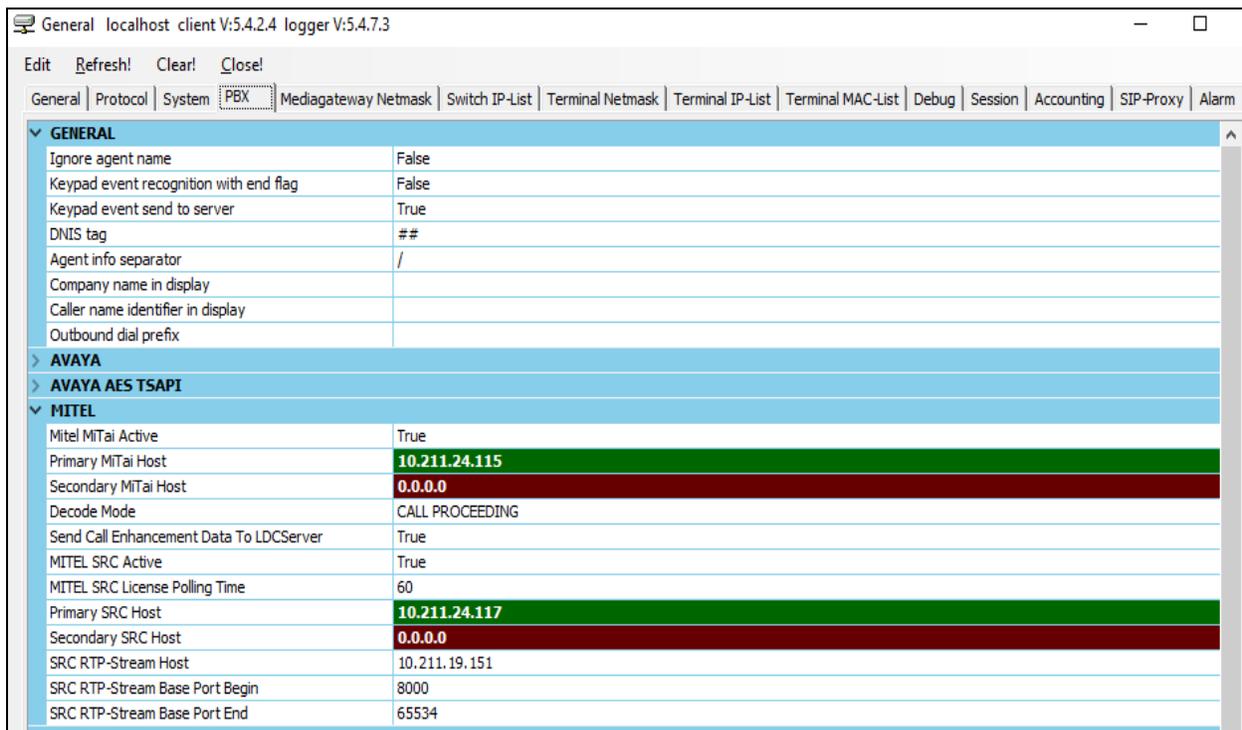
Edit Refresh! Clear! Close!

General | Protocol | System | PBX | Mediagateway Netmask | Switch IP-List | Terminal Netmask | Terminal IP-List | Terminal MAC-List | Debug | Session | Accounting | SIP-Proxy | Alarm

<b>General</b>	
Recording Status	ACTIVE
Monitoring active	True
NIC Select mode	IP V4 Address
NIC Monitoring mode	Classic Handler
<b>Monitoring NIC 1</b>	
NIC-Identifier	10.211.19.151
Protocol	MITEL
Received bytes	11263
BPF	
Monitoring NIC 2	
Monitoring NIC 3	
Monitoring NIC 4	
Monitoring NIC 5	
Monitoring NIC 6	
Monitoring NIC 7	
Monitoring NIC 8	

## Configure SRC and MITAI

- Login into Call Recording Admin →PBX
- Enter the appropriate configuration information corresponding to the various settings.



- Login into the MBG web admin
- Navigate to **Security** → **MBG Client Certificates**
- In the **Queued CSRs** section, select the **CSR for the call recording server**
- Scroll down to the bottom and select **Approve**
- The following shows an example of an approved MBG certificate

**Note:** In the call recording admin, the SRC status should turn Green

## MBG client certificates

In this panel, you can manage all Certificate Signing Requests (CSRs) in the queue of this server, and any signed certificates issued by this server's Certificate Authority (CA).

To approve or reject a request, click on the Request ID, and use the resulting page. Before you approve a CSR, you should establish the individual's identity by some means (by a phonecall at the very least), or you will defeat the purpose of this exercise.

The following are the details of your Certificate Authority's signing certificate.

<b>Issuer</b>	Issuer: C=CA, ST=ON, O=Mitel Networks, OU=VoIP, CN=Mitel 6000 CA/emailAddress=security@Mitel.com
<b>Subject</b>	Subject: CN=Local CA
<b>Not before</b>	Dec 7 11:23:06 2018 GMT
<b>Not after</b>	Dec 4 11:23:06 2028 GMT

### Queued CSRs

There are no pending CSRs in the queue at this time.

### Approved Certificates

Certificate ID	Subject
<a href="#">e33651c7-0726-4a24-a0e3-1231966de32f</a>	CN=Oaisys-Src-Recording-8d613bc1@10.211.24.177
<a href="#">a6981829-4b83-4164-81bd-0bd6c357a4e2</a>	CN=CenterForce5_0050568C4632

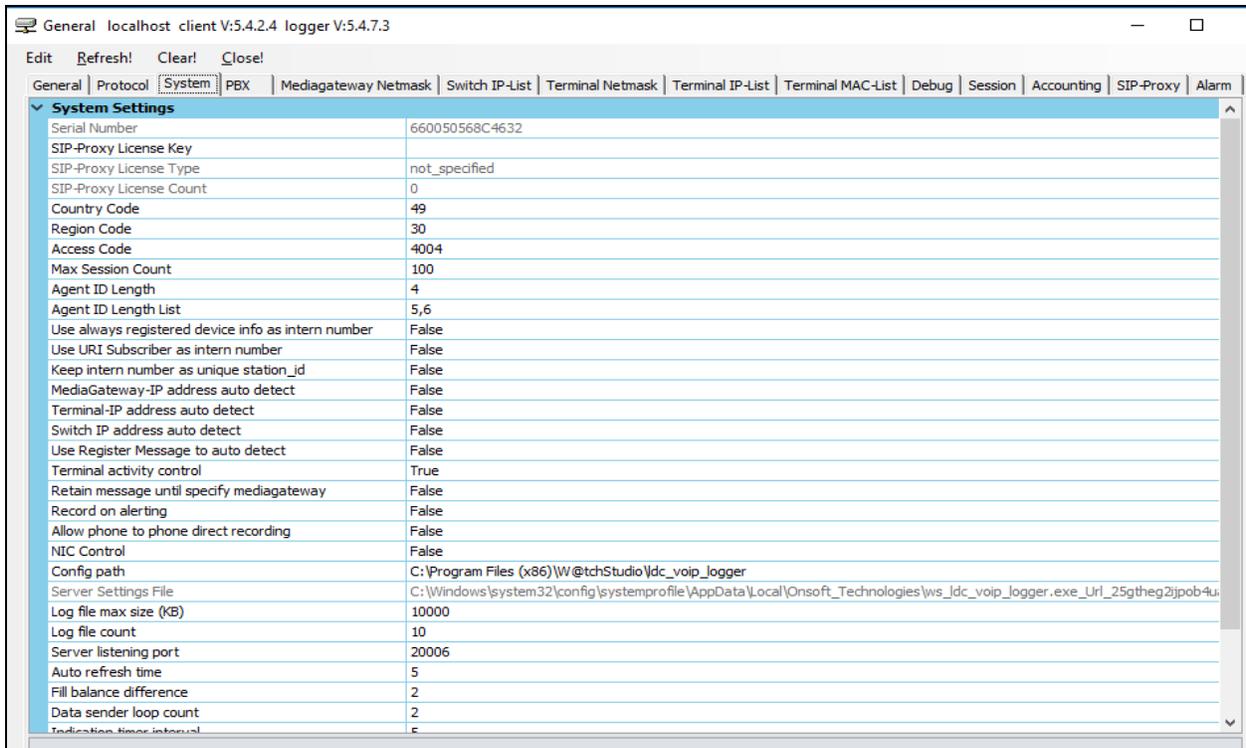
### Revoked Certificates

Certificate ID	Subject
<a href="#">74928f5d-ae68-404c-b5d4-4b5a0ffaa32f</a>	CN=CenterForce5_0050568C4632
<a href="#">d63b59f9-5d92-42f9-bff4-2bb746f0a691</a>	CN=CenterForce5_0050568C4632
<a href="#">98c09f18-32f6-4bcc-b282-329f94fa8b79</a>	CN=CenterForce5_0050568C4632
<a href="#">33095f17-6a74-417c-b370-e69456b2bb11</a>	CN=CenterForce5_0050568C4632

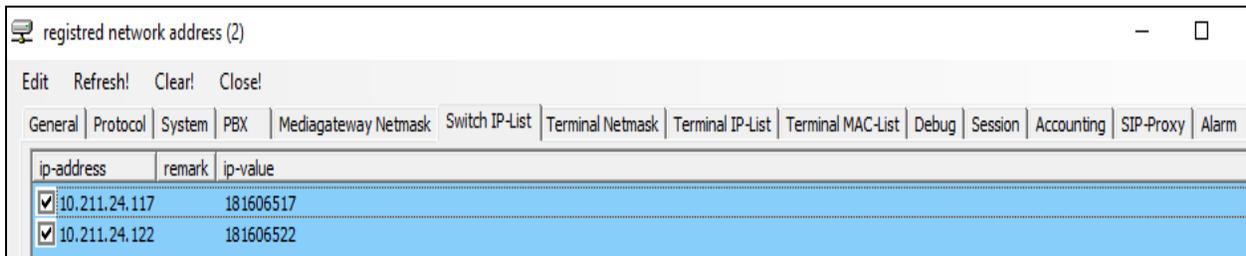
## Configure Call Recording

- Login into the Call Recorder admin
- Following Figure are Call Recorder setting configured for Lab Testing Environment

The screenshot shows the Asterisk Manager Interface (AMI) configuration page for a client on localhost. The interface is titled "General localhost client V:5.4.2.4 logger V:5.4.7.3". The configuration is organized into sections: SIP, CISCO-SKINNY, H323, AVAYA-H323-CCMS-Definity, AVAYA-H323-CCMS-Definity-Exclusive, AVAYA-H323-CCMS-IPOffice, SIEMENS-CORNET-T, SIEMENS-H323-CORNET, NORTEL-UNISTIM, ALCATEL-NOE, ALCATEL-UAUDP, MITEL, AVAYA-TSAPI, TAPI, ILINK-TEAM-CALL, CISCO-CTIOS, and RTP. The SIP section is expanded, showing Signaling Port List (5060) and Media Port List (5000-65535). The MITEL section shows Signaling Port List (6800-6802) and Media Port List (2001-65535). The RTP section shows Signaling Port List (999) and Media Port List (2001-65535).



- Add SRC IP Address in Switch IP-List for Recording, If SRC address is missing then calls won't be recorded



SIP Proxy localhost client V:5.4.2.4 logger V:5.4.7.3

Edit Refresh! Clear! Close!

General | Protocol | System | PBX | Mediagateway Netmask | Switch IP-List | Terminal Netmask | Terminal IP-List | Terminal MAC-List | Debug | Session | Accounting | SIP-Proxy | Alarm

**SIP Proxy Settings**

Stack enabled	False
Signaling Receive Port	5060
Signaling Send Port	5060
Signaling Receive via SPAN	True
Signaling L3 protocol	UDP
Owner user name	anonymous
Owner network type	IN
Owner address type	IP4
Session name	Onsoft-SIP-Client
Connection network type	IN
Connection address type	IP4
Local IP	77.77.77.77
Max accepted call count	100
Process count	0
Status message count (Total)	0
Status message count (Today)	0

**Process List**

**Registrar Parameter**

Registrar State	IDLE
Registrar Auto	False
Registrar Server	sipconnect.centerforce.com
Registrar User	centerforce
SIP User	
Registrar Password	centerforce
Registrar Expires	60

**SIP Proxy Settings**

MediaDescription: Media Description Multipart:

m=audio @media_port RTP/AVP 0 8 18 101 a=rtpmap:0 pcmu/8000 a=rtpmap:8 pcma/8000 a=rtpmap:18 g729/8000 a=rtpmap:101 telephone-event/8000/1 a=fmtp:101 0-15 a=ptime:20	m=audio @media_port1 RTP/AVP 0 8 18 101 c=IN IP4 @local_ip a=rtpmap:0 pcmu/8000 a=rtpmap:8 pcma/8000 a=rtpmap:18 g729/8000 a=rtpmap:101 telephone-event/8000/1 a=fmtp:101 0-15 a=ptime:20 a=label:1
---	---

### Configure Recording IP Endpoints

- Login into the Call Recording Admin → Terminal MAC-List
- Navigate to Server → IP Endpoints → Mitel SRC Devices
- Add an entry for each extension to be recorded

MAC-Address List(4)

Edit Refresh! Clear! Close! Auto refresh off

General | Protocol | System | PBX | Mediagateway Netmask | Switch IP-List | Terminal Netmask | Terminal IP-List | Terminal MAC-List | Debug | Session | Accounting | SIP-Proxy | Alarm

MAC-Addr	Station-ID	MAC-Addr-Value	IP-Addr	IP-Addr-Value	MITai	MAS	Callstate	RX-Port	TX-Port	RX-Codec	TX-Codec	SRC-IP-Addr	Mitel-IP-Addr
00:00:00:00:00:03	3001	3	0		yes	yes	T0	0	0	-	-		10.211.24.115
00:00:00:00:00:04	3000	4	0		yes	yes	T0	0	0	-	-		10.211.24.115
00:00:00:00:00:06	3003	6	0		yes	yes	T0	0	0	-	-		10.211.24.115
00:00:00:00:00:07	3005	7	0		yes	yes	T0	0	0	-	-		10.211.24.115

## To Verify the Call Recording

- Place a call that should be recorded
- In the call recording Admin → View → Audio Lists

DIR	SETUP TIME	DUR. AUDIO	AGENT ID	AGENT NAME	CALLING NUMBER	CALLED NUMBER	MEDIAGATEWAY-IP	CONNECT TIME	RELEASE STATUS	RELEASE TIME	RELEASE TIMESTAMP	TRN
IN	11-04-2019 10:09:15	00:00:07	3001	=3001	3003	3001	10.211.19.151:8152	11-04-2019 10:09:16	T10	9	11-04-2019 10:09:24	defa
OUT	11-04-2019 10:09:15	00:00:07	3003	=3003	3003	3001	10.211.19.151:8150	11-04-2019 10:09:16	T10	9	11-04-2019 10:09:24	defa
IN	11-04-2019 10:06:35	00:00:05	3001	=3001	3003	3001	10.211.19.151:8145	11-04-2019 10:06:36	T10	6	11-04-2019 10:06:41	defa
OUT	11-04-2019 10:06:35	00:00:05	3003	=3003	3003	3001	10.211.19.151:8143	11-04-2019 10:06:36	T10	6	11-04-2019 10:06:41	defa
IN	11-04-2019 10:04:41	00:00:03	3003	=3003	3001	3003	10.211.19.151:8137	11-04-2019 10:04:42	T10	5	11-04-2019 10:04:46	defa
OUT	11-04-2019 10:04:41	00:00:03	3001	=3001	3001	3003	10.211.19.151:8135	11-04-2019 10:04:42	T10	5	11-04-2019 10:04:46	defa
IN	10-04-2019 16:36:31	00:00:05	3005	=3005	3000	3005	10.211.19.151:8129	10-04-2019 16:36:32	T10	6	10-04-2019 16:36:37	defa
OUT	10-04-2019 16:36:29	00:00:05	3000	=3000	3000	3005	10.211.19.151:8130	10-04-2019 16:36:32	T10	6	10-04-2019 16:36:37	defa

## MiVoice Border Gateway Configuration for SRC

### Enable Call Recording in MBG

- Login into the MBG web Admin
- Navigate to Applications → MiVoice Border Gateway → Service Configuration → Application Integration
- Under **Call Recording**, Click **Enabled** check box and click **Save**

The screenshot shows the Mitel Standard Linux web administration interface. The left sidebar has 'Applications' selected, with 'MiVoice Border Gateway' highlighted. The main content area shows 'Service configuration' for the MiVoice Business Core. Under the 'Call recording' section, the 'Enabled' checkbox is checked and highlighted with a red box. Other sections like 'Tone injection' and 'MICollab Client' are also visible.

For details on implementing MBG in VMware virtual machine environment, see the following Mitel documents. All documents are available on Mitel Online and InfoChannel.

- Virtual Appliance Deployment Solutions Guide
- VMware Virtual Appliance Quick Reference Guide

### Add MiVoice Business as an ICP

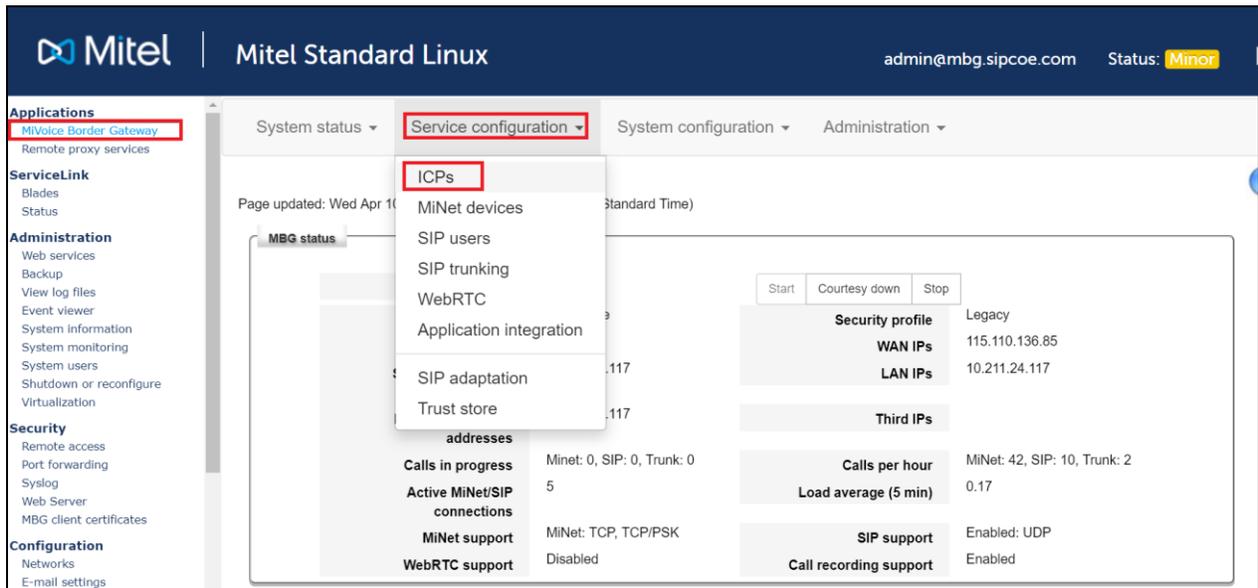
- Login to MBG and click **MiVoice Border Gateway**
- Navigate to Applications → MiVoice Border Gateway → Service Configuration → ICPs
- Add a new ICP with the following information

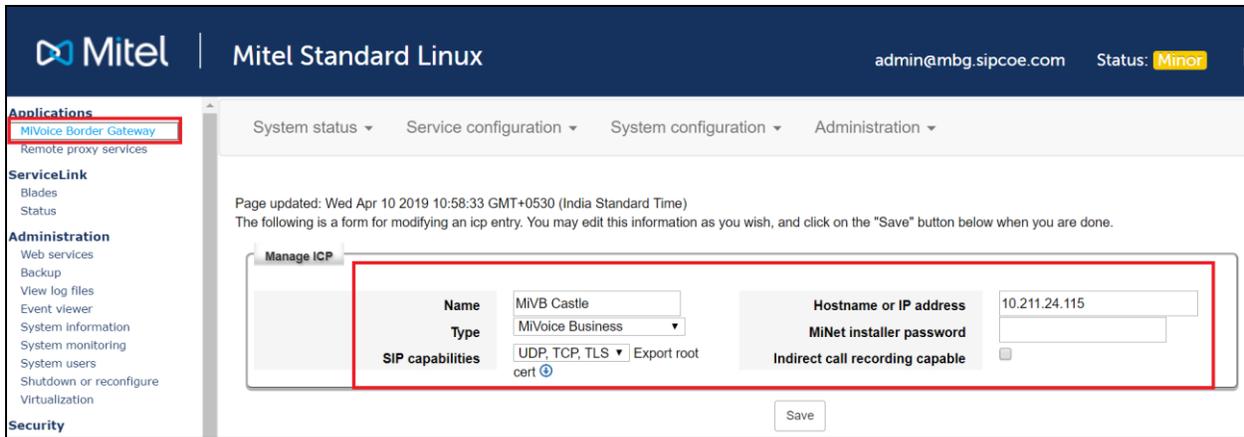
**Name:** Type the descriptive name

**Hostname or IP Address:** Type the IP address of the MiVB

**Type:** Select the MiVoice Business from the drop-down list

**SIP Capabilities:** Select TCP, UDP and TLS from the drop-down list





If using the Indirect Call Recording mode, click to select the Indirect Call Recording capable check box to match the settings to be configured with MiVoice Call Recording Admin.

### Add the Mitel MiNET device for each extension to record

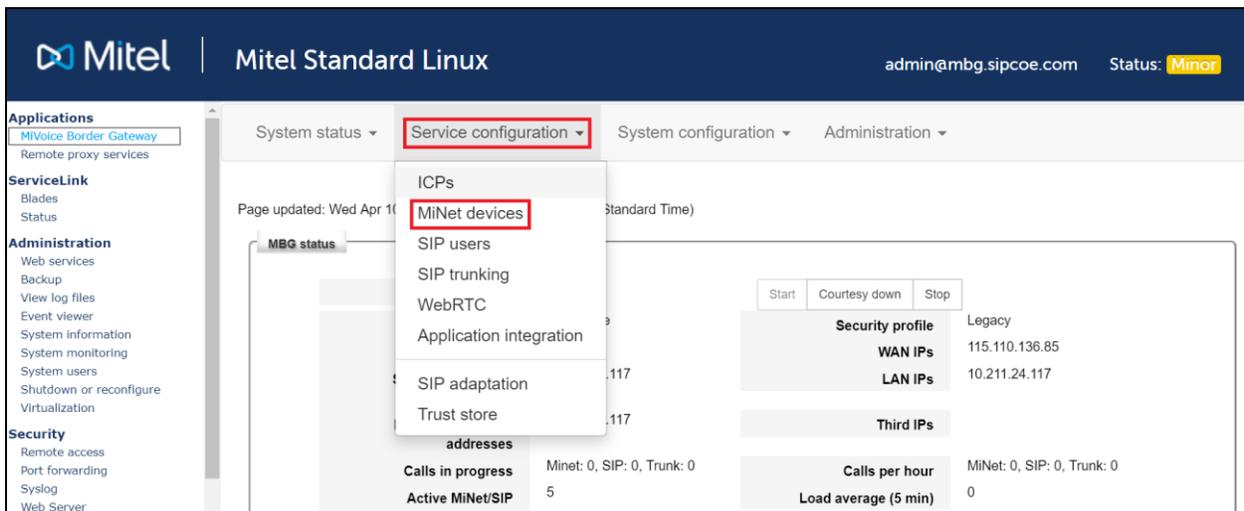
- Login into the MBG web Admin
- Navigate to Applications → MiVoice Border Gateway → Service Configuration
- Add a new device by configuring the following

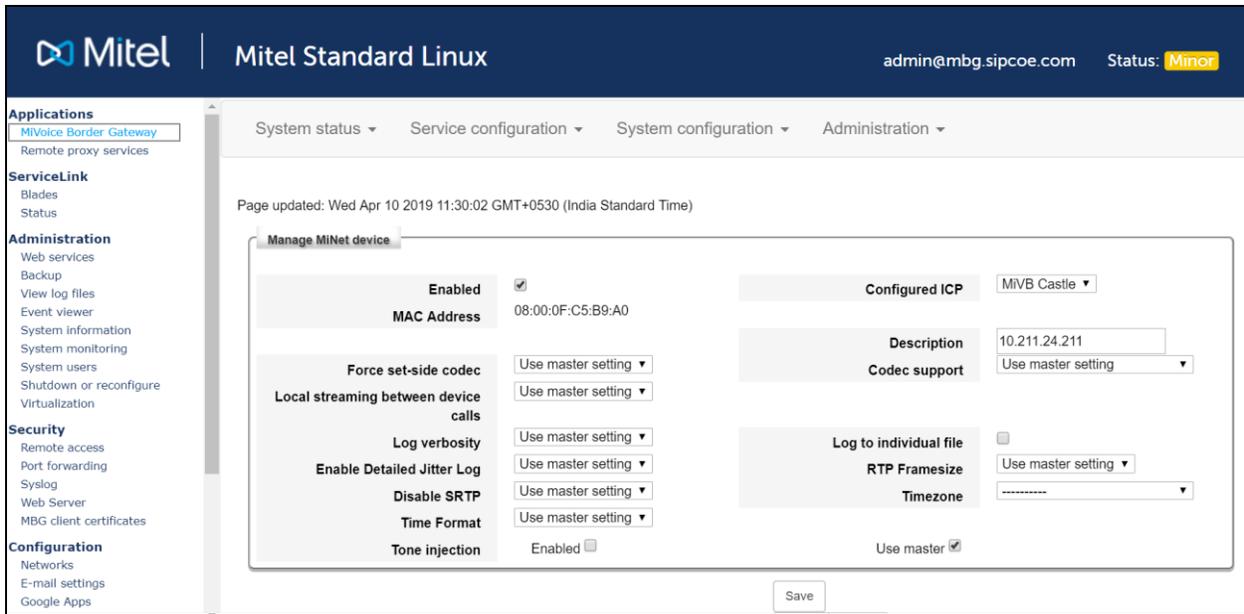
Enabled: Click to select Enabled check box

Configured ICP: Select previously added ICP for MiVB

MAC Address: Enter the MAC address of the device to be recorded

Description: Enter a descriptive name





You can provision multiple devices for recording on MBG. To simplify this process, turn off the “**Restrict MiNET Devices**” in the MBG UI. This allows the devices to connect and forward to the default ICP. The ICP will redirect the devices to their home element. For more details, See MiVoice Border gateway Installation and Maintenance Guide.

**Note:** The devices may not get into service if the default ICP is down when they try to connect.

## Glossary

MiVoice Business	MiVB
MiVoice Border Gateway	MBG
Mitel Solutions Alliance	MSA
Knowledge Management System	KMS
Interoperability Reference Guide	IRG
Not Applicable	NA
Secure Recording Connector	SRC
Call Recording Equipment	CRE