

MiVoice Business

RAY BAUM'S Act General Overview and Solution Deployment Guide

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Kari's Law and RAY BAUM'S Act

In August 2019, the USA government has adopted rules for implementing two federal laws that strengthen emergency calling: Kari's Law and Section 506 of RAY BAUM'S Act.

The Multi-line Telephone Systems (MLTS) – Kari's Law and RAY BAUM'S Act 911 Direct Dialing, Notification, and Dispatchable Location Requirements is described in the following link.

[911 requirements](#)

An FAQ about the RAY BAUM'S ACT can be found in the following link.

[FAQs for RAY BAUM'S Act](#)

The RAY BAUM'S Act classifies devices into:

- Fixed MLTS devices - devices that connect to a single end point (e.g., a desk or office phone) and are not capable of being moved to another endpoint by the end user, although they may be capable of being moved to a different endpoint by a professional installer or network manager.
- Non-Fixed MLTS devices - devices that the end user can move from one endpoint to another without assistance.

Introduction of MiVoice Business support for section 506 of RAY BAUM'S Act and Kari's law

MiVoice Business, as a MLTS, implements Section 506 of RAY BAUM'S Act and Kari's law support in conjunction with third party Next Generation 911 (NG911) emergency service providers in USA and Canada.

NOTE: In this document, Section 506 of RAY BAUM'S Act and Kari's law is called RAY BAUM for simplification.

For MiVoice Business, we have the following device categories:

- Fixed MLTS Devices - Analog Devices.
- Non-Fixed MLTS devices - IP Devices, SIP Devices, softphones, all teleworkers, etc.

In order to provide full support of the requirements above, the MiVoice Business is integrated with two well-known Next Generation 911 (NG911) providers in USA and Canada. There are 2 such NG911 providers today: RedSky and Intrado.

Solution: MiVoice Business - RAY BAUM High Level Architecture

Mitel's MiVoice Business based solution implements RAY BAUM support in conjunction with NG911 providers as the MiVoice Business 911 solution alone does not satisfy the legislated requirements for the RAY BAUM'S Act for all non-fixed devices.

For Kari's Law requirements direct dialing of 911, MiVoice Business can be pre-configured to direct dialing of 911 (emergency calls), without having to dial any prefix or access code. The 911 calls are sent via SIP trunk to the NG911 provider and the NG911 provider will redirect to the appropriate Public Safety Answering Point (PSAP) based on the civic address of the location as identified by the NG911 provider. In order to support Kari's Law local notifications, the solution will use the NG911 provider's notification application. The MiVoice Business notifications (including Mitel Revolution) provide supplemental information and are not sufficient to satisfy Kari's law on their own.

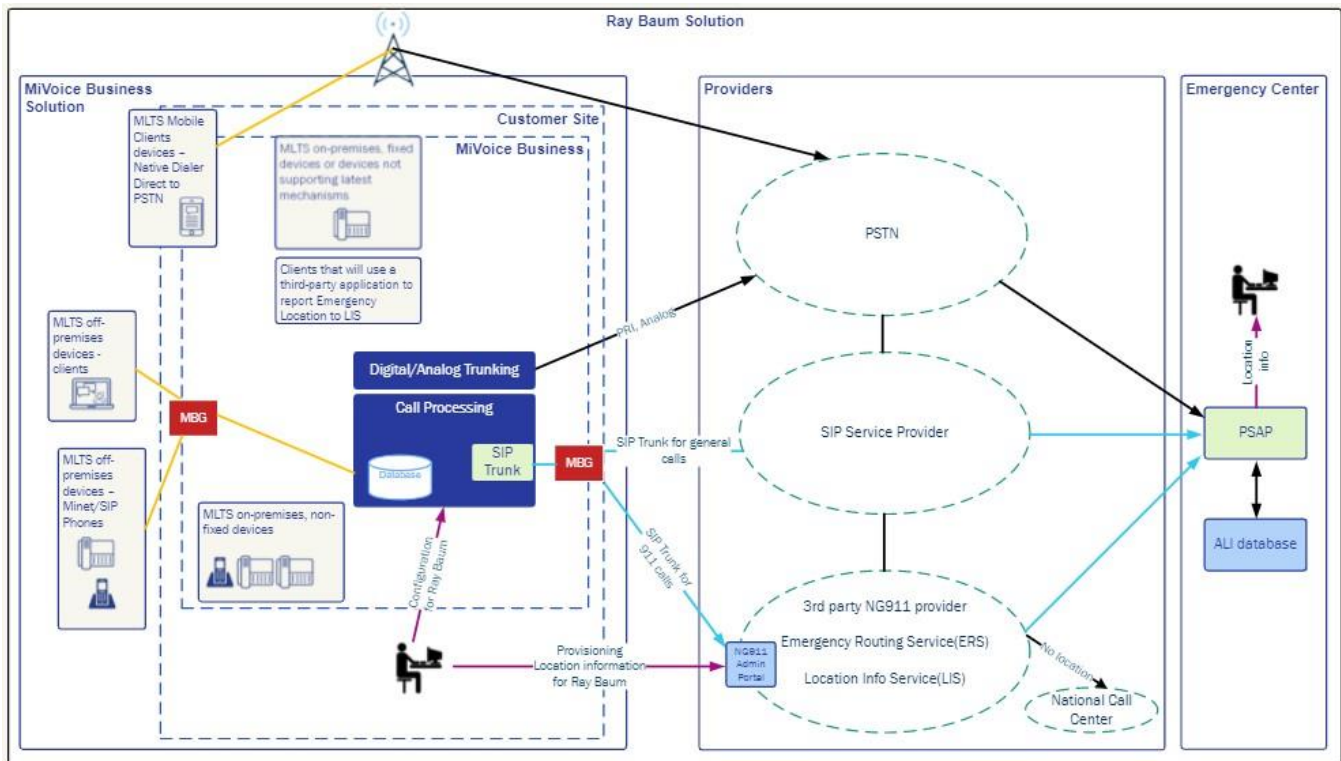
NOTE: The MiVoice Business solution primarily sends Location identifiers to the NG911 provider during emergency calls. The NG911 provider will look up these Location identifiers to determine the civic address which they then use in the signaling to the PSAP. The NG911 provider validates the civic address when the location is created in their database.

With the RAY BAUM'S Act solution, the Mitel MiVoice Border Gateway is used as SBC (Session Border Controller) between MiVoice Business and the third party NG911 provider in the solution. If a customer has an existing MiVoice Border Gateway, this can be upgraded to release 11.3 and used for the connection to the NG911 Emergency Routing Service (ERS). Additionally, the MiVoice Border Gateway can be used for Remote User (Teleworkers). Standard engineering guidelines apply.

The integration described in this guide requires that the customer has a valid service agreement with an NG911 provider. Please note that Mitel does not provide this service agreement directly.

Emergency Callback behaviors are dependent on the NG911 provider selected. Some NG911 providers provide a DID service where they use their own DIDs when contacting the PSAP and will route callbacks back to the MiVoice Business over the SIP trunk. Other NG911 providers will pass on the callback information from the call-server (or if none is provided, use a fixed callback field in their Location database) and will have the PSTN route the call back over the public PSTN to the specified callback number. In this case, MiVoice Business will need to use the existing CPN/DID features to route the incoming emergency callback from the public PSTN.

The figure 1 below, shows a high-level architectural view of the MiVoice Business RAY BAUM integration with an NG911 system using a single MiVoice Business system



The MiVoice Business RAY BAUM solution is composed of the following components:

- NG911 Provider
 - Commercial Agreement with the NG911 Provider
- MiVoice Border Gateway
 - SIP Trunking to/from NG911 provider
 - Network Definition - MiVoice Business Systems
 - Teleworker support
- MiVoice Business
 - Network Elements - SIP Peer for MiVoice Border Gateway, Outbound Proxy for MiVoice Border Gateway.
 - Emergency ARS Dialed Digits - Going out an Emergency ARS Route using SIP Trunks to MiVoice Border Gateway
 - include 933 for testing purposes
 - (optional) ARS Route List to support resilient routing over SIP to multiple MiVoice Border Gateways. Each route to the MiVoice Border Gateway must be marked as Emergency.
 - (optional) ARS Route List with non-emergency TDM Route. As a last resort (if both SIP Trunks to the MiVoice Border Gateways and/or the NG911 provider's SIP Gateways are down).
 - DID and CPN Substitution per device (or location) that can make 911 calls.
 - SIP Peer Profile dedicated to signaling with NG911.
 - SIP Devices Capabilities - For devices SIP Devices that provide location information.
 - Class of Service - For devices that are going to use a NG911 provided application.
 - Class of Service - For MINET teleworker devices.
- MiCollab
 - MiCollab Server:
 - Defining the Location Service Configuration in MiCollab Server.

- Defining the Emergency dialed digits including 911 and adding 933 for testing
- MiCollab Client:
 - Installing the Mitel Network Helper.
 - Adding/Managing their Location.
- MiVoice Business Console
 - Location Management via the NG911 Provided application

The Mitel MiVoice Border Gateway is used as Session Border Controller (SBC) between MiVoice Business and the third party NG911 provider in the solution.

A SIP trunk is setup between MiVoice Business and MiVoice Border Gateway and between MiVoice Border Gateway and third party NG911 provider.

The MiVoice Business contains emergency identification information for select devices that is used with the overall RAY BAUM'S Act solution. More details on the supported devices and location identification are provided later in this document.

With the third party NG911 provider system, a web-based portal is used to setup the information required to the solution to work properly. The information required depends on the provider, but some information is mandatory. For example, civic address, valid DID for callback calls (10 digits), valid DID number, extension number or alternate identification of a device or a user.

The majority of devices that are supported in the MiVoice Business portfolio are supported for RAY BAUM. The exception is off premises 52xx and prior generation devices.

Additional MiVoice Border Gateway s are used for Remote Users (Teleworkers) using 53xx/69xx MINET, MiCollab clients and SIP Phones (6900 series).

Solution: Requirements for MiVoice Business - RAY BAUM'S Act Integration

Product	Minimum SW Release	Minimum Requirements/Comments
MiVoice Business	9.2	At least one SIP Trunk route is required, including the SIP Channel licenses for connecting to the MiVoice Border Gateway. NOTE: While it's not the minimum requirements, it is recommended to have two MiVoice Business for redundancy.
MiVoice Border Gateway	11.3	Minimum 1 MiVoice Border Gateway in the solution with the appropriate SIP Trunk licenses. NOTE: While it's not the minimum requirements, it is recommended to have two MiVoice Border Gateways for redundancy.
cMBG	11.1 SP1	Minimum 1 MiVoice Border Gateway in the solution with the appropriate licenses. NOTE: While it's not the minimum requirements, it is recommended to have two MiVoice Border Gateways for redundancy.
MiCollab	9.4 – Redsky Solution 9.4 SP1 – Intrado Solution	Geolocation Support via HELD from the NG911 Provider's Location Information Server
69xx MiNET (6905, 6910, 6920, 6930, 6940, 6970)	1.7	Pop-up support (for supporting teleworker devices)
53xx MiNET (5304,5312,5320,5320e,5330e, 5340e,5540 only)	6.5.1	Pop-up support (for supporting teleworker devices)
SIP DECT 6xx	8.3 SP1	RFP/Base Station based provisioning of a CESID that is to be sent during calls.

Product	Minimum SW Release	Minimum Requirements/Comments
IP DECT 56xx (ASCOM)	11.6	Device based provisioning of a CESID that is to be sent during calls.
RFP 12 Single Cell Solution RFP 14 Single Cell Solution	RTX v530b6 RTX v610b1	Device based provisioning of a CESID that is to be sent during calls.
5634 Wireless (ASCOM)	3.0.2	Device based provisioning to enable sending of the MAC Address of connected Wireless Base Station during calls.

Establishing a Contract with a supported NG911 Provider

The channel partner/customer must have an agreement with one of the two NG911 providers that are validated with MiVoice Business solution.

Item	Comments
Locations	The quantity of locations required to satisfy RAY BAUM'S Law.
Users/Devices	For the MiVoice Business solution, this will include all Users and devices not associated with Users that can make emergency calls (e.g., IP Device Only, Lobby Phone, MiVoice Business Console, etc.).
HELD Clients	These are the number of users/devices that will provide Geolocation (e.g., MiCollab SIP Softphones, etc.).
NG911 Application Clients	The number of users/devices that will require the NG911 application (e.g., MiVoice Business Console, MiCollab MINET Softphones, etc.).
Notification Clients	How many notifications recipients are required for your solution to satisfy Kari's Law.

Solution: How the integration works

Non-fixed devices

A non-fixed device is a device that the end user can move from one location to another without assistance.

Collecting Data

For non-fixed devices, the MiVoice Business internal logic will check for Geo-location, BSSID, MAC address, ELIN/CESID, IP address. Additional information can be added in the MiVoice Business database to complement the information received from the device. The additional information needs to be added in the system by the system admin.

NOTE: MiVoice Business uses a priority order on the Emergency Info:

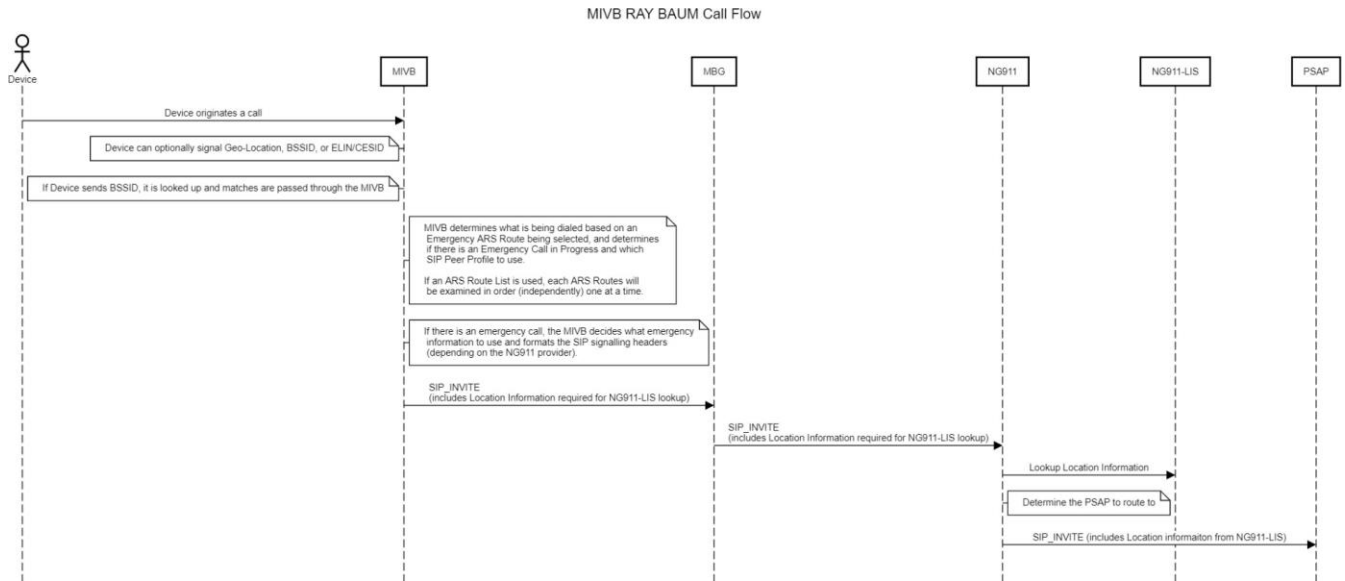
- Geolocation – provided by HELD enabled devices.
- BSSID – provided by Wi-Fi Base Stations in the SIP INVITE (P-ANI header) or 200 OK.
- CESID – provided by SIP DECT and IP DECT in the SIP INVITE (FROM header) or 200 OK.
- L2 to CESID
- Manual/Automatic CESID
- Zone CESID(IP to Zone to CESID Mapping and Zone to CESID Mapping)
- Default CESID (should not be used as it is probably not sufficient to satisfy the US Law).

Sending data to the NG911 provider

After MiVoice Business has collected the information from the device side, it builds the information to be sent in the SIP trunk, including the appropriate SIP headers required by the provider (based on the SIP Peer configuration).

After that, the call is sent to MiVoice Border Gateway, which will transparently pass through the supported SIP Headers to the NG911 provider.

To conclude the process, the NG911 provider will validate the information received and will take the appropriate action. If data is correct the call is sent directly to the PSAP (Emergency Center). If the information is not correct, then the call is redirected to the National Call Center for further triage. Note that this call has an extra cost.



Fixed devices (legacy TDM devices)

Fixed device is a device that cannot be moved to another place in the enterprise without assistance from a professional installer or network manager.

Collecting data

For fixed devices, as no information is provided by the device the MiVoice Business will use the programmed CESID. This information needs to be added in the system by the system admin.

Sending data to the NG911 provider

After MiVoice Business has collected the information from the device side, it builds the information to be sent in the SIP trunk, including the appropriate SIP headers required by the provider.

After that, the call is sent to MiVoice Border Gateway which will transparently pass through the supported SIP Headers to the NG911 provider.

To conclude the process, the NG911 provider will validate the information received and will take the appropriate action, if data is correct the call is sent directly to the PSAP (Emergency Center). If the information is not available, then the call is redirected to the National Call Center for further triage.

NOTE: Calls that are redirected to the National Call Center will incur an extra cost to the customer.

Emergency Callback

Previously the CESID was considered a Location identifier and an Emergency Callback Number. For the RAY BAUM enabled SIP Trunks, the MiVoice Business will separate the two concepts:

- CESID remains the Location identifier for most devices (i.e., except Geo-Location enabled devices, and softphones that will use a NG911 provided application to provide location).

- The CPN Substitution/DID or DN of the device will be used to support Emergency Callback (depending on the NG911 provider).

Solution: MiVoice Business Location ID Definition

The Location ID is a reference/identification used to identify a device or several devices in the MiVoice Business that is to be sent to the NG911 provider and will (for the most part) be the CESID assigned to the device. The MiVoice Business provides forms for various methods of associating a CESID:

- L2 to CESID mapping - Associates a device connected to a Layer 2 switch (either via LLDP-MED, CDP or STP) with a given CESID. This is the preferred method for associating a CESID with a device because it is based on the physical connection rather than on a logical one. In the CESID assignment form, the CESID Updating field should be set to Automatic. However, this option requires specialized hardware, which might not be available for all devices.
- BSSID to CESID mapping - Allows a MAC address of a Wireless Access Point (WAP) to be associated with a CESID. This allows MiVoice Business to find the associated MAC address. This option requires manual updating whenever the Wireless Access Point is moved.
- IP to Zone to CESID mapping - Allows a device in each IP range to be associated with a CESID (by associating the IP range to a Zone in the Location Specification form and then assigning a CESID to the Zone in the Network Zone form). This option requires that the IP Address ranges can be sufficiently segmented to provide sufficient granularity to satisfy RAY BAUM requirements.
- Zone to CESID mapping – Similar to IP to Zone to CESID mapping, except the Zone is not determined by the IP address range in the Location Specification form, but rather the zone statically assigned to the device. This option is not recommended for non-fixed IP devices because if the device is moved to another zone, the move will not automatically be detected.
- CESID Assignment - Allows a device to be assigned a CESID directly, where the CESID Updating field should be set to Manual. NOTE: Hot Desk Users will use the CESID of the registered directory number of the based device (RegDN). This option should only be used by fixed devices, such as analog devices, or teleworkers.

NOTE:

- Devices that support HELD will obtain their Location ID directly from the NG911 provider, and will be sent through MiVoice Business, as such there doesn't need to be any Location ID programmed on MiVoice Business.
- Devices that support sending the CESID/ELIN directly are programmed on the device, and will be sent through MiVoice Business, as such there doesn't need to be any Location ID programmed on MiVoice Business.
- Devices that support the NG911 provider's application will update the location based on the NG911 application itself and will not need any Location ID programmed on MiVoice Business.

Solution: MiVoice Business Device RAY BAUM Support Summary

The following table is a list of Supported Devices, and the available options they have for supporting RAY BAUM. For more details on how to actually program each option see [Deployment Guide: Device Overview](#).

Device	On-Premise	Off-Premise (teleworker)
69xx MINET	L2 to CESID mapping IP Address to CESID mapping	CESID Assignment
53xx MINET (5304, 5312, 5320, 5320e, 5330e, 5340e)	L2 to CESID mapping IP Address to CESID mapping	CESID Assignment
Legacy 53xx MINET (not covered above)	L2 to CESID mapping IP Address to CESID mapping	Not recommended
Legacy MINET (50xx, 51xx, 52xx, 5560 IPT, Navigator) NOTE: Legacy MINET devices do not support LLDP-MED	L2 to CESID mapping IP Address to CESID mapping	Not recommended
5540	L2 to CESID mapping IP Address to CESID mapping	CESID Assignment
MiVoice Business Console	NG911 provided application IP to Zone to CESID Mapping	NG911 provided application
Generic SIP Device Mitel will need to certify the solution with any Generic SIP Device.	Geolocation CESID provided by the device BSSID to CESID Mapping IP Address to CESID mapping NG911 Provided Applications	Geolocation CESID provided by the device BSSID to CESID Mapping NG911 Provided Applications
Single Cell DECT	CESID provided by the device IP Address to CESID mapping	CESID provided by the Device
RFP 12/14 Single Cell Solution (Programmed as Generic SIP on the MiVoice Business)	CESID provided by the device IP Address to CESID mapping	CESID provided by the device
Multi Cell DECT 6xx	CESID provided by the Device	CESID provided by the Device
Multi Cell DECT 56xx	CESID provided by the Device	CESID provided by the Device
5634 Wi-Fi	BSSID to CESID Mapping	BSSID to CESID Mapping
Legacy SIP (5302, 5505, 5624)	IP Address to CESID mapping	Not recommended

Device	On-Premise	Off-Premise (teleworker)
MiCollab MINET Softphone (5020)	IP to Zone to CESID Mapping NG911 provided application	NG911 provided application
MiCollab SIP Softphone (UC Endpoint)	Geolocation	Geolocation
MiCollab Web Client	Geolocation	Geolocation
MiCollab Deskphone	Depends on the deskphone type	Depends on the desk phone type
MiCollab on Mobile	Uses Native Dialer	Uses Native Dialer
Analog	CESID Assignment	--
SIP ATA (Analog Terminal Adaptors)	will follow Generic SIP	will follow Generic SIP
3rd Party WebRTC Client (via MiVoice Border Gateway)	See Generic SIP	See Generic SIP
WebRTC Anonymous Call (via MiVoice Border Gateway)	No location information available - call will be routed to the NG911 providers National Call Centre	No location information available - call will be routed to the NG911 providers National Call Centre.

Solutions: MiVoice Business Functions with RAY BAUM Support

Beyond the devices, MiVoice Business supports many functions that might be used to make an emergency 911 call. The supported MiVoice Business functions are:

MiVoice Business Feature	Description
Multicall/Keyline	Depends on the physical device.
Auto DN Registration	Depends on the physical device type
MINET Hot Desking	Uses the CESID of the RegDN The HDU obtains the CESID from the RegDN at login time. If the CESID of the RegDN is changed, the Hot Desk User should be logged out and logged back in.
SIP Hot Desking	Depends on the SIP Device that you are logged onto.
External Hot Desking	Will use the incoming CLI if they are proxied on a PUBLIC trunk. If they are proxied on a PRIVATE trunk, then we will use the CESID programmed against the EHDU.
MiTAI	Depends on the device that is being monitored.
MDUG/PRG	Depends on the device itself (not the suite). CPN/DID should be the PRG/MDUG pilot
Suites	Depends on the device itself (not the Suite) CPN/DID should be the Suite Pilot

Solutions: Mitel Applications with RAY BAUM Support

MiVoice Business is integrated with different Mitel Application with RAY BAUM'S Act support. Supported applications include.

- MiVoice Business Console
- MiCollab
- MiVoice Border Gateway – MiVoice Border Controller
- MiCC-B - MiContact Center Business for MiVoice Business or SIP
- SIP DECT
- IP DECT (Ascom)
- OIG (via MiTAI)
- RTP12

Solutions: Mitel Applications Without RAY BAUM Support

There are some Mitel applications that does not require RAY BAUM support, they are:

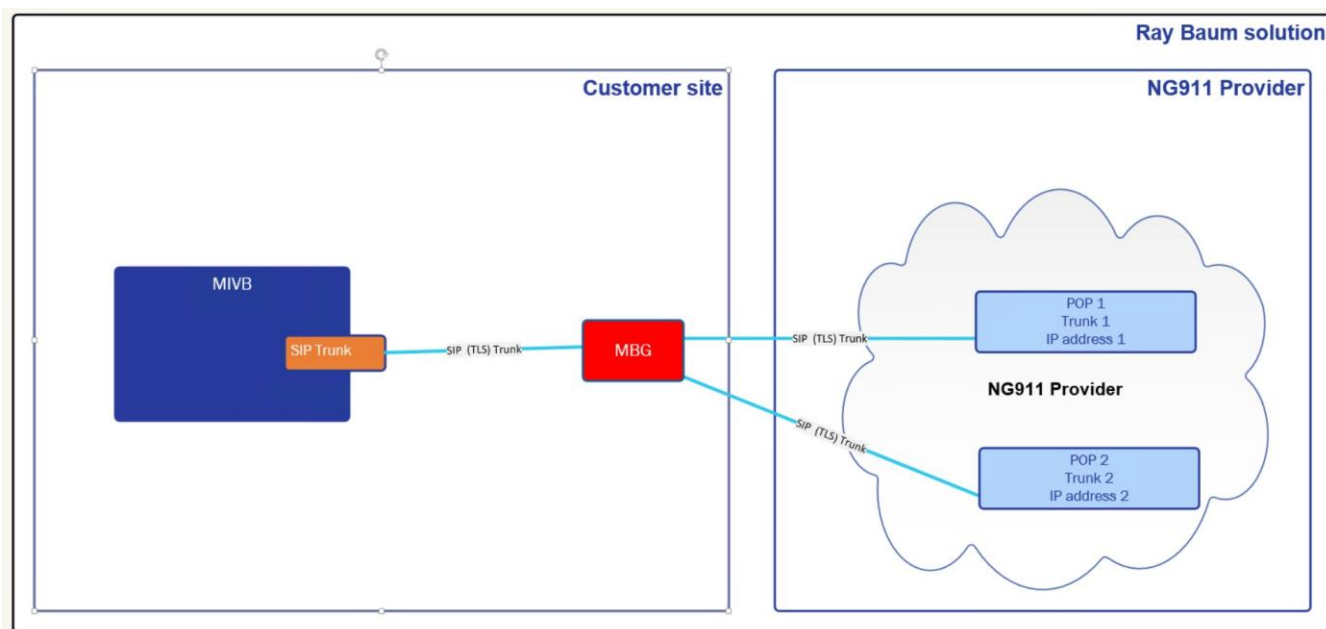
- MICAM - MiCollab Advanced Messaging
- MIR - Mitel Interaction Recording
- NPM – NuPoint Unified Messaging
- MPA - Mitel Performance Analytics
- Mitel Revolution

Solutions: Deployment Diagrams

This chapter covers possible deployments setup between MiVoice Business and the NG911 provider.

MiVoice Business and MiVoice Border Gateway in a Customer Site

The architecture view below shows the most basic setup between the MiVoice Business and the NG911 provider. An emergency route is setup over SIP trunk between MiVoice Business and a single MiVoice Border Gateway, then MiVoice Border Gateway has two SIP trunks towards the NG911 provider gateways for redundancy purpose. The double SIP trunks between the customer site and the NG911

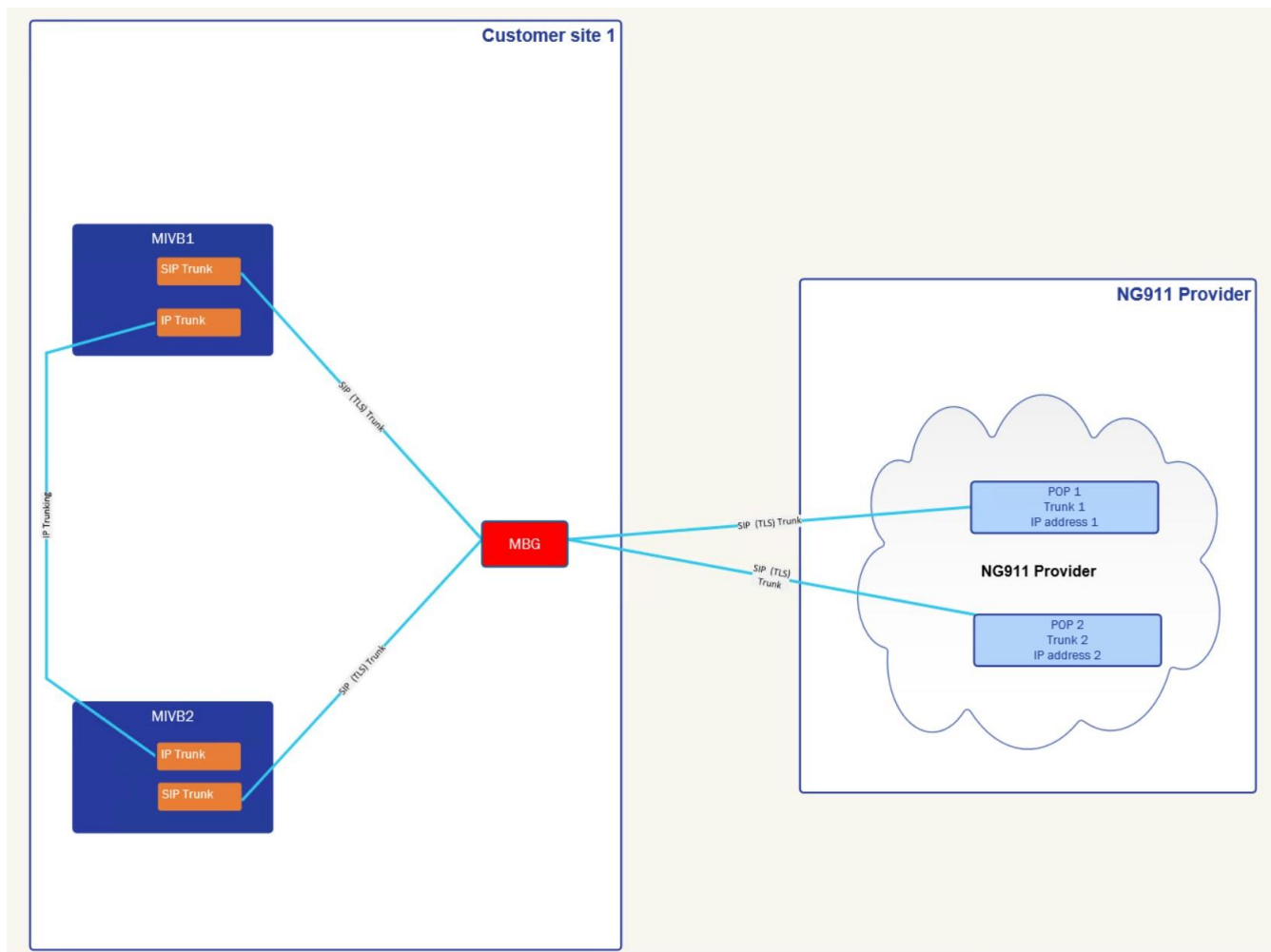


provider are highly recommended.

Refer to MiVoice Border Gateway documentation for MiVoice Border Gateway Redundancy SIP trunk configuration.

Multiple MiVoice Business Instances Each with Connectivity to a Single MiVoice Border Gateway in a Customer Site

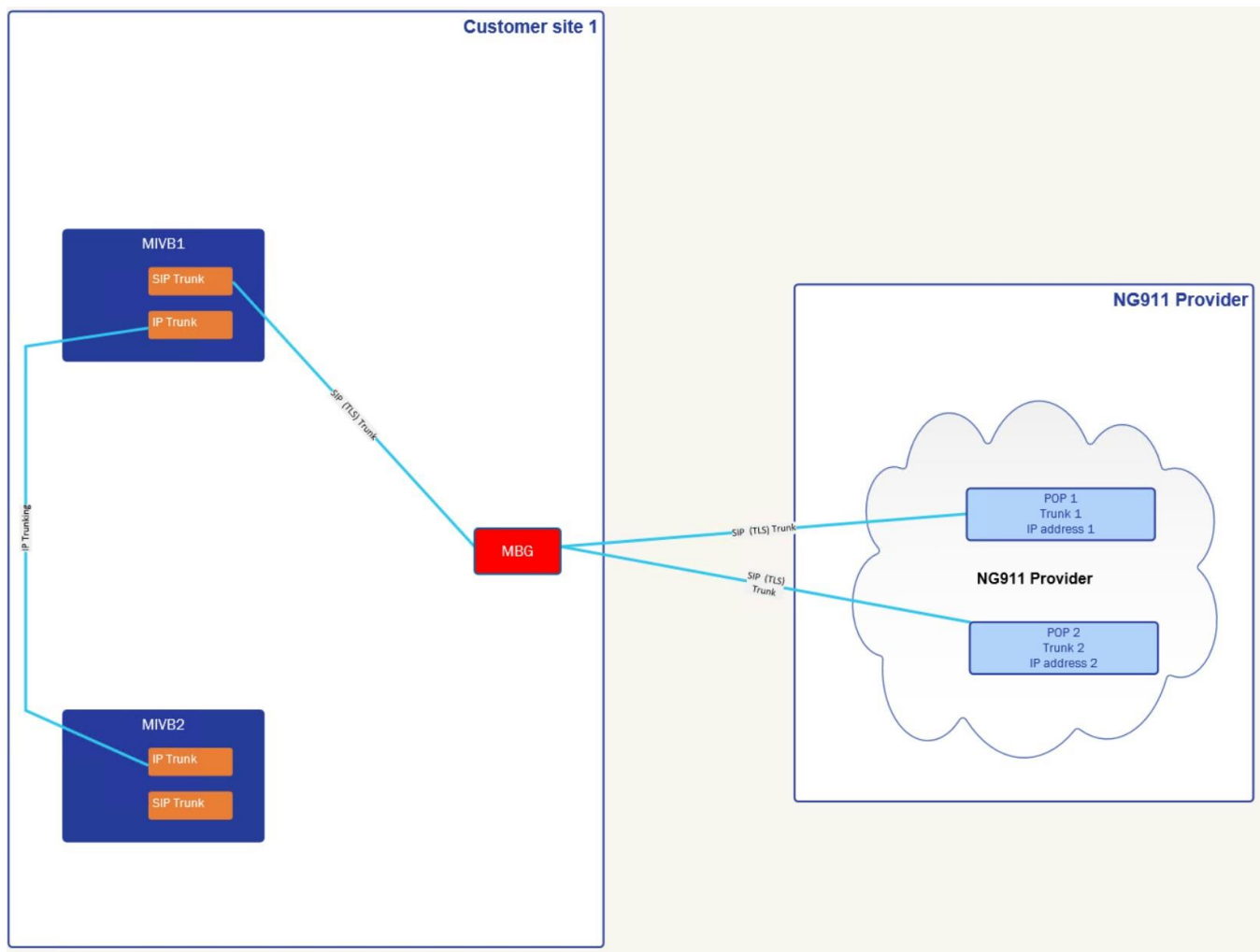
The architecture view below shows a more complicated setup between multiple MiVoice Business instances and a single MiVoice Border Gateway and the NG911 Provider. In this case, each MiVoice Business is setup with an emergency route over SIP Trunk directly to the MiVoice Border Gateway, then MiVoice Border Gateway has two SIP trunks towards the NG911 provider gateways for redundancy purpose. The double SIP Trunks between the customer site and the NG911 provider are highly recommended.



NOTE: In this case, a single IP Trunk between the MiVoice Business instances is all that is necessary, since every MiVoice Business will have its own emergency route out to the MiVoice Border Gateway. This method may cost more as you will need SIP Trunk licenses for each MiVoice Business.

Multiple MiVoice Business Instances Using a Single MiVoice Business as a Trunking Gateway to a Single MiVoice Border Gateway in a Customer Site

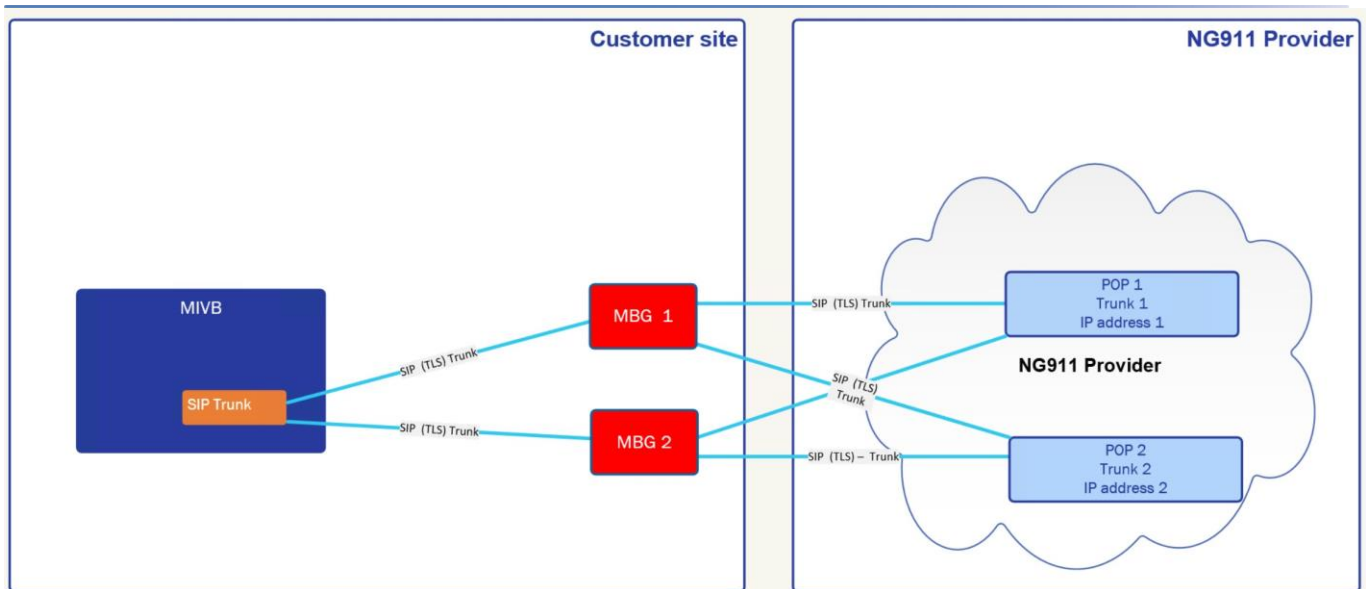
The architecture view below shows a more complicated setup between multiple MiVoice Business instances and a single MiVoice Border Gateway and the NG911 Provider that reduces the SIP Trunks (and thus licenses) required. In this case, multiple MiVoice Business are setup with an emergency IP Trunking route to a designated MiVoice Business setup with an emergency route over SIP Trunk directly to the MiVoice Border Gateway, then MiVoice Border Gateway has two SIP trunks towards the NG911 provider gate- ways for redundancy purpose. The double SIP Trunks between the customer site and the NG911 provider are highly recommended.



NOTE: In addition to the normal IP Trunk route between MiVB1 and MiVB2, the MiVB2 will need a dedicated emergency IP Trunk route to MiVB1.

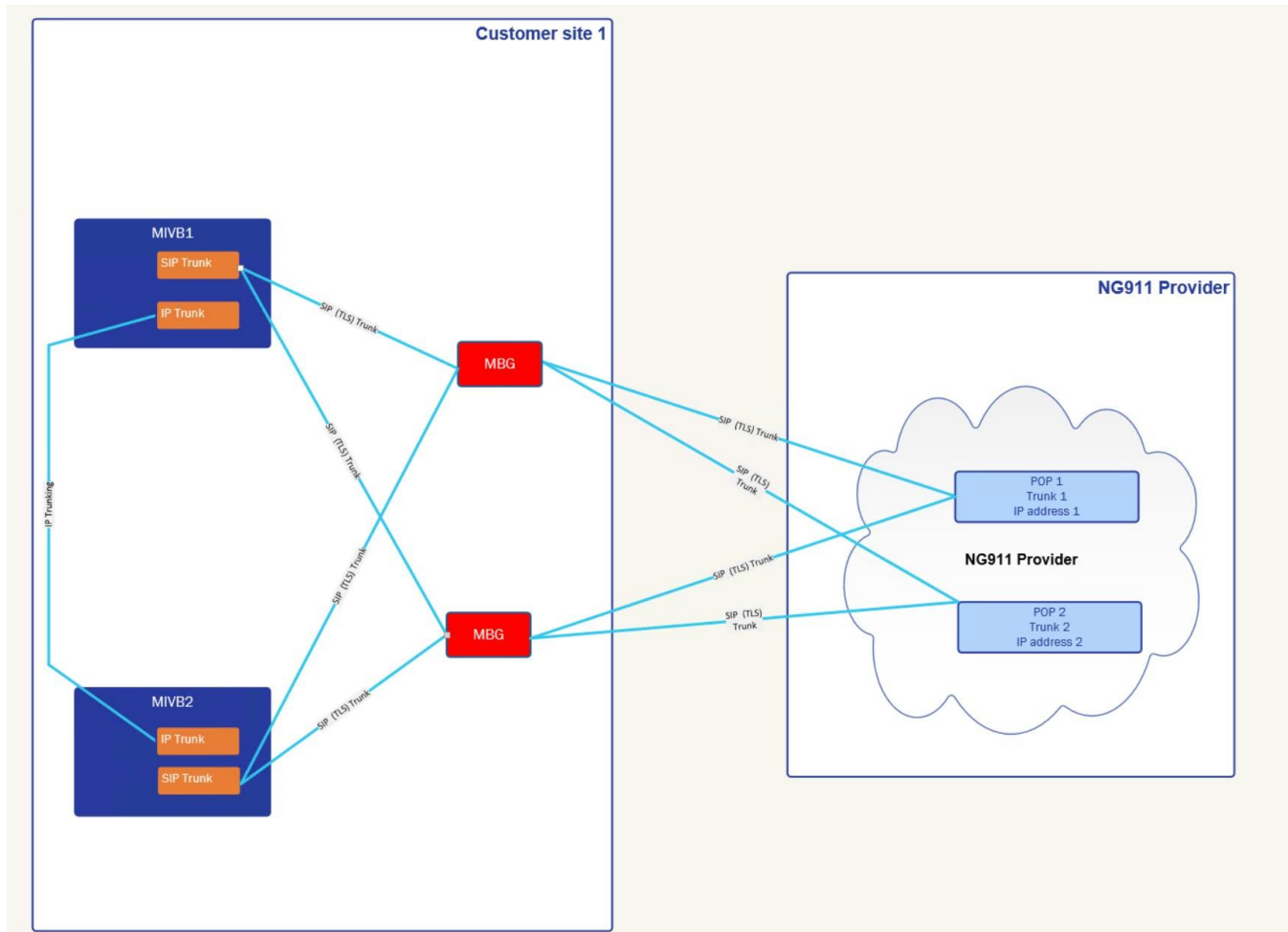
MiVoice Business and Two MiVoice Border Gateways in a Customer Site

The architecture view below shows a redundant setup between MiVoice Business and the NG911 provider. SIP trunks are setup between MiVoice Business and the two MiVoice Border Gateways, then each MiVoice Border Gateway has two SIP trunks towards the NG911 provider gateways for redundancy purpose. The double SIP trunks between the customer site and the NG911 provider are highly recommended.



Multiple MiVoice Business Instances Using Multiple MiVoice Business as a Trunking Gateway to a Single MiVoice Border Gateway in a Customer Site

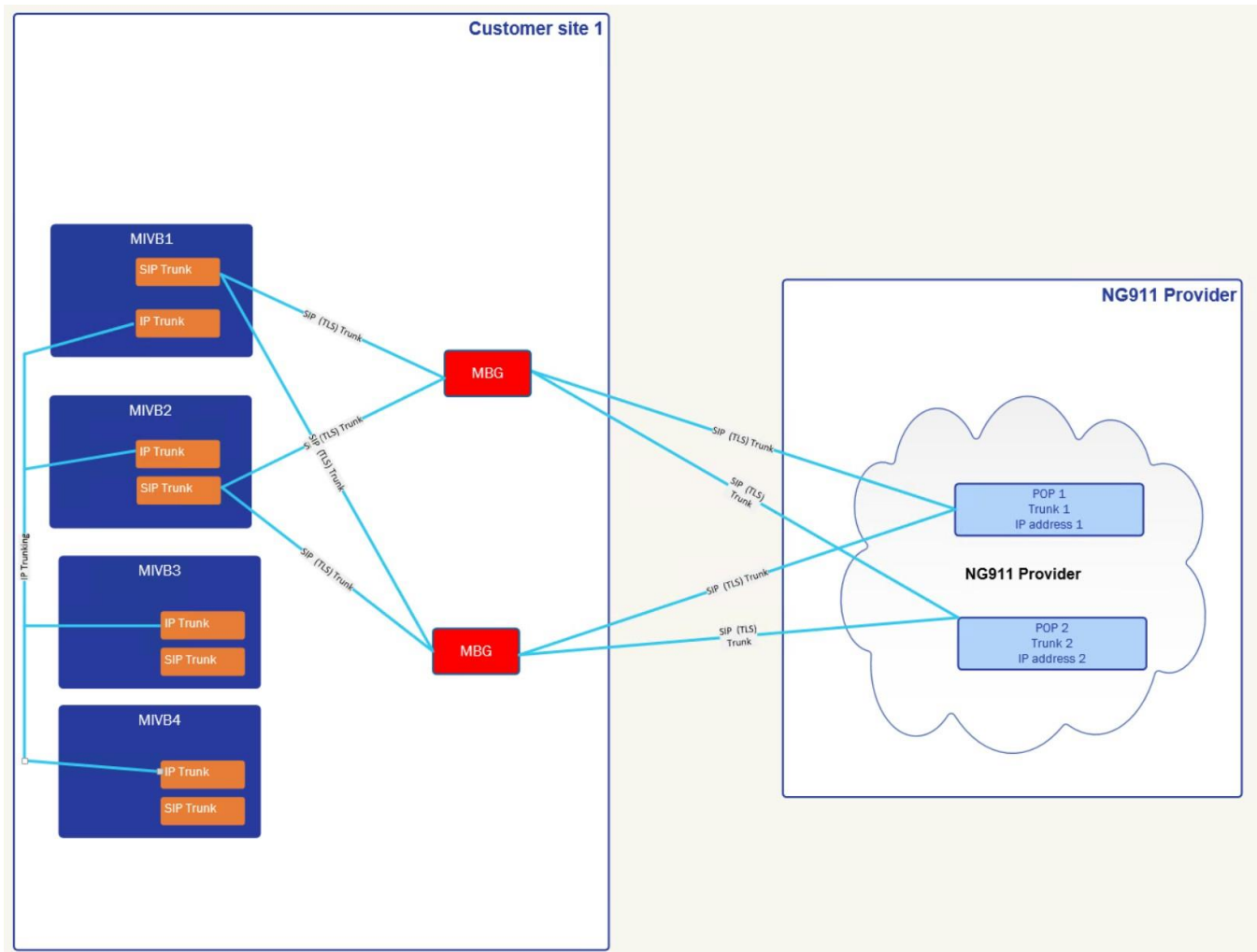
The architecture view below shows a redundant setup between multiple MiVoice Business and multiple MiVoice Border Gateways and the NG911 provider. SIP trunks are setup between MiVoice Business and the two MiVoice Border Gateways, then each MiVoice Border Gateway has two SIP trunks towards the NG911 provider gateways for redundancy purpose. The double SIP trunks between the customer site and the NG911 provider are highly recommended.



NOTE: In this case, a single IP Trunk between the MiVoice Business instances is all that is necessary, since every MiVoice Business will have its own emergency route out to the MiVoice Border Gateway. This method may cost more as you will need SIP Trunk licenses from each MiVoice Business.

Multiple MiVoice Business Instances Using a Dedicated MiVoice Business as Gateway to Two MiVoice Border Gateways in a Customer Site

The architecture view below shows a more complicated setup between multiple MiVoice Business instances and a multiple MiVoice Border Gateways and the NG911 Provider that reduces the SIP Trunks (and thus licenses) required. In this case, multiple MiVoice Business are setup with an emergency IP Trunking route to designated MiVoice Business setup with an emergency route over SIP Trunk directly to the MiVoice Border Gateway, then MiVoice Border Gateway has two SIP trunks towards the NG911 provider gateways for redundancy purpose. The double SIP Trunks between the customer site and the NG911 provider are highly recommended.



NOTE: In addition to the normal IP Trunk route between the MiVoice Business instances, non-trunking gateway MiVoice Business instances will need an emergency IP Trunk route to MIVB1 and MIVB2.

Deployment Guide: MiVoice Business SIP Trunking to NG911 using MiVoice Border Gateway as an outbound Proxy

Configure MiVoice Border Gateway SIP Options

SIP options

The SIP Options above can be found under System -> Settings -> SIP options.
 Ensure that the Access Profile values are set to Public for the Protocols you plan to support.

Configure MiVoice Border Gateway Definition for MiVoice Business Instances

Default for Mitel	Default for SIP	Name	Hostname or IP address	Type	Installer password	SIP capabilities	Indirect call recording capable	Associated connectors	Associated sets (Mitel/SIP)	Associated trunk rules (pri/sec)			
⊕	⊕	ipbx405	10.34.20.105	MiVoice Business		UDP TCP TLS	✗	✗	0/0	5/0	✎	🗑️	🔄
○	○	ipbx406	10.45.28.73	MiVoice Business		UDP TCP TLS	✗	✗	0/0	1/2	✎	🗑️	🔄
○	○	ipbx408	10.38.146.20	MiVoice Business		UDP TCP TLS	✗	✗	0/0	1/1	✎	🗑️	🔄
○	○	ipbx418	10.35.124.97	MiVoice Business		UDP TCP TLS	✗	✗	0/0	1/0	✎	🗑️	🔄
○	○	ipbx441	10.40.90.41	MiVoice Business		UDP TCP TLS	✗	✗	0/0	0/0	✎	🗑️	🔄
○	○	ipbx465	10.38.159.200	MiVoice Business		UDP TCP TLS	✗	✗	0/0	1/0	✎	🗑️	🔄
○	○	ipbx470	10.38.101.70	MiVoice Business		UDP TCP TLS	✗	✗	0/0	1/0	✎	🗑️	🔄

MiVoice Border Gateway 11.3.0.29
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NOTE: This doesn't have to be all MiVoice Business instances, as that would require SIP Trunk licenses on each MiVoice Business. However, it is recommended that at least a pair of MiVoice Business instances be able to route directly to the MiVoice Border Gateway(s).

NOTE: The MiVoice Border Gateway should set the MiVoice Business' SIP capabilities as "UDP,

TCP, TLS”

Configure MiVoice Border Gateway SIP Trunking to the NG911 Provider

NOTE: Transport protocol

MiVoice Border Gateway does not support translating transport protocols for a given SIP Service Provider. So, the MiVoice Business (Network Elements for both the MiVoice Border Gateway Outbound Proxy and the NG911 Provider), MiVoice Border Gateway (MiVoice Business + SIP Trunk), and NG911 provider must all use the same protocol for the given communication path.

If there is a need to support SIP Service Provider with other protocols as well, you can

- On the MiVoice Business create separate Outbound Proxies for each Transport Protocol (TCP, UDP, TLS) to the MiVoice Border Gateway(s).
- On the MiVoice Border Gateway define the ICP to allow all the SIP capabilities (i.e., “UDP, TCP, TLS”).
- On the MiVoice Business create separate SIP Peer Profiles for each SIP Gateway with the appropriate Transport Protocol and corresponding Outbound Proxy.


NOTE: TLS Support (Port 5061)

The NG911 provider may validate the SIP certificate used by MiVoice Border Gateway when using TLS as the Transport Protocol. By default, the MiVoice Border Gateway will use a self-signed certificate which must be replaced with a publicly signed certificate using MSL --> Web Server → Configure Web Server.

Configure MiVoice Business Trunking Gateways to use MiVoice Border Gateway as an Outbound Proxy to NG911 SIP Gateways

Create an Outbound Proxy Network Element for the MiVoice Border Gateway. Separate Network Elements are required if there are multiple MiVoice Border Gateways being used.

Change

 **Network Elements**

Name	<input type="text" value="vMBG_OP"/>
Type	<input type="text" value="Outbound Proxy"/>
FQDN or IP Address	<input type="text" value="10.46.28.70"/>
Local	False
Version	
Zone	<input type="text" value="1"/>
ARID	

Outbound Proxy Specific


Outbound Proxy Transport Type	<input type="text" value="default"/>
Outbound Proxy Port	<input type="text" value="0"/>

NOTE: Ensure that the MiVoice Border Gateway Outbound Proxy uses the same Transport Protocol as the NG911 Provider SIP Trunk.

NOTE: If Multiple Transport Protocols are required (i.e., for other SIP Gateways), then configure multiple outbound proxies to the same MiVoice Border Gateway for each protocol.

Create a Network Element(s) for the NG911 Provider's SIP Gateways. Separate Network Elements are required if the NG911 provider has multiple SIP Gateways.

Add


Network Elements

Name	NG911
Type	Other
FQDN or IP Address	192.168.2.19
Local	False
Version	
Zone	1
ARID	
SIP Peer	<input checked="" type="checkbox"/>

SIP Peer Specific

SIP Peer Transport	TLS
SIP Peer Port	5061
External SIP Proxy FQDN or IP Address	
External SIP Proxy Transport	default
External SIP Proxy Port	0
SIP Registrar FQDN or IP Address	
SIP Registrar Transport	default
SIP Registrar Port	0
SIP Peer Status	Auto-Detect/Normal

Save
Cancel

NOTE: Ensure that the MiVoice Border Gateway Outbound Proxy uses the same Transport Protocol as the NG911 Provider SIP Trunk.

Create a SIP Peer Profile for the NG911 SIP Gateway(s) specifying the MiVoice Border Gateway(s) as the outbound proxy. Separate SIP Peer Profiles are required to support resilient routing if the NG911 has multiple SIP Gate- ways.

MiVoice Business Field	Setting
Outbound Proxy Server	The Network Element for the MiVoice Border Gateway Outbound Proxy
Emergency Call Headers	Depends on the NG911 provider
User-Defined Header Name	Depends on the NG911 provider
User Defined Header Value	Depends on the NG911 provider
Private SIP Trunk	Depends on the NG911 provider
Maximum Simultaneous Calls and Minimum Reserved Call Licenses	Depending on a customer has configured these values on their SIP trunks today, these may need to be modified on existing SIP Peer Profiles, not just the new ones for the Vendors. If a customer Reserved all their SIP trunks, they either need to get more licenses, use the “free” ones, or unreserve an amount they would like for emergency calls. If they have left some Unreserved, the customer may want to unreserve some more.

MiVoice Business

Admin Group Alarm Status: Critical

ipbx405

Licenses

LAN/WAN Configuration

Voice Network

Network Elements

Cluster Elements

Admin Groups

Fax Service Profiles

Fax Advanced Settings

Network Zones

Network Zone Topology

Bandwidth Management

Codec Settings

Mass Audio Notification

System Properties

System Settings

System Feature Settings

System Administration

Hardware

Trunks

Trunk Attributes

IP/XNET

SIP

DID Ranges for CPN Substitution

SIP Peer Profile

SIP Peer Profile Assignment by Incoming DID

SIP Peer Profile Called Party Inward Dialing Modification

SIP Peer Profile Calling Party Inward Dialing Modification

SIP Peer Profile Called Party Outward Dialing Modification

URI/Number Translation

Users and Devices

Integrated Directory Services

Voice Mail

Call Routing

Music On Hold

Emergency Services Management

Property Management

Maintenance and Diagnostics

SIP Peer Profile on ipbx405

Search DN

Show form on ipbx405 (Login Node) Go

Add

Change

Delete

Print...

Import...

Export...

Data Refresh

SIP Peer Profile

Network Element	SIP Peer Profile Label	Outbound Proxy Server	CPN Restriction	Trunk Service	Session Timer	Zone
Vancouver	Vancouver	vMBG_UDP	No	6	90	1
pVancouver	pVancouver	vMBG_UDP	No	6	90	1

Basic

Call Routing

Calling Line ID

SDP Options

Signaling and Header Manipulation

Timers

Key Press Event

Outgoing DID Ranges

Profile Information

SIP Peer Profile Label

Vancouver

Network Element

Vancouver

Local Account Information

Registration User Name

Address Type

IP Address: 10.34.20.105

Administration Options

Interconnect Restriction

Maximum Simultaneous Calls

Minimum Reserved Call Licenses

Outbound Proxy Server

SMDR Tag

Trunk Service

Zone

1

2000

0

vMBG_UDP

604

6

1

Authentication Options

User Name

Password

Confirm Password

Authentication Option for Incoming Calls

Subscription User Name

Subscription Password

Subscription Confirm Password

No Authentication

KPML

Define Emergency ARS Routes for each of the NG911 SIP Peer Profiles. Separate ARS Routes are required to support resilient routing to the primary and secondary NG911 SIP Gateways.

NOTE: ARS Routes are subject to COR restriction, so if you are restricting a device from calling an Emergency Route, the call will fail.

The screenshot shows the Mitel MiVoice Business web interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Trunks, Users and Devices, Integrated Directory Services, Voice Mail, Call Routing, Automatic Route Selection (ARS), Call Handling, Music On Hold, Emergency Services Management, Property Management, and Maintenance and Diagnostics. The main content area is titled 'ARS Routes on ipbx406'. It includes a search bar, action buttons (Change, Change Page, Change All, Clear), and a table of ARS Routes. The table has 15 rows, numbered 91 to 105. Columns include Route Number, Routing Medium, Trunk Group Number, SIP Peer Profile, PBX Number / Cluster Element ID, COR Group Number, Digit Modification Number, Digits Before Outpulsing, Route Type, and Compression. Routes 91-97 are standard with Route Type 'Off'. Routes 98, 99, and 100 are SIP Trunks with Route Type 'Emergency'. Routes 101-105 are standard with Route Type 'Off'.

Route Number	Routing Medium	Trunk Group Number	SIP Peer Profile	PBX Number / Cluster Element ID	COR Group Number	Digit Modification Number	Digits Before Outpulsing	Route Type	Compression
91					1	1		Off	
92					1	1		Off	
93					1	1		Off	
94					1	1		Off	
95					1	1		Off	
96					1	1		Off	
97					1	1		Off	
98	SIP Trunk		redsky1		1	1		Emergency	Off
99	SIP Trunk		redsky2		1	1		Emergency	Off
100	SIP Trunk		Vancouver		1	1		Off	
101					1	1		Off	
102					1	1		Off	
103					1	1		Off	
104					1	1		Off	
105					1	1		Off	

NOTE: For a full resiliency coverage, it is recommended that have at least 2 MiVoice Business Trunking Gateways, and each should have 4 SIP Peer Profiles:

- NG911_1 using MBG1 as the outbound proxy
- NG911_1 using MBG2 as the outbound proxy
- NG911_2 using MBG1 as the outbound proxy.
- NG911_2 using MBG2 as the outbound proxy.

The SIP Peers should have a low Invite Ringing Response Timer (1-2 seconds) under the timer tab. Programming Emergency ARS Routes for each of these SIP Peer Profiles is required.

Adding each of these ARS Routes to the Route List is required.

(RECOMMENDED) Define ARS Route List with the Emergency ARS Routes for the NG911 SIP Peer Profiles in order.

Mitel | MiVoice Business

MN81

ARS Route Lists on MN81

Search DN

Show form on Not Accessible

ARS Route Lists Search:

Find a field named List Number that has a value of:

Change Clear

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

ARS Route Lists

List Number	1st Choice route	2nd Choice route	2nd Choice Warning Tone	3rd Choice route	3rd Choice Warning Tone	4th Choice route	4th Choice Warning Tone	5th Choice route	5th Choice Warning Tone	6th Choice route	6th Choice Warning Tone	7th Choice route	7th Choice Warning Tone	8th Choice route	8th Choice Warning Tone	9th Choice route	9th Choice Warning Tone	10th Choice route	10th Choice Warning Tone	11th Choice route	11th Choice Warning Tone	12th Choice route	12th Choice Warning Tone
1	15	8	Yes	11	Yes	12	No	13	No	14	No	No	No	No	No	No	No	No	No	No	No	No	No
2			No		No		No		No		No		No		No		No		No		No		No
3			No		No		No		No		No		No		No		No		No		No		No
4			No		No		No		No		No		No		No		No		No		No		No
5			No		No		No		No		No		No		No		No		No		No		No
6			No		No		No		No		No		No		No		No		No		No		No
7			No		No		No		No		No		No		No		No		No		No		No
8			No		No		No		No		No		No		No		No		No		No		No
9			No		No		No		No		No		No		No		No		No		No		No
10			No		No		No		No		No		No		No		No		No		No		No
11			No		No		No		No		No		No		No		No		No		No		No
12			No		No		No		No		No		No		No		No		No		No		No
13			No		No		No		No		No		No		No		No		No		No		No
14			No		No		No		No		No		No		No		No		No		No		No
15			No		No		No		No		No		No		No		No		No		No		No

NOTE: As a “last resort” non-emergency ARS route can be added AFTER all NG911 Routes to handle a case where the NG911 is completely down. These final ARS Routes in the list should be non-Emergency because the Emergency information programmed on the MiVoice Business is incomplete and cannot be relied upon for normal calls over the PSTN.

Define ARS Route Dialed Digits to use the previously defined ARS Route List. Ensure that 911 is dialable without any prefix or suffix digits.

NOTE: Sites may want to add a 933 ARS route for testing purposes.

Mitel | MiVoice Business

SDS Distribution Error Status: Minor

MN81

ARS Digits Dialed on MN81

Search DN

Show form on Not Accessible

Add Change Delete

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

Page 1 of 1 Go to Value Go

ARS Digits Dialed

Digits Dialed	Number of Digits to Follow	Termination Type	Termination Number
283	Unknown	Route	2
383	Unknown	Route	3
583	Unknown	Route	10
683	Unknown	Route	8
7777	Unknown	Route	6
783	Unknown	List	1
883	Unknown	Route	15
917	Unknown	Route	5

Configure Non-Trunking Gateways to use MiVoice Business Trunking Gateways to Access the NG911 Provider

Create Emergency IP Trunking ARS Route to the MiVoice Business Trunking Gateway, this is on top of any IP Trunking for regular calls. Separate ARS Routes are required for resilient routing to the MiVoice Business Trunking Gateways.

ARS Routes on pbx405

Change Change Page Change All Clear

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

Page 7 of 14 Go to Value Go

Route Number	Routing Medium	Trunk Group Number	SIP Peer Profile	PBX Number / Cluster Element ID	COR Group Number	Digit Modification Number	Digits Before Outpulsing	Route Type	Compression
91					1	1		Off	
92					1	1		Off	
93					1	1		Off	
94					1	1		Off	
95					1	1		Off	
96					1	1		Off	
97					1	1		Off	
98	Direct IP Route			405	65	805		Emergency	Auto
99	Direct IP Route			470	65	805		Emergency	Auto
100					1	1		Off	
101					1	1		Off	
102					1	1		Off	
103					1	1		Off	
104					1	1		Off	
105					1	1		Off	

NOTE: Direct IP Trunking is not required (IP/XNET Trunk Groups can be used but is more finicky to program).

(Optional) Define ARS Route List. Recommended to provide resilient routing to MiVoice Business Trunking Gateway(s).

Mitel | MiVoice Business Admin Group Alarm Status: **Critical** Show form on **ipbx405 (Login Node)** **Go**

ipbx405

ARS Route Lists on ipbx405 Search DN

ARS Route Lists Search: Find a field named **List Number** that has a value of **Search**

Change **Clear** **Print...** **Import...** **Export...** **Data Refresh**

ARS Route Lists

List Number	1st Choice route	2nd Choice route	2nd Choice Warning Tone	3rd Choice route	3rd Choice Warning Tone	4th Choice route	4th Choice Warning Tone	5th Choice route	5th Choice Warning Tone	6th Choice route	6th Choice Warning Tone	7th Choice route	7th Choice Warning Tone	8th Choice route	8th Choice Warning Tone	9th Choice route	9th Choice Warning Tone	10th Choice route	10th Choice Warning Tone	11th Choice route	11th Choice Warning Tone	12th Choice route	12th Choice Warning Tone	13th Choice route	13th Choice Warning Tone
1	98	99	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
2	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
3	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
4	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
5	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
6	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
7	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
8	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
9	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
10	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
11	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
12	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
13	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
14	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
15	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	

Define ARS Route Dialed Digits to use the previously defined ARS Route List.

Mitel | MiVoice Business Admin Group Alarm Status: **Critical** Show form on **ipbx405 (Login Node)** **Go**

ipbx405

ARS Digits Dialed on ipbx405 Search DN

Add **Change** **Delete** **Print...** **Import...** **Export...** **Data Refresh**

Page 1 of 1 Go to Value **Go**

ARS Digits Dialed

Digits Dialed	Number of Digits to Follow	Termination Type	Termination Number
70406	Unknown	Route	6
70408	Unknown	Route	8
70418	Unknown	Route	18
70441	Unknown	Route	41
70465	Unknown	Route	65
70470	Unknown	Route	70
9	Unknown	Route	8
911	0	List	1
96	Unknown	Route	21
98470	Unknown	Route	70
99	Unknown	Route	20

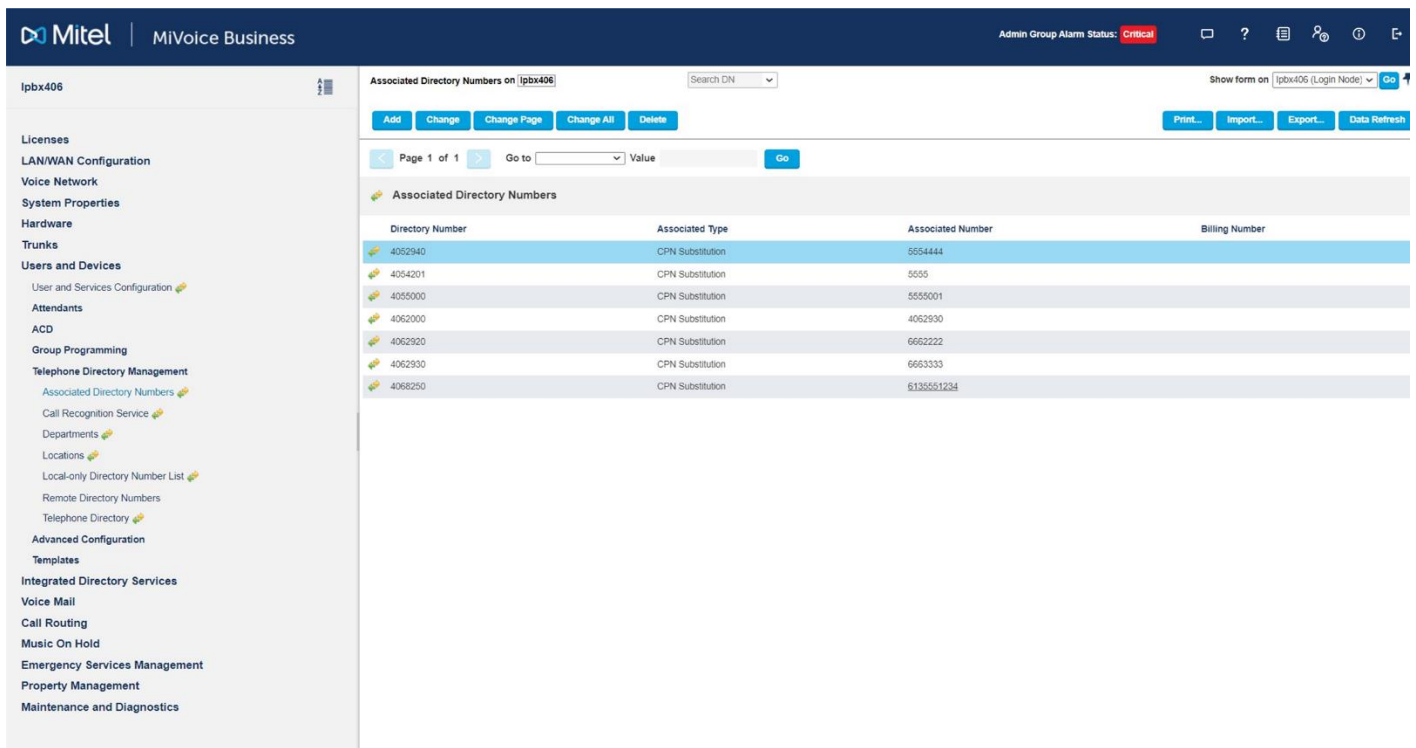
Deployment Guide: Emergency Callbacks

Depending on the NG911 provider, emergency callbacks may come through the Public PSTN. As such, it may be required to program CPN Substitution and matching DID to properly route the call back to the originating device.

- CPN Substitution is used to identify the Calling Party Number and will be used as the Emergency Callback number when using the NG911 SIP Gateway. NOTE: The same CPN will be used for non-emergency and emergency calls.
- The DID number is used by MiVoice Business to route an incoming call based on the Digits Dialed.

For a proper callback to occur the CPN sent to the NG911 provider must be routable back to MiVoice Business where we will match the called digits to the DID number and route the call to the programmed destination. It is recommended to have a unique CPN/DID for each Device/User to ensure that the emergency call-back is routed back to the device/user that originated the emergency call.

On MiVoice Business, program the CPN Substitution for the device



The screenshot shows the Mitel MiVoice Business web interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Trunks, Users and Devices, and Integrated Directory Services. The main content area is titled 'Associated Directory Numbers on Ipbx406'. It includes a search bar for 'Search DN' and a 'Go' button. Below the search bar are buttons for 'Add', 'Change', 'Change Page', 'Change All', and 'Delete'. There are also buttons for 'Print...', 'Import...', 'Export...', and 'Data Refresh'. The table below shows the following data:

Directory Number	Associated Type	Associated Number	Billing Number
4052940	CPN Substitution	5554444	
4054201	CPN Substitution	5555	
4055000	CPN Substitution	5555001	
4062000	CPN Substitution	4062930	
4062920	CPN Substitution	6662222	
4062930	CPN Substitution	6663333	
4068250	CPN Substitution	6135551234	

On MiVoice Business, program the DID for the device.

Mitel | MiVoice Business

License Violation Status: **Critical**

MN81

Direct Inward Dialing Service on MN81

Search DN

Show form on: Not Accessible

Direct Inward Dialing Service Search:

Find a field named: Primary Node Id (PNI) that has a value of:

Search

Add Change Delete

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

Direct Inward Dialing Service

DID Number	Primary Node Id (PNI)	Destination Number	DID Type
5656	555	6910	Emergency DID
696969696969	555	7878	Emergency DID
4111800000	555	80000	Standard DID
9703329141	555	81001	Standard DID
381810020	555	81002	Standard DID
88888888	555	81002	Emergency DID
8100581005	555	81005	Standard DID
381810060	555	81006	Standard DID
0000081222	555	81222	Emergency DID
121212121212	555	81222	Emergency DID
0000081660	555	81660	Emergency DID
381817700	555	8177	Standard DID

NOTE: If the NG911 provider requires callback routing to be based on the CPN Substitution number, the MiVoice Business Emergency DID Routing feature should be disabled in the Shared System Options form. The Emergency DID Routing feature uses the CESID the Emergency Callback, which is not what we want.

NOTE: If Direct Inward Dialing Service is used, the Trunk Attributes for the incoming trunk must have Direct Inward Dialing Service enabled.

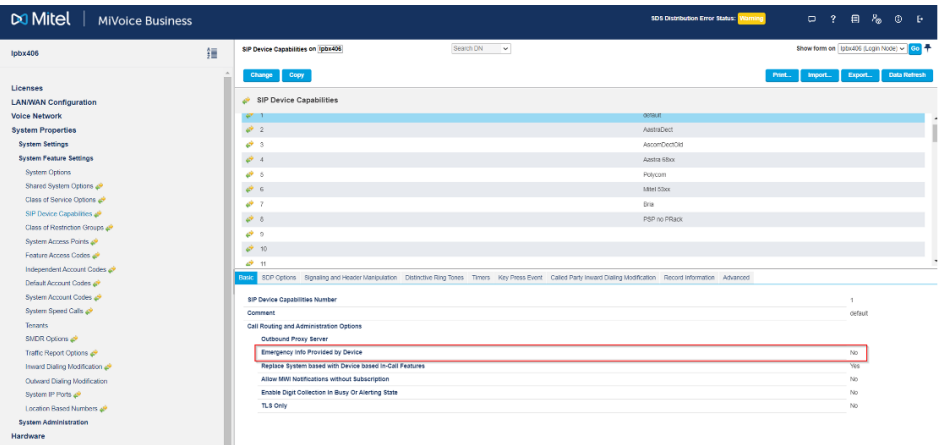
Deployment Guide: Device Overview

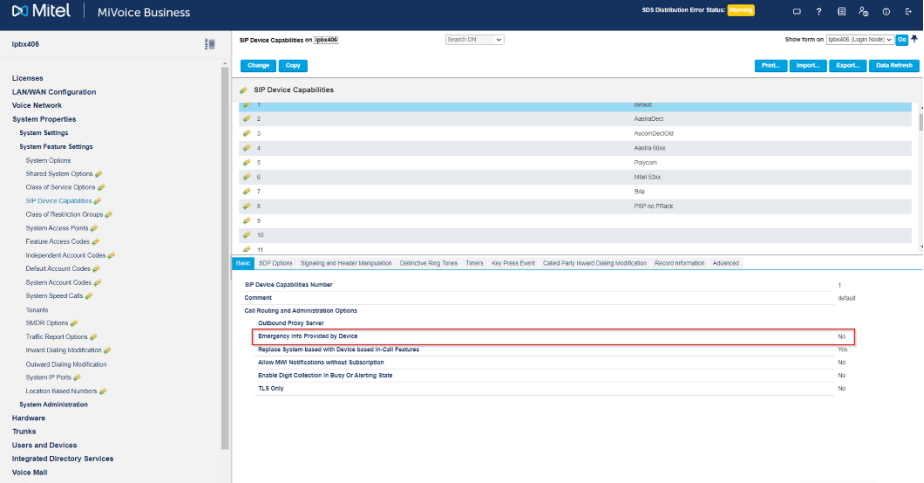
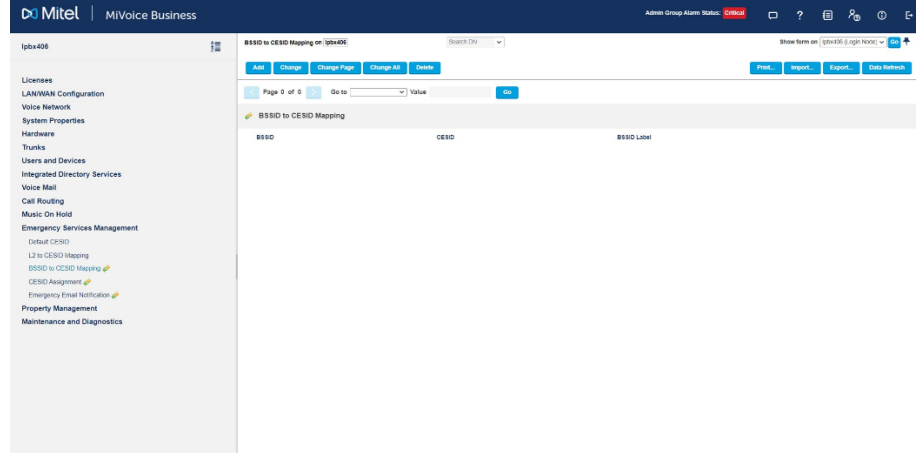
There are three primary different configuration models, depending on the device and the device's location. Which devices uses which specific configuration model is detailed later in the document.

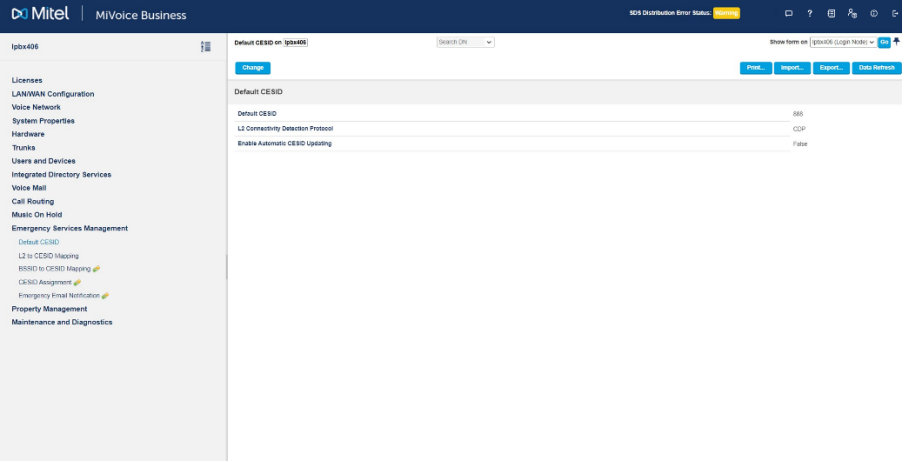
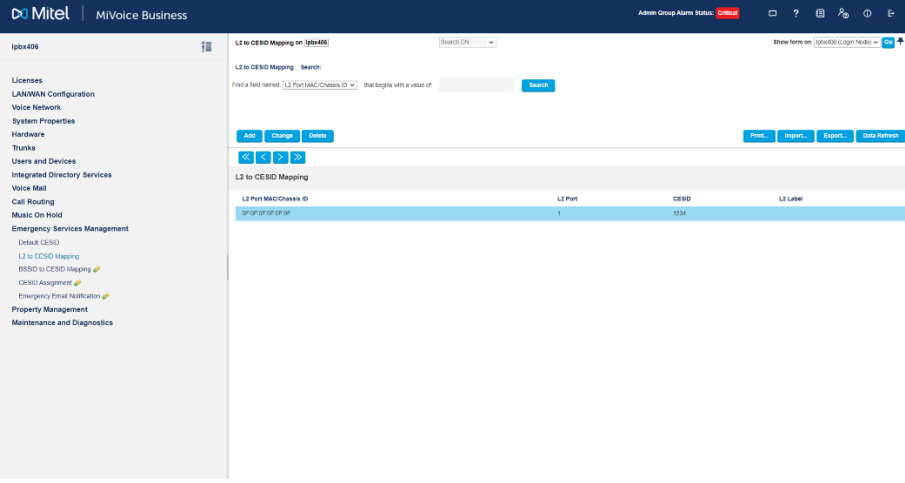
Devices that use CESID (e.g., 69xx, Single Cell DECT, 5634 Wireless)

Step 1: Add the location to the NG911 to match the CESID.

Step 2: Program the CESID information in MiVoice Business

CESID Alternatives	Configuration Steps
CESID sent by the device (limited to SIP devices)	<ul style="list-style-type: none"> On the device, program the CESID on the device. NOTE: Configuration will depend on the device type. On MiVoice Business, enable Emergency Info Provided by Device in the SIP Device Capabilities  <p>NOTE: Valid CESIDs are digit strings of 1-12 digits and length and 0-9 are the only valid digits. While these devices themselves may allow other characters as they support multiple Mitel PBXs, MiVoice Business will not pass along the CESID it does not meet the MiVoice Business criteria. If invalid characters are used, the emergency call may fail.</p>

CESID Alternatives	Configuration Steps
<p>BSSID to CESID Mapping (limited to 5634)</p>	<ul style="list-style-type: none"> On the device, enable the MAC Address of the Wireless Access Point to be sent on all calls. NOTE: Configuration will depend on the device type. On MiVoice Business, enable Emergency Info Provided by Device in the SIP Device Capabilities  <ul style="list-style-type: none"> On the MiVoice Business program the BSSID to CESID Mapping form. 

CESID Alternatives	Configuration Steps
L2 to CESID Mapping (limited to MiNET sets)	<div><div><ul style="list-style-type: none">On MiVoice Business, configure the L2 Connectivity Detection Protocol in the Default CESID form. The available options are STP, CDP, or LLDP-MED. NOTE: Not all legacy MiNET devices support LLDP-MED</div><div></div><div><ul style="list-style-type: none">On MiVoice Business, configure the L2 to CESID Mapping form</div><div></div><div>NOTE: MiVoice Business only supports one device per L2 Port.</div></div>

Configuration Steps

- On MiVoice Business, define the IP Address range to Zone ID in either the Location Specification or Location Specific IPv6 form.

[illegible]

- On MiVoice Business, configure the CESID against the Zone in the Network Zones form.

[illegible]

- On MiVoice Business, set the Zone Assignment to Default for the

Mitel | MiVoice Business

402100

User and Services Configuration on **ipbx406**

Search On [v]

Show form on **ipbx406** (Login Notes) [v] [x]

[Save] [Cancel] [Print] [Refresh] [Export CSV] [Send Email]

User and Services Configuration

Search By [Number] [v] [X]

Search Results (1 result)

- 402100
Generic SIP Phone
Full Search
- BP_406100, Monterey
Add Voicemail

User Profile	Service Profile	Device Details	Transfer Details	Access and Authentication	Phone Applications	Keys
External Hot Desking Enabled	(No) Yes					
External Hot Desking Dialing Prefix						
External Hot Desking Number						
DID Service Number						
Use DID Number for Outgoing Calls	<input type="checkbox"/>					
OPN Substitution Number						
Billing Number						
Personal Speedcall Allocation						
Zone Assignment Method	Default					
Zone ID	101					
SIP Device Capabilities	7					
Interconnect Number	15					
Tenant Number	15					
Lock Default Configuration	(No) Yes					
Nux Call History Records	0					
Non Busy Extension	(No) Yes					
Call Coverage Service Number	15					
Call Renaming - Day	1					
Call Renaming - Night1	1					
Call Renaming - Night2	1					
Call Renaming DND Type	All					
Call Renaming - Val All	1					

Zone to CESID Mapping

- On MiVoice Business, configure the CESID against the Zone in the Network Zone Assignment form.

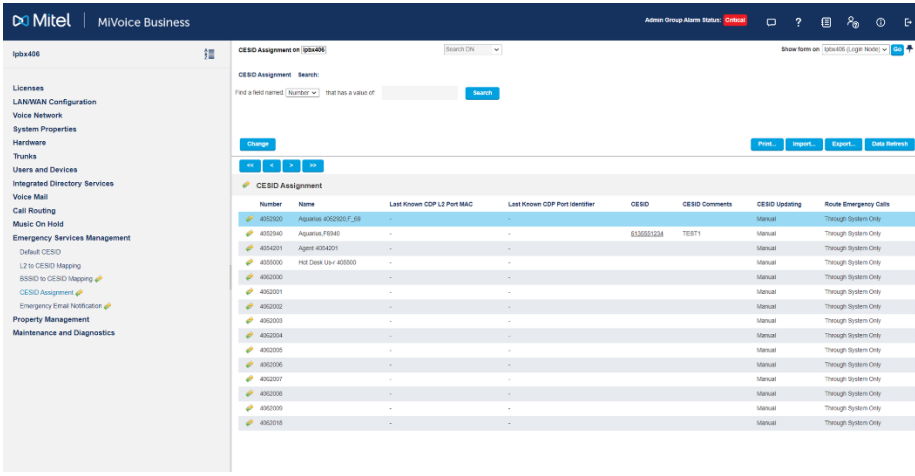
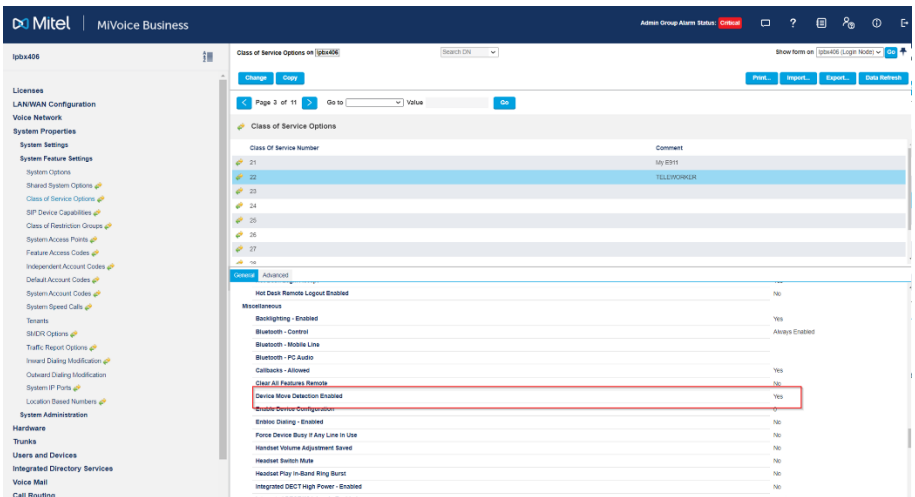
The screenshot shows the 'Network Zones' configuration page in the Mitel MiVoice Business interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Users and Devices, and Maintenance and Diagnostics. The main content area displays a table of Network Zones. The table has columns for Zone ID, Intra-zone Compression, Group Zone, Intra-zone Fax Profile, Line, SMGR Tg, Time Zone, LBS Profile, Zone CESID, Default Billing Number, Default CPN, Audio Source, Embedded Music Source, and Music On Hold Music Source. The table lists 20 zones, with Zone 1 highlighted. The 'Zone CESID' column for Zone 1 contains the value '6100001122'.

Zone ID	Intra-zone Compression	Group Zone	Intra-zone Fax Profile	Line	SMGR Tg	Time Zone	LBS Profile	Zone CESID	Default Billing Number	Default CPN	Audio Source	Embedded Music Source	Music On Hold Music Source
1	No		1					6100001122					
2	No		1										
3	No		1										
4	No		1										
5	No		1										
6	No		1										
7	No		1										
8	No		1										
9	No		1										
10	No		1										
11	No		1										
12	No		1										
13	No		1										
14	No		1										
15	No		1										
16	No		1										
17	No		1										
18	No		1										
19	No		1										
20	No		1										

- On MiVoice Business, set the Zone Assignment to Default or Manual for the device in the User and Service Configuration form.

The screenshot shows the 'User and Services Configuration' page in the Mitel MiVoice Business interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Users and Devices, and Maintenance and Diagnostics. The main content area displays the configuration for a specific user, '4005100'. The 'User Profile' tab is selected, showing fields for External Hot Desking Enabled, External Hot Desking Profile, External Hot Desking Number, DID Service Number, Use DID Number for Outgoing Calls, CPN Substitution Number, Billing Number, Personal Speedcall Allocation, Zone Assignment Method, Zone ID, SP Device Capabilities, Interconnect Number, Tenant Number, Lock Default Configuration, Max Call History Records, Non-Busy Extension, Call Coverage Service Number, Call Routing - Day, Call Routing - Night, Call Routing - Night2, Call Routing DND Type, and Call Routing - 1st Aik. The 'Zone Assignment Method' is set to 'Default' and the 'Zone ID' is '100'.

Field	Value
External Hot Desking Enabled	Yes
External Hot Desking Profile	
External Hot Desking Number	
DID Service Number	
Use DID Number for Outgoing Calls	
CPN Substitution Number	
Billing Number	
Personal Speedcall Allocation	
Zone Assignment Method	Default
Zone ID	100
SP Device Capabilities	7
Interconnect Number	10
Tenant Number	10
Lock Default Configuration	No
Max Call History Records	10
Non-Busy Extension	No
Call Coverage Service Number	10
Call Routing - Day	1
Call Routing - Night	1
Call Routing - Night2	1
Call Routing DND Type	40
Call Routing - 1st Aik	1

CESID Alternatives	Configuration Steps
<p>CESID Assignment</p>	<ul style="list-style-type: none"> On MiVoice Business, program the CESID against the device in the CESID Assignment form  <ul style="list-style-type: none"> Some Off-Premise MiNET devices (e.g., select 53xx, 69xx) will also need to enable the Device Move Detection Class of Service Option. When enabled, a pop-up will be presented to the end user indicating the device has detected a possible change of location and to contact their administrator to provide the new location. Once acknowledged by the end user, MiVoice Business will generate an Audit log indicating which device acknowledged the move. 

Step 3: On MiVoice Business, program the CPN Substitution for the device in the Associated Directory Number form(or alternatively the User and Services Configuration form). This is to program a number directly to an extension. CPN Substitution can also be configured in the Zone Assignment or DID Ranges for CPN Substitution form if it is desired the emergency callback, should the emergency call drop, ring another more central number.

Mitel | MiVoice Business Admin Group Alarm Status: **Critical** Show form on **ipbx406 (Login Node)** **Go**

ipbx406

Associated Directory Numbers on [ipbx406] Search DN **Go**

Add Change Change Page Change All Delete **Print... Import... Export... Data Refresh**

Page 1 of 1 Go to Value **Go**

Associated Directory Numbers

Directory Number	Associated Type	Associated Number	Billing Number
4052940	CPN Substitution	5554444	
4054201	CPN Substitution	5555	
4055000	CPN Substitution	5555001	
4062000	CPN Substitution	4062930	
4062920	CPN Substitution	6662222	
4062930	CPN Substitution	6663333	
4068250	CPN Substitution	6135551234	

Users and Devices

- User and Services Configuration
- Attendants**
- ACD
- Group Programming
- Telephone Directory Management**
 - Associated Directory Numbers
 - Call Recognition Service
 - Departments
 - Locations
 - Local-only Directory Number List
 - Remote Directory Numbers
 - Telephone Directory
- Advanced Configuration
- Templates
- Integrated Directory Services
- Voice Mail
- Call Routing
- Music On Hold
- Emergency Services Management
- Property Management
- Maintenance and Diagnostics

Step 4: On MiVoice Business, program the DID for the device in the Direct Inward Dialing Service form(or alternatively the User and Services Configuration form)

Mitel | MiVoice Business SDS Distribution Error Status: **Warning** Show form on **ipbx406 (Login Node)** **Go**

ipbx406

Direct Inward Dialing Service on [ipbx406] Search DN **Go**

Direct Inward Dialing Service Search:

Find a field named: **Primary Node Id (PNI)** that has a value of: **Search**

Add Change Delete **Print... Import... Export... Data Refresh**

Direct Inward Dialing Service

DID Number	Primary Node Id (PNI)	Destination Number	DID Type
1111			Standard DID
444	613	4052940	Emergency DID
4444	613	4052940	Standard DID
6135525660	613	4055100	Standard DID
1111	613	4062920	Emergency DID
333	613	4062920	Emergency DID
45454545	613	4062920	Emergency DID
34343434	613	4065100	Emergency DID
4441112222	613	4065100	Emergency DID
444111222212	613	4065100	Emergency DID
4441113333	613	4065100	Emergency DID
444111333312	613	4065100	Emergency DID
6666	613	4185001	Standard DID
6666	613	4185001	Standard DID
4056500	613	5998500	Standard DID

Automatic Route Selection (ARS)

Call Handling

- Business Schedules
- Interconnect Restriction
- Intercept Handling
- Call Coverage Services
- Dial Out of Queue Lists
- Call Rerouting Always Alternatives
- Call Rerouting First Alternatives
- Call Rerouting Second Alternatives
- Call Rerouting
- Call Park
- Direct Inward Dialing Service
- Caller Based Routing Service

Music On Hold

Emergency Services Management

Property Management

Maintenance and Diagnostics

NOTE: If Direct Inward Dialing Service is used, the Trunk Attributes for the incoming trunk must have Direct Inward Dialing Service enabled.

Using System Speed Calls is another means of providing DID access.

Devices That Use the NG911 Provided Application (e.g., MiVoice Business Console)

The screenshot displays the Mitel MiVoice Business web interface. On the left is a navigation menu with categories like Licenses, LANWAN Configuration, Voice Network, System Properties, System Settings, System Feature Settings, System Administration, Hardware, Users and Devices, Integrated Directory Services, Voice Mail, Call Routing, and Music On Hold. The main content area is titled 'Class of Service Options on ipbx406'. It includes a search bar, 'Change' and 'Copy' buttons, and a 'Show form on' dropdown set to 'ipbx406 (Login Node)'. Below this is a table of Class of Service Options with columns for Class Of Service Number and Comment. The table lists options 21 through 27. Option 21 is highlighted in blue with the comment 'My E911'. Option 22 has the comment 'TELEWORKER'. Below the table are tabs for 'General' and 'Advanced'. The 'Advanced' tab is active, showing a list of configuration options. The 'Emergency' section is highlighted with a red box, containing the option 'CESID Not Required for Emergency Call' which is set to 'Yes'. Other options in the Emergency section include 'Emergency Call - Audio Level for Set' (Ringer), 'Emergency Call Notification - Audio' (No), and 'Emergency Call Notification - Visual' (Yes). Other sections visible include DND (Do Not Disturb) and Group Presence.

Step 1: Program the NG911 application requirements, linking it to the DN or CPN of the device.

Step 2: On MiVoice Business, enable CESID not required for Emergency Calls on the device's COS option.

Step 3: On MiVoice Business, program the CPN Substitution for the device.

The screenshot shows the Mitel MiVoice Business console interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Trunks, Users and Devices, and Integrated Directory Services. The main content area is titled 'Associated Directory Numbers on ipbx406'. It includes a search bar, a 'Show form on' dropdown set to 'ipbx406 (Login Node)', and buttons for 'Add', 'Change', 'Change Page', 'Change All', 'Delete', 'Print...', 'Import...', 'Export...', and 'Data Refresh'. Below this is a table of associated directory numbers.

Directory Number	Associated Type	Associated Number	Billing Number
4052940	CPN Substitution	5554444	
4054201	CPN Substitution	5555	
4055000	CPN Substitution	5555001	
4062000	CPN Substitution	4062930	
4062920	CPN Substitution	6962222	
4062930	CPN Substitution	6963333	
4068250	CPN Substitution	6135551234	

Step 4: On MiVoice Business, program the DID for the device.

The screenshot shows the Mitel MiVoice Business console interface for the 'Direct Inward Dialing Service' configuration page for device ipbx406. The left sidebar is the same as the previous screenshot. The main content area is titled 'Direct Inward Dialing Service on ipbx406'. It includes a search bar, a 'Show form on' dropdown set to 'ipbx406 (Login Node)', and buttons for 'Add', 'Change', 'Delete', 'Print...', 'Import...', 'Export...', and 'Data Refresh'. Below this is a table of direct inward dialing services.

DID Number	Primary Node Id (PNI)	Destination Number	DID Type
1111			Standard DID
444	613	4052940	Emergency DID
4444	613	4052940	Standard DID
6135925660	613	4065100	Standard DID
1111	613	4062920	Emergency DID
333	613	4062920	Emergency DID
45454545	613	4062920	Emergency DID
34343434	613	4065100	Emergency DID
4441112222	613	4065100	Emergency DID
444111222212	613	4065100	Emergency DID
4441113333	613	4065100	Emergency DID
444111333312	613	4065100	Emergency DID
6665	613	4185001	Standard DID
6666	613	4185001	Standard DID
4058500	613	598500	Standard DID

NOTE: If Direct Inward Dialing Service is used, the Trunk Attributes for the incoming trunk must have Direct Inward Dialing Service enabled.

Using System Speed Calls is another means of providing DID access.

Step 5: Install the NG911 application.

Devices That Use Geo-Location (e.g., MiCollab SIP Softphone Client)

1. Program the NG911 information required for the HELD device.
2. Configure the device to use the NG911 servers directly.
3. On MiVoice Business, enable Emergency Info Provided by Device in the SIP Device Capabilities.

The screenshot shows the Mitel MiVoice Business configuration interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, System Settings, System Feature Settings, System Account Codes, System Speed Calls, Tenants, SMDR Options, Traffic Report Options, Inward Dialing Modification, Outward Dialing Modification, System IP Ports, Location Based Numbers, System Administration, Hardware, Trunks, Users and Devices, Integrated Directory Services, Voice Mail, Call Routing, and Music On Hold.

The main content area is titled "SIP Device Capabilities on lpbx406". It includes a search bar and buttons for "Change", "Copy", "Print...", "Import...", "Export...", and "Data Refresh". Below this is a table of SIP Device Capabilities:

SIP Device Capabilities	Value
1	default
2	AastraDect
3	AscomDectOld
4	Aastra 680x
5	Polycom
6	Mitel 530x
7	Bria
8	PSP no PRack
9	
10	
11	

Below the table is a tabbed interface with tabs for "Basic", "SCP Options", "Signaling and Header Manipulation", "Distinctive Ring Tones", "Timers", "Key Press Event", "Called Party Inward Dialing Modification", "Record Information", and "Advanced". The "Basic" tab is selected, showing the following configuration options:

Configuration Option	Value
SIP Device Capabilities Number	1
Comment	default
Call Routing and Administration Options	
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
TLS Only	No

4. On MiVoice Business, program the CPN Substitution for the device.

The screenshot shows the Mitel MiVoice Business web interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Trunks, Users and Devices, and Integrated Directory Services. The main content area is titled 'Associated Directory Numbers on Ipbx406'. It includes a search bar, action buttons (Add, Change, Change Page, Change All, Delete), and a table of associated numbers.

Directory Number	Associated Type	Associated Number	Billing Number
4052940	CPN Substitution	5554444	
4054201	CPN Substitution	5555	
4055000	CPN Substitution	5555001	
4062000	CPN Substitution	4062900	
4062920	CPN Substitution	6662222	
4062930	CPN Substitution	6663333	
4068250	CPN Substitution	6135551234	

5. On MiVoice Business, program the DID for the device.

The screenshot shows the Mitel MiVoice Business web interface. The left sidebar contains a navigation menu with categories like Licenses, LAN/WAN Configuration, Voice Network, System Properties, Hardware, Trunks, Users and Devices, Integrated Directory Services, Voice Mail, Call Routing, Music On Hold, Emergency Services Management, Property Management, and Maintenance and Diagnostics. The main content area is titled 'Direct Inward Dialing Service on Ipbx406'. It includes a search bar, action buttons (Add, Change, Delete), and a table of direct inward dialing services.

DID Number	Primary Node Id (PNI)	Destination Number	DID Type
1111			Standard DID
444	613	4052940	Emergency DID
4444	613	4052940	Standard DID
5135925650	613	4055100	Standard DID
1111	613	4062920	Emergency DID
333	613	4062920	Emergency DID
45454545	613	4062920	Emergency DID
34343434	613	4065100	Emergency DID
4441112222	613	4065100	Emergency DID
444111222212	613	4065100	Emergency DID
4441113333	613	4065100	Emergency DID
444111333312	613	4065100	Emergency DID
6665	613	4165001	Standard DID
6665	613	4165001	Standard DID
4058500	613	5998500	Standard DID

NOTE: If Direct Inward Dialing Service is used, the Trunk Attributes for the incoming trunk must have Direct Inward Dialing Service enabled.

Using System Speed Calls is another means of providing DID access.

Deployment Guide: 69xx MINET

See the general Solution Deployment Guide - Devices for more details on programming each option.

On Premise

Options Available	Programming Steps
L2 to CESID Mapping (RECOMMENDED)	NG911: <ul style="list-style-type: none"> Program a Location to match the CESID of the L2 Port. MiVoice Business: <ul style="list-style-type: none"> Define the L2 to CESID Mapping. Refer to specific NG911 Solution documentation for Emergency Callback configuration. Device: <ul style="list-style-type: none"> None
IP to Zone to CESID Mapping	NG911: <ul style="list-style-type: none"> Program a Location to match the CESID of the Zone. MiVoice Business: <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Device: <ul style="list-style-type: none"> None

Off Premise

Options Available	Programming Steps
CESID Assignment	<p>NG911:</p> <ul style="list-style-type: none">• Program a Location to match the device's CESID. <p>MiVoice Business:</p> <ul style="list-style-type: none">• Define the CESID.• Enable the <i>Device Move Detection</i> COS option. When enabled, the device user will be notified of a possible device move and will instruct them to contact the Administrator to correct the location in NG911. MiVoice Business will generate an Audit Trail when the notification has been acknowledged by the user• Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none">• None.

Deployment Guide: 53xx MiNET (5304, 5312, 5320, 5320e, 5330e, 5340e)

On Premise

Options Available	Programming Steps
L2 to CESID Mapping (RECOMMENDED)	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the L2 Port. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the L2 to CESID Mapping. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None
IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None

Off Premise

Options Available	Programming Steps
CESID Assignment	<p>NG911:</p> <ul style="list-style-type: none">• Program a Location to match the CESID of the device <p>MiVoice Business:</p> <ul style="list-style-type: none">• Define the CESID of the device.• Enable the <i>Device Move Detection</i> COS option. When enabled, the device user will be notified of a possible device move and will instruct them to contact the Administrator to correct the location in NG911 provider portal. MiVoice Business will generate an Audit Trail when the notification has been acknowledged by the user• Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none">• None

Deployment Guide: Legacy MiNET 53xx

On Premise

Options Available	Programming Steps
L2 to CESID Mapping (RECOMMENDED)	NG911: <ul style="list-style-type: none"> Program a Location to match the CESID of the L2 Port. MiVoice Business: <ul style="list-style-type: none"> Define the L2 to CESID Mapping. Define the Emergency Callback handling (CPN/DID) Device: <ul style="list-style-type: none"> None
IP to Zone to CESID Mapping	NG911: <ul style="list-style-type: none"> Program a Location to match the CESID of the Zone. MiVoice Business: <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration. Device: <ul style="list-style-type: none"> None

Off Premise

Not recommended as these devices do not support Device Move Detection

Deployment Guide: Legacy MiNET (50xx, 51xx, 52xx, 5560 IPT, Navigator)

On Premise

Options Available	Programming Steps
L2 to CESID Mapping (RECOMMENDED)	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the L2 Port. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the L2 to CESID Mapping to be CDP (These legacy MiNET devices do not support LLDP-MED). Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None
IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None

Off Premise

Not recommended as these devices do not support device move detection.

Deployment Guide: 5540

On Premise

Options Available	Programming Steps
L2 to CESID Mapping (RECOMMENDED)	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the L2 Port. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the L2 to CESID Mapping. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None
IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None

Off Premise

Options Available	Programming Steps
CESID Assignment	<p>NG911:</p> <ul style="list-style-type: none">• Program a Location to match the CESID of the device <p>MiVoice Business:</p> <ul style="list-style-type: none">• Define the CESID of the device.• Enable the <i>Device Move Detection</i> COS option. When enabled, the device user will be notified of a possible device move and will instruct them to contact the Administrator to correct the location in NG911 Provider portal. MiVoice Business will generate an Audit Trail when the notification has been acknowledged by the user• Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none">• None

Deployment Guide: MiVoice Business Console

On Premise

Options Available	Programming Steps
NG911 Provided Application (RECOMMENDED if device is wireless)	<p>NG911:</p> <ul style="list-style-type: none"> Refer to specific NG911 Solution documentation for application configuration <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the CESID not required for Emergency Calls COS option. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> Install the NG911 provided application. Manage the location via the NG911 provided application.
IP to Zone to CESID Mapping (RECOMMENDED if device is wired)	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none"> None

Off Premise

Options Available	Programming Steps
NG911 Provided Application	<p>NG911:</p> <ul style="list-style-type: none">• Refer to specific NG911 Solution documentation for application configuration <p>MiVoice Business:</p> <ul style="list-style-type: none">• Enable the CESID not required for Emergency Calls COS option.• Refer to specific NG911 Solution documentation for Emergency Callback configuration. <p>Device:</p> <ul style="list-style-type: none">• Install the NG911 provided application.• Manage the location via the NG911 provided application.

Deployment Guide: Generic SIP

Since each Generic SIP Softphone may have different implementations, Mitel will need to certify the solution with each specific Generic SIP Set.

On Premise

Options Available	Programming Steps
Geo-Location	<p>NG911:</p> <ul style="list-style-type: none"> • None <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by Device SIP Device Capability for the device. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • Program the NG911 Location Server access information. • Update the location
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> • Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by the Device SIP Device Capability. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • Program the CESID against the device. • NOTE: The number entered must conform to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

BSSID to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none">• Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none">• Enable the Emergency Info Provided by the Device SIP Device Capability.• Define the BSSID to CESID Mapping.• Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none">• Enable the MAC Address of the Wireless Access Point being used for the call to be sent.
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Options Available	Programming Steps
IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> • Program a Location match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Define the IP Address Range to Zone in Location Specification form • Define Zone CESID in Network Zones form • Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • None
NG911 Provided Application	<p>NG911:</p> <ul style="list-style-type: none"> • Refer to specific NG911 Solution documentation for application configuration <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the CESID not required for Emergency Calls COS option. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • Install the NG911 provided application. • Manage the location via the NG911 provided application. <p>NOTE: This option should only be used where NG911 provided application can be installed on the same host as the device.</p>

Off Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> • Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by the Device SIP Device Capability. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • Program the CESID against the device. • NOTE: The number entered must conform to the CESID rules of the MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.
BSSID to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> • Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by the Device SIP Device Capability. • Define the BSSID to CESID Mapping. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • Enable the MAC Address of the Wireless Access Point being used for the call to be sent.

Options Available	Programming Steps
NG911 Provided Application	<p>NG911:</p> <ul style="list-style-type: none">• Refer to specific NG911 Solution documentation for application configuration <p>MiVoice Business:</p> <ul style="list-style-type: none">• Enable the CESID not required for Emergency Calls COS option.• Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none">• Install the NG911 provided application.• Manage the location via the NG911 provided application. <p>NOTE: This option should only be used where NG911 provided application can be installed on the same host as the device.</p>

Deployment Guide: Single Cell DECT (SIP 6xx / IP 56xx)

This is just a 6xx/56xx using a single cell.

On Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> See the Multi-Cell DECT solution below based on 6xx vs 56xx device. NOTE: The number entered must conform to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.
IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> See the Multi-Cell DECT solution below based on 6xx vs 56xx device. Program a Location match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form (or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration

	Device: <ul style="list-style-type: none"> • None
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Off Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> • Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by the Device SIP Device Capability. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> • See the Multi-Cell DECT solution below based on 6xx vs 56xx device. • NOTE: The number entered must conform to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

Deployment Guide: SIP DECT (6xx)

Starting from release 8.3 SP1, SIP-DECT supports providing an Emergency Location Identification Number (ELIN) in the SIP signaling of incoming and outgoing calls. This helps the call server (SIP proxy) to determine the correct public-safety answering point (PSAP) depending on where the call was made.

An ELIN can be set for:

- The system
- A site
- A specific base station

The parameter value that is more specific among the three is used to help accurate identification.

If ELIN support is enabled, the configured ELIN value is sent in the FROM header field of the SIP invite and the P-Asserted-Identity field of the 200 OK. The ELIN is a string of up to 31 characters. There is no specific limitation on character set. Characters are escaped in the SIP header if necessary.

Examples:

```
From: "Extension 5115"
<sip:5115@example.com;elin=0123456789>;tag=f-5899462600ef0a1cP-Asserted-
Identity: <sip:5115@example.com;elin=0123456789>
```

The screenshot shows the Mitel configuration interface. On the left is a navigation menu with options: Configuration, Status, System, Basic settings, Advanced settings (highlighted), SIP, Provisioning, User administration, and Data management. The main panel has tabs for Net parameters, DECT phones, DECT base stations, IMA, Additional services, and User service. Under 'Additional services', the 'Emergency location' tab is selected. It shows a form for 'Emergency location identification number' with two fields: 'Enabled' (checked) and 'Number' (containing '0123456789'). A red rectangle highlights these two fields. At the bottom are 'OK' and 'Cancel' buttons.

The configuration can be done via the Open Mobility Manager (OMM) web service or via OM Management Portal (OMP). Only the general activation of this feature and the system-wide emergency location identification number can be set via the OMM configuration files.

NOTE: The number entered must conform to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

Parameter / Group	System emergency location identification number enabled
Description	The parameter “enabled” of the system emergency location identification number configuration enables the sending of the configured ELIN in the SIP signaling.
Format	Boolean

Range	1 or true (enable)0 or false (disable)
Default value	False
OMP	System/ Advanced settings / Emergency location / Emergency location identification number / Enabled
OMM Web	Advanced: System/ Advanced / Emergency location
MOM Web	N/A
OMM configuration files	<code><SetELIN enable="1"/></code>
DECT Phone	N/A
User configuration files	N/A.

Parameter / Group	System emergency location identification number
Description	The system parameter "Emergency call identification number" provides the system-wide valid emergency call identification number. This value is used when a more specific ELIN set is not available. The parameter can be used for small systems in which the same ELIN must be used for all base stations.
Format	String
Range	Up to 31 characters
Default value	Empty
OMP	System/ Advanced settings / Emergency location / Emergency location identification number / Number
OMM Web	Advanced: System/ Advanced / Emergency location
MOM Web	N/A
OMM configuration files	<code><SetELIN enable="0123456"/></code>
DECT Phone	N/A
User configuration files	N/A

Parameter / Group	System emergency location identification number
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Description	<p>The system parameter "Emergency call identification number" provides the system-wide valid emergency call identification number. This value is used when a more specific ELIN set is not available. The parameter can be used for small systems in which the same ELIN must be used for all base stations.</p> <p>NOTE: The number entered must conform to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.</p>
Format	String
Range	Up to 31 characters.
Default value	Empty
OMP	Sites/ Emergency location identification number
OMM Web	Sites/ Emergency location identification number
MOM Web	N/A
OMM configuration files	N/A
DECT Phone	N/A
User configuration files	N/A

Parameter / Group	Base station's emergency location identification number
Description	<p>The base station parameter "Emergency location identification number" provides an emergency location identification number for a specific base station.</p>
Format	String
Range	Up to 31 characters.
Default value	Empty
OMP	DECT base stations/ Emergency location identification number
OMM Web	Base Stations/ Emergency location identification number
MOM Web	N/A
OMM configuration files	N/A
DECT Phone	N/A
User configuration files	N/A

The screenshot displays the Mitel configuration interface. On the left is a navigation menu with options: Configuration, Status, System, Sites, DECT base stations, WLAN, DECT phones, Conference rooms, System features, Licenses, and Support. The main area has tabs for Overview, DECT base stations, Users, Devices, Sites, Conference, Provisioning, and Provisioning health report. The 'Overview' tab is active, showing a 'System' section with various status indicators (green checkmarks) and a 'Features' section with status indicators (green checkmarks or red X's). A red box highlights the 'Emergency location configuration' section, which shows a warning icon and a message: 'Emergency location identification number not provided for all DECT base stations!'.

System	Status
Uptime	0 Day(s) 00 h 22 min
Licenses	✓
Standby OMM (192.168.2.136)	✓
Synchronization state	✓
DECT base stations	✓
DB import/export	✓
Downloading new firmware to portable parts	✓
Provisioning	✓
OMM configuration file processing	✓
Emergency location configuration	⚠

Features	Status
OM Integrated Messaging & Alerting service	✓
User data server	✓
MOM control	✗
802.1x state	✗
OMM certificate server	✗
Provisioning certificate server	✗
802.1x certificate server	✗
SIP certificate server	✓

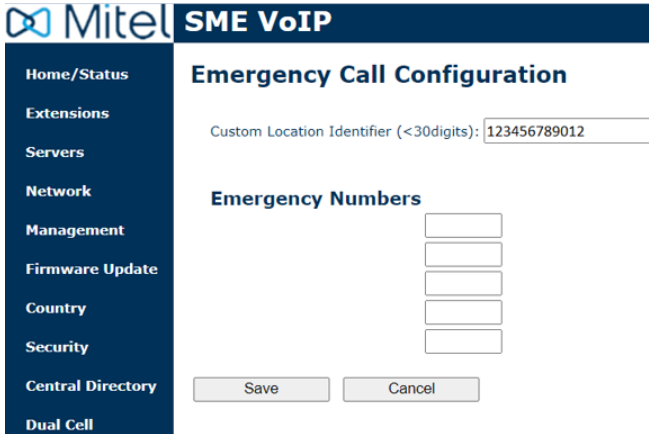
Emergency location identification number not provided for all DECT base stations!

If ELIN support is enabled and at least one RFP has no ELIN assigned, a warning is displayed on the status information page.

Deployment Guide: RFP 12/14 Single Cell Solution

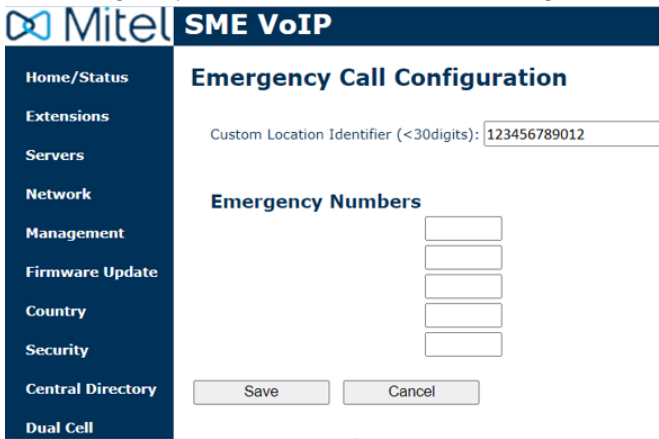
This is programmed as a Generic SIP Device on MiVoice Business

On Premise

Options Available	Programming Steps
<p>CESID provided by the device</p>	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> The ELIN (CESID) must be configured on the Base Station web page called "Emergency Call Configuration". On the same page, valid emergency numbers can also be configured.  <ul style="list-style-type: none"> NOTE: The number entered must conform to the CESID rules of the MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none">• Program a Location match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none">• Define the IP Address Range to Zone in Location Specification form• Define Zone CESID in Network Zones form• Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form.• Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none">• None
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Off Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> The ELIN(CESID) must be configured on the Base Station web page called "Emergency Call Configuration". On the same page, valid emergency numbers can also be configured.  <ul style="list-style-type: none"> NOTE: The number entered must conform to the CESID rules of the MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

Deployment Guide: Multi-Cell SIP DECT (6xx)

On Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> ELIN must be configured on the Base Station->Advanced->Emergency->ELIN page NOTE: The number entered must conform to the CESID rules of the MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

Off Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> ELIN must be configured on the Base Station->Advanced->Emergency->ELIN page NOTE: The number entered must conform to the CESID rules of the MiVoice Business,

	<p>where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.</p>
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Deployment Guide: Multi-Cell IP DECT (56xx)

As of IP-DECT 56xx Release 11.6, IP-DECT supports providing an Emergency Location Identification Number (ELIN) in the SIP signaling of incoming and outgoing calls. This helps the call server (SIP proxy) to determine the correct public-safety answering point (PSAP) depending on where the call has made.

The ELIN is configured on the Device Overview page of the base station by clicking on the device name.

Which then opens a pop-up where the Location ID(ELIN tag in SIP Signaling) can be entered, as well as an option description which is only used as notes for a System Administrator.

NOTE: The string entered in the Location ID field must conform to the CESID rules of the MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

On Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> See configuration at beginning of chapter. NOTE: The number entered must conform

	to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.
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Off Premise

Options Available	Programming Steps
CESID provided by the device	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device SIP Device Capability. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> NOTE: The number entered must conform to the CESID rules of MiVoice Business, where only digits 0-9 are valid, up to a maximum of 12 digits. Special characters or text is not supported and may result in a failed emergency call.

Deployment Guide: 5634 Wi-Fi

On Premise

Options Available	Programming Steps		
BSSID to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> • Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by the Device in the SIP Device Capability. • Define the BSSID to CESID Mapping. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <p>In configuration manual there is a table under chapter "VoIP Protocol" with a table, this is our proposal for the entry for Ray Baum Solution:</p> <table border="1"> <tr> <td data-bbox="574 995 818 1470">Emergency call location method</td><td data-bbox="818 995 1463 1470"> <p>According to Ray Baum Act, a law requirement in US, the handset must be possible to localize at emergency calls. Different PBX vendors has different solutions to solve this requirement.</p> <p>When set to None (default), no solution is selected.</p> <p>When set to Register with SIP instance-id, the MAC address is send in SIP REGISTER message according to RFC 5626.</p> <p>When an emergency call is established, the SIP server authenticates the handset through the MAC Address of REGISTER message and forwards it to the system so that the handset's location is clearly identified.</p> <p>NOTE: This is a solution that Avaya PBX supports.</p> <p>When set to Send BSSID in SIP invite, the BSSID of the access point that handset is connected to at the time the call is established will be send in SIP invite and in SIP invite response 200 OK in PANI (P-Access-Network-Info) header. The BSSID is send in all calls, not only in emergency calls.</p> <p>NOTE: This is a solution that MiVoice PBX supports.</p> </td></tr> </table>	Emergency call location method	<p>According to Ray Baum Act, a law requirement in US, the handset must be possible to localize at emergency calls. Different PBX vendors has different solutions to solve this requirement.</p> <p>When set to None (default), no solution is selected.</p> <p>When set to Register with SIP instance-id, the MAC address is send in SIP REGISTER message according to RFC 5626.</p> <p>When an emergency call is established, the SIP server authenticates the handset through the MAC Address of REGISTER message and forwards it to the system so that the handset's location is clearly identified.</p> <p>NOTE: This is a solution that Avaya PBX supports.</p> <p>When set to Send BSSID in SIP invite, the BSSID of the access point that handset is connected to at the time the call is established will be send in SIP invite and in SIP invite response 200 OK in PANI (P-Access-Network-Info) header. The BSSID is send in all calls, not only in emergency calls.</p> <p>NOTE: This is a solution that MiVoice PBX supports.</p>
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Off Premise

Options Available	Programming Steps		
BSSID to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location to match the CESID of the device. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the Emergency Info Provided by the Device in SIP Device Capability. Define the BSSID to CESID Mapping. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <p>In configuration manual there is a table under chapter "VoIP Protocol" with a table, this is our proposal for the entry for Ray Baum Solution:</p> <table> <tr> <td>Emergency call location method</td><td> <p>According to Ray Baum Act, a law requirement in US, the handset must be possible to localize at emergency calls. Different PBX vendors has different solutions to solve this requirement.</p> <p>When set to None (default), no solution is selected.</p> <p>When set to Register with SIP instance-id, the MAC address is send in SIP REGISTER message according to RFC 5626.</p> <p>When an emergency call is established, the SIP server authenticates the handset through the MAC Address of REGISTER message and forwards it to the system so that the handset's location is clearly identified.</p> <p>NOTE: This is a solution that Avaya PBX supports.</p> <p>When set to Send BSSID in SIP invite, the BSSID of the access point that handset is connected to at the time the call is established will be send in SIP invite and in SIP invite response 200 OK in PANI (P-Access-Network-Info) header. The BSSID is send in all calls, not only in emergency calls.</p> <p>NOTE: This is a solution that MiVoice PBX supports.</p> </td></tr> </table>	Emergency call location method	<p>According to Ray Baum Act, a law requirement in US, the handset must be possible to localize at emergency calls. Different PBX vendors has different solutions to solve this requirement.</p> <p>When set to None (default), no solution is selected.</p> <p>When set to Register with SIP instance-id, the MAC address is send in SIP REGISTER message according to RFC 5626.</p> <p>When an emergency call is established, the SIP server authenticates the handset through the MAC Address of REGISTER message and forwards it to the system so that the handset's location is clearly identified.</p> <p>NOTE: This is a solution that Avaya PBX supports.</p> <p>When set to Send BSSID in SIP invite, the BSSID of the access point that handset is connected to at the time the call is established will be send in SIP invite and in SIP invite response 200 OK in PANI (P-Access-Network-Info) header. The BSSID is send in all calls, not only in emergency calls.</p> <p>NOTE: This is a solution that MiVoice PBX supports.</p>
Emergency call location method	<p>According to Ray Baum Act, a law requirement in US, the handset must be possible to localize at emergency calls. Different PBX vendors has different solutions to solve this requirement.</p> <p>When set to None (default), no solution is selected.</p> <p>When set to Register with SIP instance-id, the MAC address is send in SIP REGISTER message according to RFC 5626.</p> <p>When an emergency call is established, the SIP server authenticates the handset through the MAC Address of REGISTER message and forwards it to the system so that the handset's location is clearly identified.</p> <p>NOTE: This is a solution that Avaya PBX supports.</p> <p>When set to Send BSSID in SIP invite, the BSSID of the access point that handset is connected to at the time the call is established will be send in SIP invite and in SIP invite response 200 OK in PANI (P-Access-Network-Info) header. The BSSID is send in all calls, not only in emergency calls.</p> <p>NOTE: This is a solution that MiVoice PBX supports.</p>		

Deployment Guide: Legacy SIP (5302, 5505, 5624)

On Premise

Options Available	Programming Steps
IP to Zone to CESID Mapping	<p>NG911:</p> <ul style="list-style-type: none">• Program a Location match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none">• Define the IP Address Range to Zone in Location Specification form• Define Zone CESID in Network Zones form• Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form.• Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none">• None.

Off Premise

Not recommended.

Deployment Guide: MiCollab MINET Softphone

On Premise

Options Available	Steps
NG911 provided application (RECOMMENDED if device is wireless)	<p>NG911:</p> <ul style="list-style-type: none"> Refer to specific NG911 Solution documentation for application configuration. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Enable the CESID not required for Emergency Calls COS option. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> Install the NG911 provided application. Manage the location via the NG911 provided application.
IP to Zone to CESID Mapping (RECOMMENDED if device is wired)	<p>NG911:</p> <ul style="list-style-type: none"> Program a Location match the CESID of the Zone. <p>MiVoice Business:</p> <ul style="list-style-type: none"> Define the IP Address Range to Zone in Location Specification form Define Zone CESID in Network Zones form Set device's Zone Assignment Method to Default in the User and Services Configuration form(or Station Assignment form. Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none"> None

Off Premise

Options Available	Steps
NG911 provided application	<p>NG911:</p> <ul style="list-style-type: none">• Refer to specific NG911 Solution documentation for application configuration <p>MiVoice Business:</p> <ul style="list-style-type: none">• Enable the CESID not required for Emergency Calls COS option.• Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>Device:</p> <ul style="list-style-type: none">• Install the NG911 provided application.• Manage the location via the NG911 provided application.

Deployment Guide: MiCollab SIP Softphone

MiCollab clients installed on a mobile device with a native dialer (e.g., Apple and Android phones and not tablets), the native dialer will intercept emergency calls, and will not go through the MiVoice Business.


Additional configuration is required for MiCollab SIP Softphones.

Via the MiCollab Server, configure the Location Service under MiCollab Client Service > Administrator Interface > Enterprise Tab > Location Service Configuration.

Field	Notes
Location Service	NG911 Provider
URL	NG911 LIS Server URL
HeldOrgId	HELD Organization ID
Secret	HELD+ Secret Key
Confirm Secret	HELD+ Secret Key
Virtual Environment	If the Virtual Environment checkbox is checked, then the clients are virtualized. That means, the Virtual Environment checkbox will enable the administrator to declare whether their clients are running in a virtual environment or not, i.e., VMWARE Horizon, Citrix, or RDS.

Via the MiCollab Server, configure the Emergency Dial Plan under MiCollab Client Deployment> Deployment Profiles > Emergency Numbers.

NOTE: IFT/EFT sites should enable 933 in the emergency number list for testing/integration.


MiCollab
admin@micollab.gtsca.gts.ucs.mitel.io
Status: Clear

Applications
 Users and Services
 Audio, Web and Video
 Conferencing
 MiCollab Client Service
MiCollab Client Deployment
 Licensing Information

ServiceLink
 Install Applications

Administration
 Web services
 View log files
 Event viewer
 SDS Distribution Errors

Configuration
 Integrated Directory Service
 MiCollab Client Integration
 Wizard
 Reconcile Wizard
MiCollab Settings
 MiCollab Language
 Email settings
 Google Apps
 Cloud Service Provider
 Hostnames and addresses
 Domains

Security
 Remote access

Miscellaneous
 Support and licensing
 Help

Manage MiCollab Client Deployment

Users
 Deployment Profiles
 Configuration
 Diagnostics

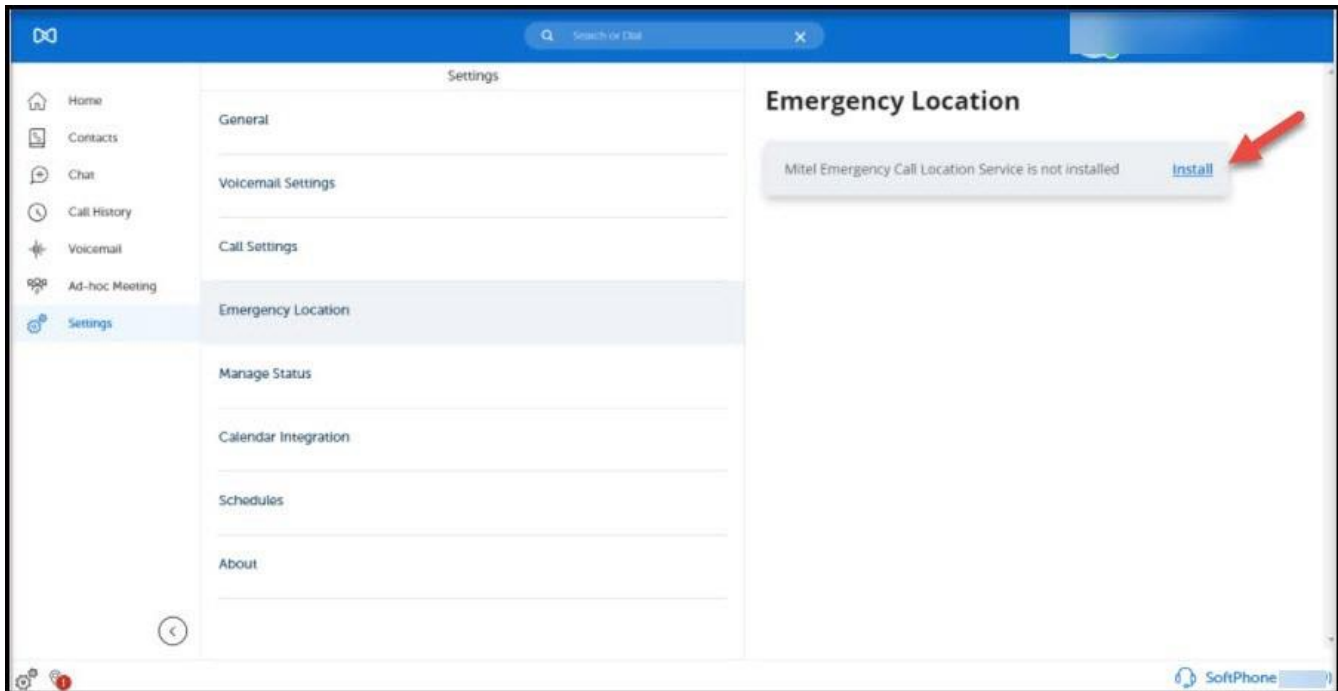
Profiles

» Location: Deployment Profiles / Modify
 Show Info

General Settings

Name *	cDefault	Log Level	DEBUG
Use Teleworker	on	Call mode	Audio
Use Softphone	on	Office number	6135922122
		Office number pause	2
MBG	mbg.gtsca.gts.ucs.mitel.io	Config download host *	MiCollab Server FQDN
		MBG SIP host *	Custom DNS SRV mbg.gtsca.gts.ucs.mitel.io
		MBG-WebRTC SIP host *	MBG's FQDN
Override user email	<input type="checkbox"/>	PBX SIP host	Custom DNS SRV mivb.gtsca.gts.ucs.mitel.io
Deployment email address	shawn.menard@mitel.com	Conference access code	*40
RTP timeout detection	<input checked="" type="checkbox"/>	Emergency numbers	000,110,112,118,119,911,999

Additionally, each MiCollab client will need to install the Mitel Network Helper and enter/confirm their location in the MiCollab Client.



Emergency (911) Location

We need to have a dispatchable location for you in the event of an emergency.

Duplicate

Or

Location Name

Location Info

Street

City

State

Zip Code

SoftPhone

This may differ based on the MiCollab Client. Client specific details can be found here:

On Premise

Options Available	Steps
Geo-Location	<p>NG911:</p> <ul style="list-style-type: none"> • None <p>MiVoice Business:</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by Device SIP Device Capability for the device. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>MiCollab Server:</p> <ul style="list-style-type: none"> • Define the Location Service Configuration. • Define the Emergency dial plan <p>MiCollab Client:</p> <ul style="list-style-type: none"> • Install the Mitel Network Helper • Enter/update their location in the MiCollab Client

Off Premise

Options Available	Steps
Geo-Location	<p>NG911:</p> <ul style="list-style-type: none"> • None <p>MiVoice Business</p> <ul style="list-style-type: none"> • Enable the Emergency Info Provided by Device SIP Device Capability for the device. • Refer to specific NG911 Solution documentation for Emergency Callback configuration <p>MiCollab Server:</p> <ul style="list-style-type: none"> • Define the Location Service Configuration. <p>MiCollab Client</p> <ul style="list-style-type: none"> • Install the Mitel Network Helper • Enter/update their location in the MiCollab Client

Deployment Guide: MiCollab Web Client


NOTE: Sites should enable 933 in the emergency number list for testing/integration.

Additional configuration is required for MiCollab SIP Softphones.

Via the MiCollab Server, configure the Location Service under MiCollab Client Service > Administrator Interface > Enterprise Tab > Location Service Configuration.

Field	Notes
Location Service	NG911 Provider
URL	NG911 LIS Server URL
HeldOrgId	HELD Organization ID
Secret	HELD+ Secret Key
Confirm Secret	HELD+ Secret Key
Virtual Environment	If the Virtual Environment checkbox is checked, then the clients are virtualized. That means, the Virtual Environment checkbox will enable the administrator to declare whether their clients are running in a virtual environment or not, i.e. VMWARE Horizon, Citrix, or RDS.

Via the MiCollab Server, configure the Emergency Dial Plan under MiCollab Client Deployment > Deployment Profiles > Emergency Numbers.


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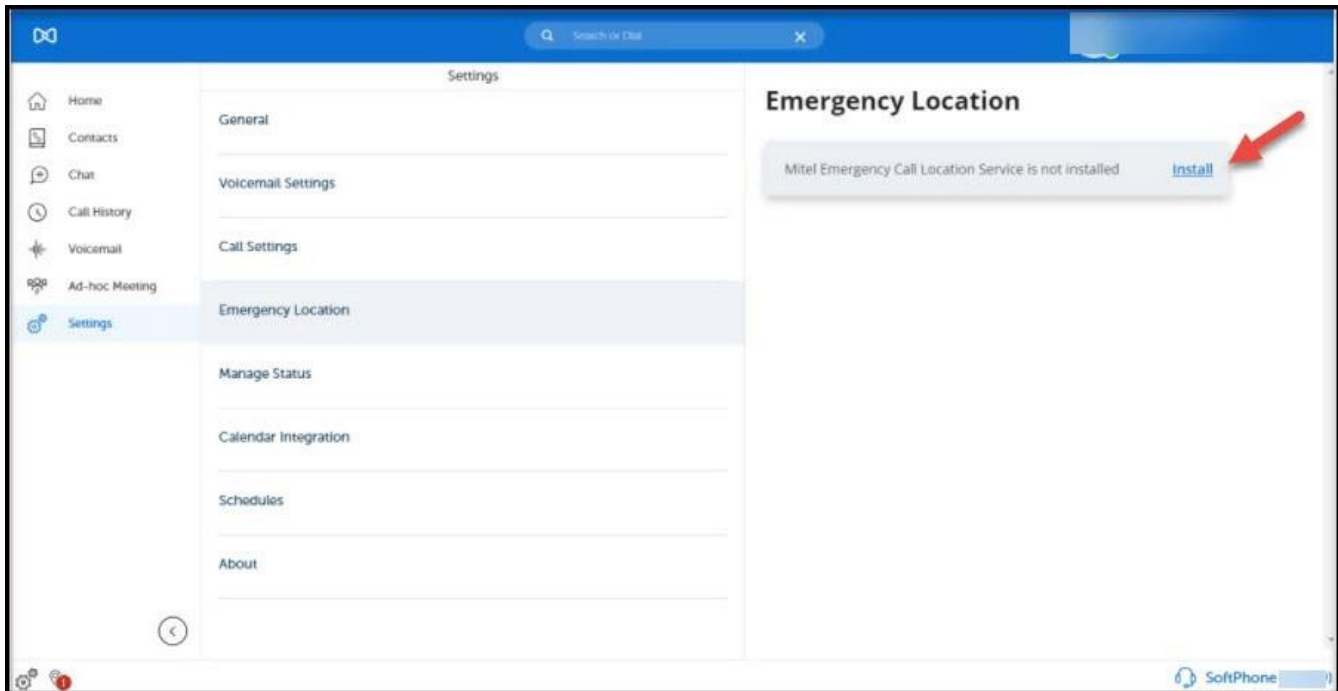
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		MBG-WebRTC SIP host *	MBG's FQDN
Override user email	<input type="checkbox"/>	PBX SIP host	Custom DNS SRV mivb.gtsca.gts.ucs.mitel.io
Deployment email address	shawn.menard@mitel.com	Conference access code	*40
RTP timeout detection	<input checked="" type="checkbox"/>	Emergency numbers	000,110,112,118,119,911,999

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Options Available	Steps
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Off Premise

Options Available	Steps
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Deployment Guide: MiCollab Deskphone

Follow the instructions based on the device type of the Deskphone.

Deployment Guide: MiCollab Mobile

Uses native dialer, so there is no interaction with the MiVoice Business solution for emergency calls.

Deployment Guide: 3rd Party WebRTC Clients (via MiVoice Border Gateway)

Since each 3rd Party WebRTC Client may have different implementations, Mitel will need to certify the solution with each specific 3rd Party WebRTC Client.

WebRTC is just a HTML wrapper around the SIP protocol, so it would behave like a Generic SIP device. See above.

Deployment Guide: WebRTC Anonymous Calls (via MiVoice Border Gateway)

WebRTC can provide anonymous calls support via a weblink. These web-links are not expected to be routed from MiVoice Business to an emergency destination and will NOT provide any location information.

Limitations

Mobile phones – Mobile phones are not part of the MiVoice Business solution with RAY BAUM as they use the native phone function to provide the location services information during an emergency call.

MiVoice Business does not support different NG911 providers per tenant in the same system. E.g., the same NG911 provider needs to be used by all tenants in a given system.

Acronyms, Abbreviations, and Glossary

BSSID - Basic Service Set Identification. MAC address of a Wireless Access Point (WAP) **CESID** - Caller Emergency Service Identification, equivalent to ELIN.

CESID - Customer Emergency Service Identification – A number that uniquely identifies the device that dialed 911.

COR - Class of Restriction – To limit a station's access to certain Class of Service Options.

COS - Class of Service – A level of service defined by a specific set of features that controls an extension's access to these features.

CPN - Calling Party Number – A number to identify the device or user who initiated the call.

DID - Direct Dialing Inwards – Allows an external caller to dial an internal extension without having to go through an attendant or operator.

ELIN - Emergency Location Identification Number also known as CESID. **ERS** - Emergency Routing Services.

Fixed devices- Fixed device is a device that cannot be moved to another place in the enterprise without assistance from a professional installer or network manager.

HELD- HTTP-Enabled Location Delivery. Protocol used for retrieving location information from a server within a network.

LIS - Location Information Server provided by Intrado that allows an organization to enter location information (including civic address, floor/room/suite/apt, and so on) to be used during emergency calls.

LLDP- Link Layer Discovery Protocol – An IEEE standard (801.1AB) that provides a vendor-neutral method for Ethernet network devices such as switches, routers, and wireless LAN access points to advertise and store the information about themselves to other nodes on the network.

LLDP-MED- Link Layer Discovery Protocol-Media Endpoint Discovery MiVoice Border Gateway.

MOM- Multi OMM Manager. Multi-OMM-Manager (MOM) delivers full local site survivability for large geographical distributed multi-site-DECT networks with the benefit of central user management, roaming between sites and overall messaging. The MOM solution is scalable over small and large sites and expands the total system capacity for a managed SIPDECT network from 10,000 to 50,000 users

OMM- Open Mobility Manager. System configuration is managed through Mitel SIP-DECT's web service portal Open Mobility Manager (OMM), which features a status display with event logs, statistics and real-time monitoring. Parameter changes can be applied to multiple entries (such as RFPs) at once and statuses of SIP-DECT RFPs can be monitored for system alarm states

OMP- Om Management Portal. Mitel SIP-DECT reduces administrative effort by automatically creating handset data in large systems when a new subscription is added and allowing administrators to import user data from external sources.

MiVB – MiVoice Business

MLTS - Multi Line Telephone System. Equivalent to a PBX, but is the nomenclature used in the RAY BAUM'S Act.

NANP – North American Numbering Plan (https://en.wikipedia.org/wiki/North_American_Numbering_Plan)

Non-fixed devices – A non-fixed device is a device that the end user can move from one endpoint to another without assistance.

PAI header - P-Asserted-Identity header

PANI header- P-Access-Network-Info header PSAP - Public Safety Answering Points

PNI – Primary Node Id. MiVoice Business identifier to differentiate between different MiVoice Business clusters in the same MiVoice Business network.

SBC – Session Border Controller