

Mitel Revolution

Configuration Guide for MiVoice Business

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Mitel Revolution Configuration Guide for Mitel MiVoice Business

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Introduction

The Mitel Revolution interface provides a way to centrally manage creating and sending notifications. This interface can be used to send emergency and non-emergency notifications such as Live or Stored Audio Notifications, Weather Alerts, AMBER Alerts, IPAWS Alerts, and Text Messages to supported devices.

Notifications can be sent to endpoints such as iOS and Android smartphones; Instant Messaging clients, SMS clients, and Mitel Revolution Desktop Notification Client; Paging Relay; Legacy Paging and Analog Systems; IP Speakers; Clocks; Message Boards; Social Media accounts; and more. Visit us on the web at [Mitel Revolution Web Help](#) to learn more about Mitel Revolution product.

Users can quickly send notifications and get real-time status on notifications and view scheduled notifications and a list of recently sent notifications from their dashboard. Users can also view sent notification details to see which endpoints received notifications. They can manage notifications from a single location, viewing all notifications, endpoints assigned, and the type of each notification.

Note: Mitel Revolution supports multicast paging for MiVoice Business with the Mitel 6900 series phones (MiNET mode) from MiVoice Business Release 9.1 and later. Multicasting is not supported through the MiVoice Border Gateway to teleworker configured sets.

About this Guide

This document describes the configuration of Mitel Revolution for the Mitel MiVoice Business platform.

Emergency Call Notifications (USA Only)

For customers in the USA utilizing a next-generation 911 solution (NG911) for emergency call routing purposes, the NG911 vendor should be considered as the primary source for Kari's Law local alerting, and Revolution notifications of 911 calls should be considered an ancillary alert of the event, with the activation of 911-related Mitel Revolution notifications being triggered by the NG911 vendor and not the PBX.

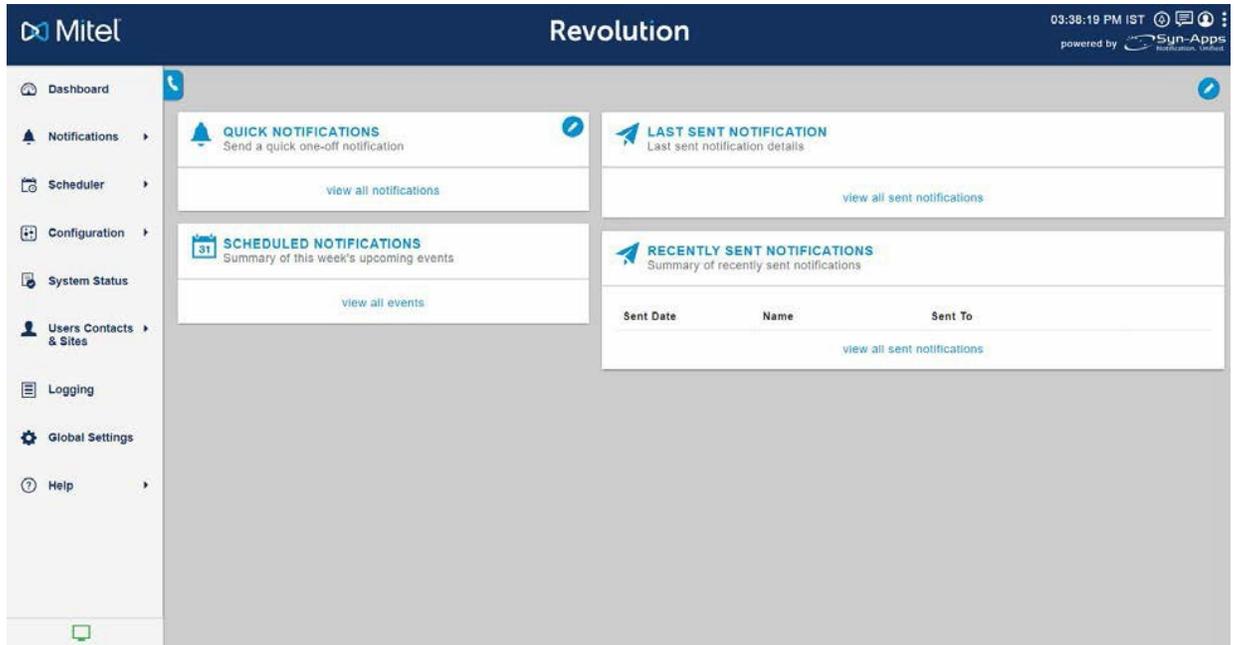
If the customer is not using a NG911 vendor for emergency calls then Mitel Revolution can serve as the primary notifier and mechanism for enabling local alerts associated with Kari's Law.

Documentation

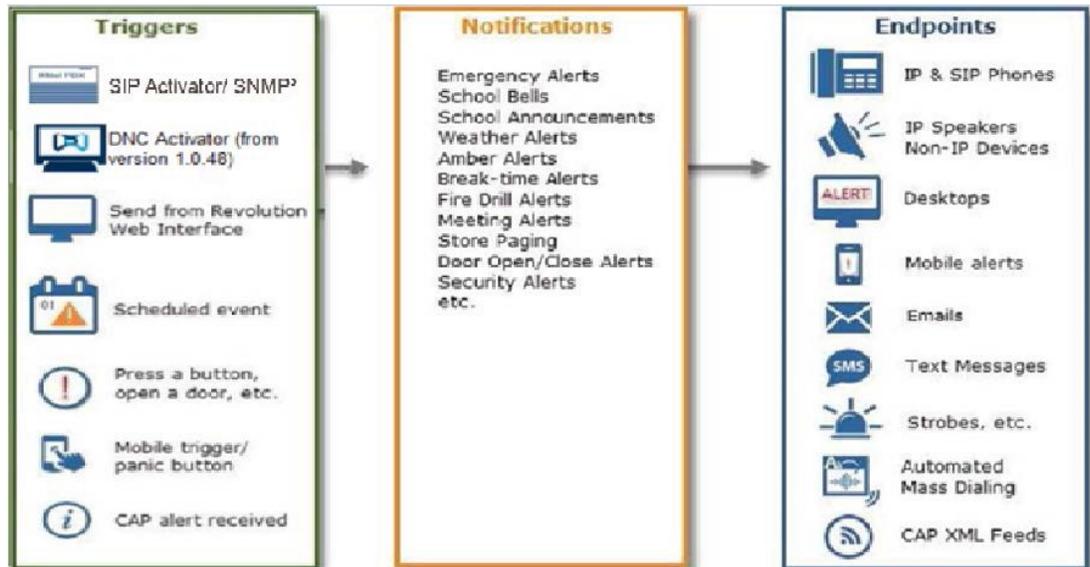
- **Mitel Revolution Web Help:** The Mitel Revolution Web Help contains information about installing Mitel Revolution, initial setup, feature configuration, maintenance and troubleshooting, end-user tasks, system monitoring, and upgrade related details. You can access the web help at [Mitel Revolution Web Help](#).
- **MiVoice Business System Administration Tool Help:** The MiVoice Business System Administration Tool Help contains information about the forms in the MiVoice Business System Administration tool. It also, explains the features that can be programmed using the tool. You can access the Tool Help at [MiVoice Business Web Help](#).

Mitel Revolution Overview

The Mitel Revolution interface provides a Dashboard for quick access to frequently used notifications, status of sent notifications, and scheduled notifications. The Dashboard can be configured for each user. Users having the required permissions can maintain their dashboard themselves. Access to configuring the Revolution modules is denied to all user roles except the administrator.



Notification Overview



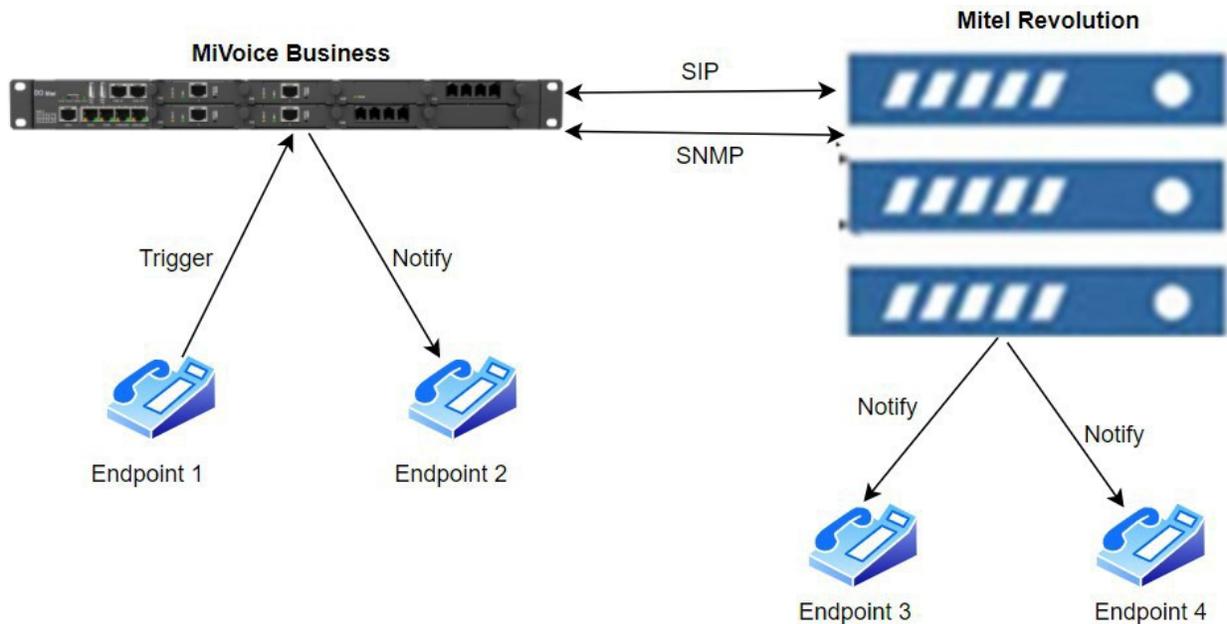
Creating notifications involve the following three main steps:

- Assigning the triggers for sending notifications (SIP Activator/SNMP/DNC Activator).
- Creating the content (image, audio, or text) to be sent.
- Assigning the endpoints that receive the notifications.

For more information about creating notifications on the Mitel Revolution interface, see [Creating Notifications](#).

Network Topology

The following diagram explains how the elements in the network are connected to the Mitel Revolution:



Software Dependencies and Compatibilities

For a list of supported MiVoice Business software versions compatible with Mitel Revolution, see [Mitel Compatibility Matrix](#).

MiVoice Business Configuration

This section describes the steps to configure a Mitel MiVoice Business for Mitel Revolution.

The user must configure the general MiVoice Business settings. These configuration settings include the following:

- Creating a generic SIP extension on your MiVoice Business System Administration tool, see [Creating SIP Users](#).
- Configure an outgoing SIP trunk from the MiVoice Business System Administration tool to Mitel Revolution see [Creating SIP Trunk](#).
- Creating a page group on your MiVoice Business System Administration tool and add members to the group see [Configuring an Outgoing SIP Trunk](#).

Note:

The MiVoice Business connection configured for the Mitel Revolution interface must not have a Secure RTP profile enabled.

Configuring SNMP Settings

If you are using the Mitel Emergency Services and want to trigger a notification on Mitel Revolution when an emergency number is dialed, the SNMP Trap messages for the SIP trunk must be configured in the MiVoice Business System Administration tool.

For Release 9.0 and later, perform the following steps to configure SNMP settings:

1. Log in to the MiVoice Business using the link in the following format:
MiVoice Business System Administration tool IP address/server-manager/
2. To enable the SNMP feature, select **Enabled** from the **SNMP Service Status** drop-down list.
3. Enter a “value” in the **SNMPv2c community string for read-write access** field.
4. From the **SNMPv2c network access setting** drop-down list, select “**All configured trusted networks**”.
5. Click **Save**.

Configure SNMP support

SNMP, or Simple Network Management Protocol, provides a set of operations and a protocol to permit remote management and remote monitoring of a network device and/or traps.

To configure the SNMP service on this server, use the following fields, and click on the "Save" button at the bottom of the page. Note that this service is disabled by default.

Please specify whether you would like the service enabled or disabled.

SNMP service status Enabled ▾

Configure a community string that SNMPv2c clients will use to monitor this server via get requests and traps. If you do not wish to use the default value of "public", change the

SNMPv2c community string for read-only access MitelRO

Configure a community string that SNMPv2c clients will use for set requests (limited access as determined by applications).

SNMPv2c community string for read-write access MitelRW

Please select the range of networks that you would like to be able to access your SNMPv2c services.

SNMPv2c network access setting All configured trusted networks ▾

SNMPv3 provides secure access to the server by a combination of authenticating and encrypting frames over the network. User-Based Security Model (USM) is used for control

For GCP Release, perform the following steps to configure SNMP settings:

6. Login to GCP Solution Manager
7. Click SNMP Tab

8. You may perform the following steps to configure the shared system option in MIVB:
 - a. Go to the **Shared System Options** form.
 - b. Click **Change**.
 - c. In the **Trap IPAddress/FQDN for ER Notification** field, enter the Mitel Primary Revolution IP address.
 - d. In the **Trap IPAddress/FQDN for ER Notification Optional 1** field, enter the Mitel Secondary Revolution IP address.
 - e. In the **Trap Community String** field, enter the same value as entered in the **SNMPv2c community string read-write** field in the MSL/GCP SNMP.
 - f. Click **Save**.

Note: Multiple SNMP trap support is applicable only for Release 9.2 and later.

Shared System Options

DPNSS/QSIG Diversion Enabled	Yes
Enable CTI Application Authentication	No
Emergency DID Routing Enabled	No

Emergency Response

Enable ER TRAPS	Yes
Trap IPAddress/FQDN for ER Notification	192.168.10.44
Trap IPAddress/FQDN for ER Notification Optional 1	192.168.10.45
Trap IPAddress/FQDN for ER Notification Optional 2	
TRAP Community String	MitelRW

Enable access to Server Manager	Yes
Maintain Original Forward or Reroute Reason	Yes
Present Original DNIS	No
Set Registration Auto DN Selection - Prefix	

For Releases 8.0 and 7.2 SP1 PR2, perform the following steps to configure the SNMP settings:

1. Go to the **SNMP Configuration** form.
2. In the **Enable SNMP Agent**, select the **Yes** check box to enable the SNMP feature.
3. Enter a value in the **Read Write Community** field.
4. Enter the Mitel Revolution IP address in the **IP Address** field.
5. Enter **Comments** to identify that the IP address corresponds to the Mitel Revolution.
6. Click **Save**.

SNMP Configuration on **Local_87** DN to search Show form on Not Accessible Go

[Change](#) [Clear](#) [Print...](#) [Import...](#) [Export...](#) [Data Refresh](#)

SNMP Configuration

Enable SNMP Agent	System Name	Contact	Location	Read Only Community	Read/Write Community	Accept Requests From All Managers
Yes	Local_87			public	MitelRW	Yes

< Page 1 of 3 > Go to Value Go

[Change Member](#) [Change Page Members](#) [Change All Members](#) [Clear Member](#)

Accept Requests from the following Managers

Entry #	IP Address	Comments
1	192.168.1.10	Revolution
2		
3		

7. Go to the **SNMP Trap Forwarding** form.
8. Set **Enable MITEL Traps** to **Yes**.
9. Click **Save**.
10. Enter the IP Address of Mitel Revolution.
11. In the **Trap Community** field, enter the same value as entered in the **Read/Write Community** field.
12. Enable the ER Notification.
13. Enter Revolution in the **Comments** field.
14. Click **Save**.

The screenshot shows the 'SNMP Trap Forwarding' configuration page. At the top, there is a section for 'Enable MITEL Traps' with a dropdown menu set to 'Yes'. Below this, there are two buttons: 'Change Member' and 'Clear Member'. The main section is titled 'Trap Forwarding Attributes' and contains a table with the following data:

Entry #	IP Address	Trap Community	ER Notification	Comments
1	192.168.1.10	MitelRW	Yes	Revolution
2			No	
3			No	

Note:

- You can use a custom community string of your choice. Mitel recommends that you follow industry best practices including avoidance of default/public strings. For our testing, we have used "MitelRW".
- We recommend that networking protections (ACL/firewalls) be used to restrict access to unauthorized SNMP connections other than between the MiVB and Revolution.

Understanding how audio is handled between Revolution and MiVoice Business

When integrated with MiVoice Business (MiVB), Revolution may require both SIP trunks and generic SIP extensions that is SIP registrations on Revolution for audio to pass between the two platforms.

- For MiVB
Revolution communications such as dialing a specific SIP line number to trigger a Notification, **SIP trunks** are used and must be licensed/configured as such on the MiVB.
- For Revolution
MiVB communications such as playing an audio page via the MiVB **Group Page** feature, **Generic SIP extensions** that is SIP Registrations on Revolution are used and must be licensed on the MiVB via

either Enterprise User or Single Line Licenses. This is required because the MiVB **Group Page** feature requires that a **Feature Access Code (FAC)** be dialed prior to the **Page Group** number, and FAC's can only be dialed by an extension. The MiVB does not allow FAC's on SIP trunks.

- If all audio pages to IP Phones are being done via multicast (and not the MiVB **Group Page** feature), SIP extensions may not be required.
- If both SIP trunks and SIP extensions/registrations are provisioned and your Notification includes a MiVB **Page Group** configured as an Endpoint with the **Group Page FAC**, by default the Revolution will use an available SIP extension/registration to deliver the page.
- If only SIP trunks are provisioned and your Notification includes a MiVB **Page Group** configured as an Endpoint with the **Group Page FAC**, Revolution will attempt to use an available SIP trunk, which will fail.

Understanding Revolution Paging Methodologies with MiVoice Business

A Mitel IP phone can receive an audio page via several mechanisms:

1. **Multicast** – In this scenario, both the Revolution server and the Mitel Paging Relays can deliver multicast audio broadcasts to their local subnets. The IP Phones receive the audio of the page via their configured multicast address. The MiVB is not directly involved in the audio delivery, and neither SIP trunks nor SIP extensions are used.
2. **Revolution Endpoint** – In this scenario, each Mitel IP phone extension number is configured in Revolution as an Endpoint. If this Endpoint is included in a notification that contains audio, Revolution will attempt to dial it directly using either a SIP extension if available, or a SIP trunk if a SIP extension is not available. It requires a 1:1 ratio between the number of SIP trunks and the number of extensions to Endpoints. If there are 10 IP Phone Endpoints configured to receive an audio Notification, then 10 SIP Extensions or trunks need to be available, and all recipients' phones will ring. Each recipient will have to answer and wait until the configured endpoints have answered before the audio will be played.
3. **MiVB Group Page** – In this scenario, only the MiVB Page Group number is configured as an Endpoint in Revolution and includes the **Group Page Feature Access Code** as part of the dial string. Any number of IP phones can be made a member of that Page Group within MiVB (up to the limits placed by for the controller type). Revolution is not specifically aware of which IP Phones are part of which Page Group. When using Group Page, Revolution must use an available SIP extension to dial the Page Group number so that the **Feature Access Code** can be included.

Creating SIP Users

Perform the following steps to create a new user on the MiVoice Business System Administration tool:

1. Go to the **Users and Services Configuration** form.
2. Click **Add**.
3. Select **by Role > Basic User**.
4. In the **User Profile** tab, enter values for the following fields:

Field	Value
Last Name	Enter the last name of the Mitel revolution interface.
First Name	Enter the first name of the Mitel revolution interface.

5. In the **Service Profile** tab, enter values for the following fields:

Field	Value
Number	Enter an extension number for the user. For example, 1001.
Device Type	Select Generic SIP Phone from the drop-down list.
Secondary Element	Select a secondary element from the drop-down list.

6. Click **Save Changes**.

Note: Use the default values for the other fields in the form.

The screenshot shows the Mitel MiVoice Business System Administration interface. The main content area displays the 'User and Services Configuration' form for a user named 'MR, Revolution'. The 'Service Profile' tab is selected, and the 'Number' field is set to '1001'. The 'Device Type' is set to 'Generic SIP Phone'. The 'Search Results' list on the left shows 'MR, Revolution' selected, with 'Phone Service (1001)' as a secondary element. The 'Admin Group Alarm Status' is 'Critical'.

Creating SIP Trunk

This section describes how to create a new network element and configure an outgoing SIP trunk. Creating a SIP trunk involves the following steps:

- Add a network element to MiVoice Business.
- Creating a SIP peer profile for the new network element.
- Identifying a class of service to the SIP line.
- Configuring an Outgoing route to the SIP trunk.
- Configuring SNMP setting for emergency notifications.

Adding a New Network Element

Perform the following steps to add a new network element to the MiVoice Business System Administration tool:

1. Go to the **Network Elements** form.
2. Click **Add** to create a new network element.
3. Enter values for the following fields:

Field	Value
Name	Enter an alphanumeric name of up to nine characters for the Mitel Revolution interface. For example, MitelRev.
Type	Select Other from the drop-down list.
FDQN or IP Address	Enter the IP address or FQDN of the Mitel Revolution interface.

4. Select the **SIP Peer** check box.
5. In the **SIP Peer Port** field, enter the SIP port if you will not use the default port value.

Note: By default, the SIP Peer Port value is set as 5060.

6. Click **Save**.

Note: Use the default values for the other fields in the form.

Similarly, create a new Network Element for the secondary Revolution server.

Network Elements

Name: MitelRev

Type: Other

FQDN or IP Address: [REDACTED]

Local: False

Version: [REDACTED]

Zone: 1

ARID: [REDACTED]

SIP Peer:

SIP Peer Specific: [REDACTED]

SIP Peer Transport: default

Save Cancel

Creating a SIP Peer Profile

Perform the following steps to create a new SIP peer profile:

Note:

The ARS Route List approach is used to route the calls through an alternate route that points to the secondary Revolution server if the primary server is not accessible. It requires a new Network element, SIP profile, and a Route pointing to the secondary Revolution platform. Both the routes are added under ARS Route List with primary as the first choice and secondary being the alternative.

1. Go to the **SIP Peer Profile** form.
2. In the **Basic** tab, enter values for the following fields:

Field	Value
SIP Peer Profile Label	Enter an alphanumeric name of up to nine character for Mitel Revolution interface. For example, Rev.
Network Element	Select the Mitel Revolution interface name that you created in the Network Element form. For example, MitelRev.
Address Type	Select the IP of the MiVoice Business System Administration tool.
Trunk Service	Enter the available Trunk Service number from the Trunk Attributes form. For example, 2.
Authentication Options > User Name	Enter the username from the Inbound Username field of the Mitel Revolution interface.
Authentication Options > Password	Enter the password from the Inbound Password field of the Mitel Revolution interface.

SIP Peer Profile					
Network Element	SIP Peer Profile Label	Outbound Proxy Server	CPN Restriction	Trunk Service	Session Timer
MitelRev	Rev		No	5	90

[Save](#)

Basic | Call Routing | Calling Line ID | SDP Options | Signaling and Header Manipulation | Timers | Key Press Event | Profile Information

SIP Peer Profile Label:

Network Element:

Local Account Information

Registration User Name:

Address Type: FQDN: mivb.mitel.com IP Address: 10.211.60.155

Note:

If you want to authenticate the configuration of the SIP trunk, enter the **Username** and **Password** field values in the **Inbound Username** and **Inbound Password** fields in the **Authenticating the SIP Lines** section of Mitel Revolution.

- In the **SDP Options** tab, enter values for the following fields:

Field	Value
Allow Using UPDATE for Early Media Renegotiation	Yes
Force sending SDP in initial invite message	Yes
Force sending SDP in initial invite - Early Answer	Yes

SIP Peer Profile					
Network Element	SIP Peer Profile Label	Outbound Proxy Server	CPN Restriction	Trunk Service	Session Timer
MitelRev	Rev		No	5	90

[Save](#)

Basic | Call Routing | Calling Line ID | **SDP Options** | Signaling and Header Manipulation | Timers | Key Press Event | Profile Information

Allow Peer To Use Multiple Active M-Lines: No Yes

Allow Using UPDATE For Early Media Renegotiation: No Yes

Avoid Signaling Hold to the Peer: No Yes

AVP Only Peer: No Yes

Enable Mitel Proprietary SDP: No Yes

Force sending SDP in initial Invite message: No Yes

Force sending SDP in initial Invite - Early Answer: No Yes

- In the **Signaling and Header Manipulation** tab, enter the **Trunk Group Display** field to identify that this trunk group is for Mitel Revolution.
- Click **Save**.
- Go to the **Trunk Attributes** form.
- Select the available **Trunk Service Number**. For example, 2.
- Click **Change**.

9. Enter specific values in the following fields:

Field	Value
Class of Service	Enter a class of service available in the Class of Service Options form.
Trunk Label	Enter a name for the Mitel Revolution trunk.

The screenshot shows a 'Change' form with the following fields and values:

- Class of Service: 1
- Class of Restriction: 1
- Baud Rate: 300
- Intercept Number: 1
- Non-dial In Trunks Answer Point - Day: (empty)
- Non-dial In Trunks Answer Point - Night 1: (empty)
- Non-dial In Trunks Answer Point - Night 2: (empty)
- Dial In Trunks Incoming Digit Modification - Absorb: (empty)
- Dial In Trunks Incoming Digit Modification - Insert: (empty)
- Dial In Trunks Answer Point: (empty)
- Dial In Trunks Insert Forwarding Information: No Yes
- Trunk Label: Revolution

Buttons for 'Save' and 'Cancel' are visible at the bottom right.

10. Click **Save**.

Note: Use the default values for the other fields in the form.

Similarly, create another SIP Peer Profile for the secondary Revolution server.

Identifying the Class of Service

Perform the following steps to identify the class of service used for Mitel Revolution:

1. Go to the **Class of Service Options** form.
2. Select the **Class of service** you have used in the **Trunk Attributes** form for the **Trunk Service Number** assigned to Mitel Revolution.
3. Click **Change**.
4. Add **Comments** to identify that this class of service is used for Mitel Revolution.
5. Click **Save**.

Note: Use the default values for the other fields in the form.

Configuring an Outgoing SIP Trunk

Perform the following steps to route the SIP trunk group to Mitel Revolution:

1. To set the routing medium for the SIP peer profile:
 - a. Go to the **ARS Routes** form.
 - b. Select the available **Route Number**.

- c. Click **Change**.
- d. Enter values for the following fields:

Field	Value
Routing Medium	Select SIP Trunk from the drop-down list.
SIP Peer Profile	Select the SIP peer profile name that you have created for Mitel Revolution.
Route Type	Select the routing type from the drop-down list. By default, select PSTN Access Via DPNSS for SIP Trunk.

Change

ARS Routes

Route Number	3
Routing Medium	<input type="text" value="SIP Trunk"/>
Trunk Group Number	<input type="text"/>
SIP Peer Profile	<input type="text"/>
PBX Number / Cluster Element ID	<input type="text"/>
COR Group Number	1
Digit Modification Number	1
Digits Before Outpulsing	<input type="text"/>
Route Type	<input type="text"/>
Compression	Off

- e. Click **Save**.

Similarly, create an ARS route for the secondary Revolution server.

Change

ARS Routes

Route Number	4
Routing Medium	<input type="text" value="SIP Trunk"/>
Trunk Group Number	<input type="text"/>
SIP Peer Profile	<input type="text"/>
PBX Number / Cluster Element ID	<input type="text"/>
COR Group Number	1
Digit Modification Number	1
Digits Before Outpulsing	<input type="text"/>
Route Type	<input type="text"/>
Compression	Off

- 1. To set the route list:

- f. Go to the **ARS Route List** form.
- g. Select any list, for example, select list 1.
- h. Enter **1st Choice route** as 3 (primary Server) and **2nd Choice route** as 4 (secondary server).
- i. Click **Save**.

Change

List Number	1st Choice route	2nd Choice route	2nd Choice Warning Tone	3rd Choice route	3rd Choice Warning Tone
1			No		No

1. Enter the number of records to change:

2. Define the Change Range Programming Pattern:

Field Name	Change action	Value to change	Increment by
List Number	-	1	-
1st Choice route	<input type="button" value="Change to"/>	<input type="text" value="3"/>	<input type="text"/>
2nd Choice route	<input type="button" value="Change to"/>	<input type="text" value="4"/>	<input type="text"/>
2nd Choice Warning Tone	<input type="button" value="Change to"/>	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
3rd Choice route	<input type="button" value="Change to"/>	<input type="text"/>	<input type="text"/>
3rd Choice Warning Tone	<input type="button" value="Change to"/>	<input checked="" type="radio"/> No <input type="radio"/> Yes	-

2. To set the dial number to monitor the outgoing SIP trunk:

- a. Go to the **ARS Digits Dialed** form.
- a. Enter specific values in the following fields:

Field	Value
Digits Dialed	Enter the partial or complete external numbers dialed to access subsequent routing information. For example, 1234.
Number of Digits to Follow	Select the number of digits expected to follow the partial number specified under Digits Dialed. For example, 2.
Termination Type	Select Route from the drop-down list if the calls to the specified digits are to go directly to a route.
Termination Number	Enter the Route Number you have selected in the ARS Routes form. For example, 3.

Add

Add Range Programming - ARS Digits Dialed Help

This form allows you to add one or more records.

1. Enter the number of records to add:

2. Define the Add Range Programming Pattern:

Field Name	Value to Add	Increment by
Digits Dialed	<input style="width: 100px;" type="text" value="1234"/>	<input style="width: 100px;" type="text"/>
Number of Digits to Follow	<input style="width: 100px;" type="text" value="2"/>	-
Termination Type	<input style="width: 100px;" type="text" value="Route"/>	-
Termination Number	<input style="width: 100px;" type="text" value="3"/>	<input style="width: 100px;" type="text"/>

Preview
Save
Cancel

- b. Click **Save**.

Note: Use the default values for the other fields in the form.

- 3. To set the dial number to monitor the outgoing SIP trunk with Route list:
 - a. Go to the **ARS Digits Dialed** form.
 - b. Enter specific values in the following fields:

Field	Value
Digits Dialed	Enter the partial or complete external number dialed to access subsequent routing information, for example, 1234.
Number of Digits to Follow	Select the number of digits expected to follow the partial number specified under Digits Dialed, for example, 2.
Termination Type	Select List from the drop-down menu if calls to the specified digits go directly to a route.
Termination Number	Enter the Route List you have selected in the ARS Routes List form, for example, 1.

Change

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

Digits Dialed	Number of Digits to Follow	Termination Type	Termination Number
12	Unknown	Route	44

1. Enter the number of records to change:

2. Define the Change Range Programming Pattern:

Field Name	Change action	Value to change	Increment by
Digits Dialed	<input type="text" value="Change to"/> ▾	<input style="width: 100px;" type="text" value="1234"/>	<input style="width: 50px;" type="text"/>
Number of Digits to Follow	<input type="text" value="Change to"/> ▾	<input style="width: 50px;" type="text" value="2"/> ▾	-
Termination Type	<input type="text" value="Change to"/> ▾	<input style="width: 50px;" type="text" value="List"/> ▾	-
Termination Number	<input type="text" value="Change to"/> ▾	<input style="width: 100px;" type="text" value="1"/>	<input style="width: 50px;" type="text"/>

c. Click Save.

Note: Use default values for other fields in the form.

Configuring Mass Audio Notification

As of MiVoice Business Release 9.1, it is possible to set Multicast Address for Notifications to Mitel IP Phones.

Perform the following steps to set Multicast Address for Notifications on the MiVoice Business System Administration tool:

1. Go to **Voice Network > Mass Audio Notification**.
2. Enter the **Multicast Address** and **Multicast Port** number.

Add

Add Range Programming - *Mass Audio Notification* Help

This form allows you to add one or more records.

1. Enter the number of records to add:

2. Define the Add Range Programming Pattern:

Field Name	Value to Add	Increment by
Zone ID	<input type="text" value="1"/>	<input type="text"/>
Multicast Address	<input type="text" value="234.0.0.1"/>	-
Multicast Port	<input type="text" value="232"/>	<input type="text"/>
Comment	<input type="text"/>	-

Preview Save Cancel

3. Click **Save**.

Note: Multicast is not supported via MBG for teleworkers.

Multicast address notification when base DN and Hot Desk users are in different network zones

In different network time zone, the multicast address is accepted only by registering DN in case of hot desk user on which it configured on.

Note:

Hot desk user network zone is not taken into consideration, and it always depends on network zone where this hot desk user configured.

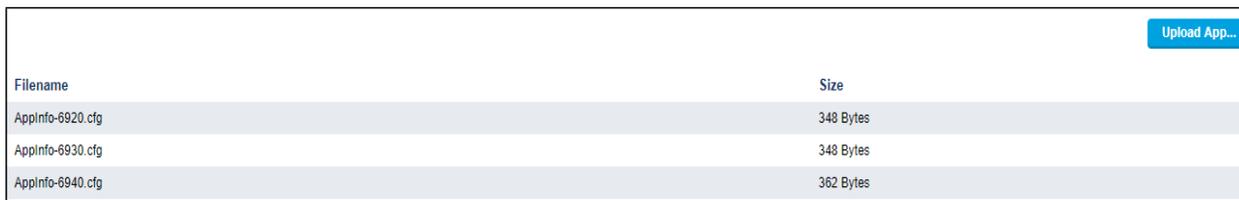
MiNET XML Configuration

Perform the following steps on the MiVoice Business System Administration tool for XML configuration:

1. Create the 69xx.cfg files using a text editor, for each model you must create one .cfg file and file name must be AppInfo-<phonemodel>.cfg Ex : AppInfo-6920.cfg , AppInfo-6930.cfg , AppInfo-6940.cfg.
2. Use the following XML configuration parameters to create the file:

```
xml application post list:<revolution server IP>,<Secondary revolution server IP>
```

3. Once we have the files created, go to **Phone Applications Update** and upload the 69xx .cfg file.



Filename	Size
AppInfo-6920.cfg	348 Bytes
AppInfo-6930.cfg	348 Bytes
AppInfo-6940.cfg	362 Bytes

After successful configuration, the 6800/ 6900 SIP phones are listed under the Endpoints section on Mitel Revolution.

Note: XML Notifications are not supported on 68xx and 69xx sets that are configured as Teleworker phones.

4. Go to **Mitel Revolution > Configuration > Endpoints**.



Mitel	Active	Mitel6940 - 1000	@Mitel:08000FBBBC02	All	192.168.10.7	✓	⚙️
-------	--------	------------------	---------------------	-----	--------------	---	----

The listed endpoint can be selected for notification.

Creating a Page Group

Perform the following steps to create a page group and add members to the group:

1. Ensure that Class of Service and interconnect restrictions allow the paging and paged parties to connect.
2. Go to the **Page Groups** form.
3. Enter values for the following fields:

Field	Value
Page Group	Enter the number of the Page Group. For example, 1002.
Local-only DN	By default, this field is disabled. Do not change the selection.
Page Group Name	System-generated, protected field. Contains the name associated with the page group directory number in the Telephone Directory form.

4. Click **Save**.
5. Select the page group you created and click **Add Member**.
6. Enter values for the following fields:

Field	Value
Number	Enter the local directory numbers that are members of the page group. A directory number can be a member of more than one-page group, and the directory number can be placed in a page group even if the COS options for Group Page - Allow and Group Page - Accept are disabled. For example, add extensions of 53xx 0r 69xx phones.
Default	Select Yes to Indicate this page group is the directory number's default or prime page group.

Name	System-generated, protected field. Contains the name associated with the member directory number in the Telephone Directory form.
-------------	--

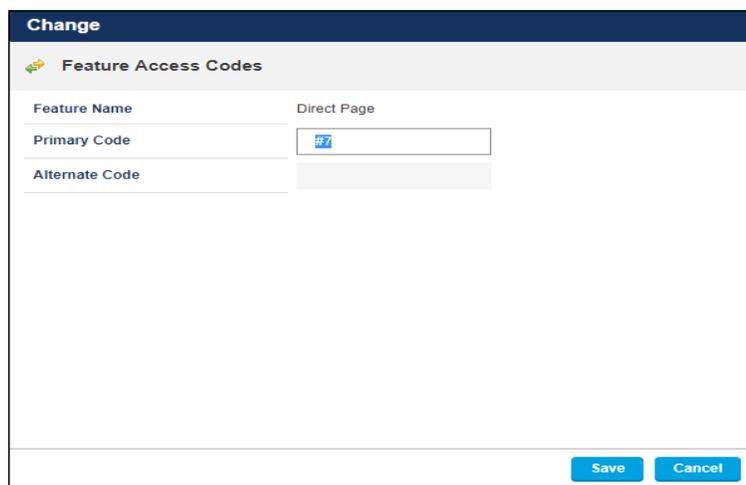
7. In the **Class of Service Options** form, configure the following:
 - To allow a user to initiate a Group Page, select **Group Page Allow**. A user does not need to be a member of a Page Group to initiate a Group Page.
 - To allow a user to receive Group Pages, select **Group Page Accept**.
8. Assign a Direct Page code in the **Feature Access Codes** form for the new page group created.

Adding Feature Access Code

Perform the following steps to add access codes to the **Direct Page** feature to page another telephone over its built-in speaker:

1. Go to the **Feature Access Code** form.
2. Select the **Direct Page** feature.
3. Click **Change**.
4. Add a **Primary Code** number.

Note: Do not enter codes that contain a pound key (#).



The screenshot shows a 'Change' dialog box titled 'Feature Access Codes'. It contains three input fields: 'Feature Name' (set to 'Direct Page'), 'Primary Code' (with a text box containing '77'), and 'Alternate Code' (with an empty text box). At the bottom right, there are 'Save' and 'Cancel' buttons.

5. Click **Save**.

Note: Use the default values for the other fields in the form.

Configure Mitel 53xx Devices to Work with Revolution

For configuring Mitel 53xx devices to work with Revolution, you must install Revolution on the devices, activate the licenses, and then use MiVoice Business System Administration Tool to enable the device to poll the Revolution server for receiving notifications.

Installing Revolution and Activating Licenses on the Device

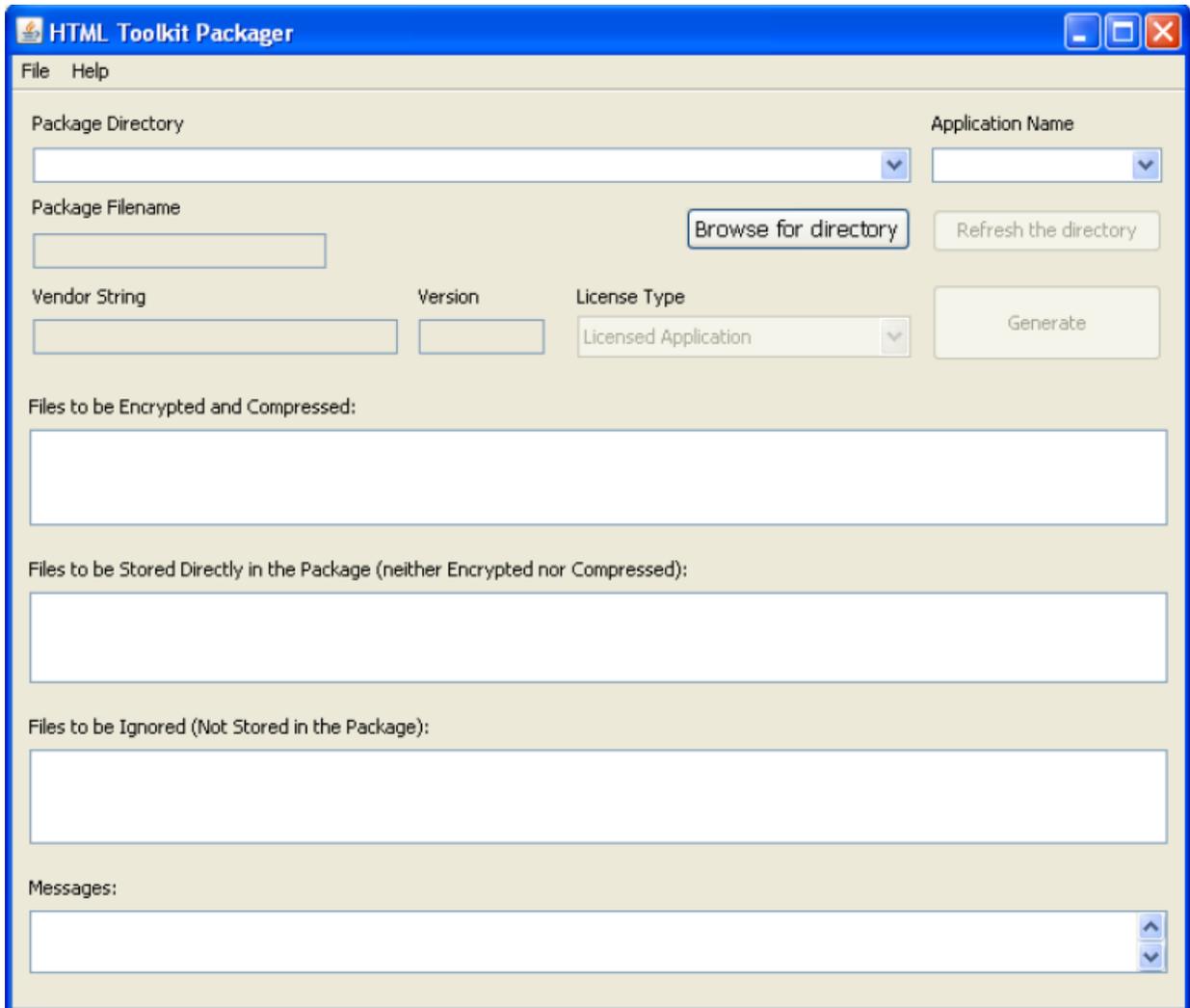
Follow this procedure to set up your Mitel 53xx devices to work with Revolution 5320(e), 5330(e), 5340(e), 5360.

1. Download the application source files from the server where Revolution is installed which is at C:\Program Files(x86)\Syn-Apps\ShoreTelNotifier\Mitel53xx\PhoneApps.zip
 1. Unzip the archive file.
 2. Run the PowerShell script update_app_host.
 3. At the prompt, enter the IP address of your Revolution server.

This script updates the various files to include your IP address in preparation for the next steps.

This procedure uses the HTML App Packager, which is part of the Mitel HTML Toolkit.

2. Install the HTML Tool Kit. During installation, the installer will prompt for an installation directory; it is recommended that you use the suggested directory.
Once HTML Tool Kit is installed, under the start menu, in the Mitel entry (unless the location was changed) a new entry **HTML Toolkit** containing **HTML App Packager** is displayed.
3. Launch the **HTML App Packager**.
To package the applications using a Licensed key, and to launch the HTML App Packager, navigate to **Start > All Programs > Mitel > Html Toolkit > HTML App Packager**.



4. Click **Choose a file or directory** and select the path based on the phone model (C:\Program Files (x86)\Syn-Apps\ShoreTelNotifier\Mitel53xx\PhoneApps\5320-5330-5340). Select **Generate** to produce an SPX file in the same directory.

MiVoice Business Configuration

The screenshot shows the 'HTML Toolkit Packager' application window. The interface includes a menu bar with 'File' and 'Help'. The main area is divided into several sections:

- Package Directory:** A dropdown menu showing the path 'C:\Program Files (x86)\Syn-Apps\ShoreTelNotifier\Mitel53xx\PhoneApps\5320-5330-5340'.
- Application Name:** A dropdown menu showing 'Rev_5320-30-40'.
- Package Filename:** A text input field containing 'Rev_5320-30-40.spx'.
- Vendor String:** An empty text input field.
- Version:** An empty text input field.
- License Type:** A dropdown menu showing 'Licensed Application'.
- Buttons:** 'Browse for directory', 'Refresh the directory', and 'Generate'.
- Files to be Encrypted and Compressed:** A list containing 'deardisplay.htm', 'revolution.js', 'revolution_high.htm', 'revolution_low.htm', and 'style.css'.
- Files to be Stored Directly in the Package (neither Encrypted nor Compressed):** An empty list.
- Files to be Ignored (Not Stored in the Package):** An empty list.
- Messages:** A log window showing the following messages:

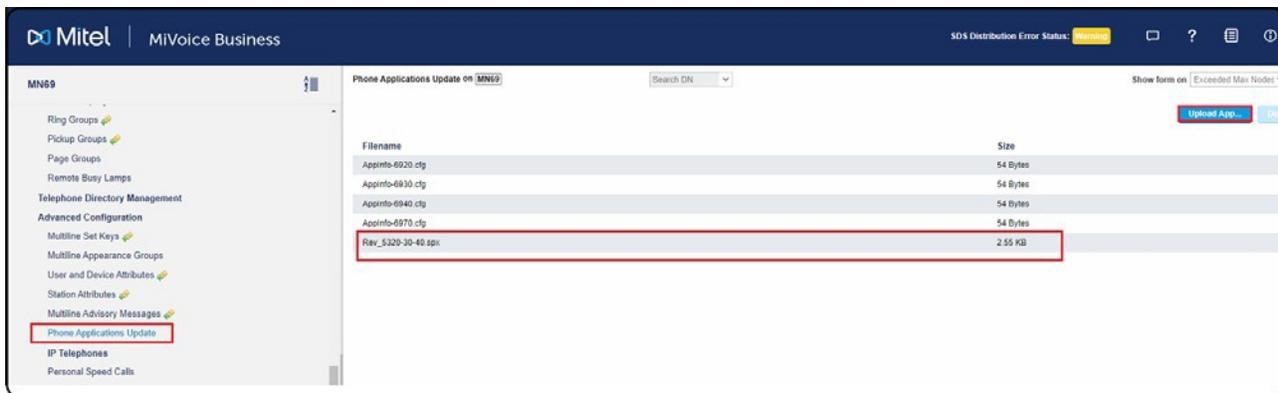
```
2021-09-15 15:56:09 Generating the package file.
2021-09-15 15:56:09 Saving package info file C:/Program Files (x86)/Syn-Apps/Shore
TelNotifier/Mitel53xx/PhoneApps/5320-5330-5340/spx.package
2021-09-15 15:56:10 The package file Rev_5320-30-40.spx was written.
```

Note: If you are running the application for the first time, you will be prompted for a password. Enter the text Mitel Licensed Applications in the password field and click **OK** to activate the license.

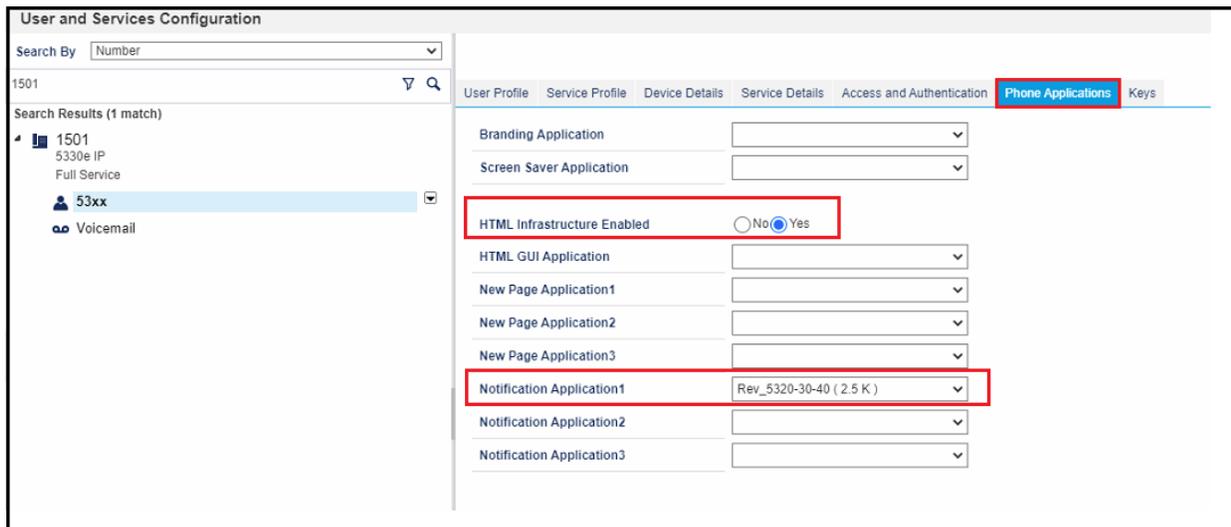


Configuration From MiVoice Business System Administration Tool

1. Go to **User and Devices > Advanced Configuration > Phone Applications Update**.
 1. Select **Upload App**.
 2. Select **Choose File** and navigate to the SPX file (for example, Rev-5320-30-40.spx) that you generated.
 3. Repeat for each model group.



2. Go to **User and Devices > User and Services Configuration**.
 1. Locate and select the device you want to update.
 2. Select the **Phone Applications** tab.
 3. For **HTML Infrastructure Enabled**, select **Yes**.
 4. For **Notification Application1**, select your package
 5. Select **Save Changes**. Your device will now be able to poll the Revolution server to receive notifications.
 6. Repeat for any other devices.



Limitations

Clear notification feature does not work with the notification type text and images in 53xx phones.

Mitel Revolution Configuration

This section describes how to configure Mitel Revolution with the MiVoice Business System Administration tool.

Installation and Configuration

Refer to the following topics in the Mitel Revolution Web Help to install Mitel Revolution on Windows Server 2008, 2012/2012r2, 2016 or 2019 and configure it with your Mitel system.

- [System Requirements](#)
- [Installation](#)
- [Configure Your Mitel Phone System](#)
- [Mitel SIP Trunk](#)

SIP Activator Configuration

This section describes the Mitel Revolution configurations for MiVoice Business.

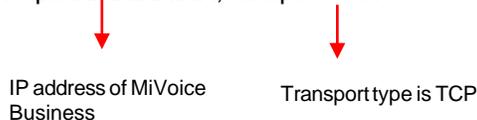
Note: When setting up with GCP Flex, MiVoice Business FQDN must be used in place of IP address.

Configuring SIP Registration

Perform the following steps to configure the SIP registration:

1. Go to **Configuration > Phone Systems > SIP**.
2. Click **NEW** and select **NEW SIP REGISTRATION**.
The **SIP REGISTRATION GENERAL SETTINGS** form opens.
3. Enter a descriptive **Name** that identifies this SIP line registration.
4. In the **Registrar URI** field, enter the registrar server URI in the format **sip:domain.com**.

For example: sip:XX.XX.XX.XX;transport=TCP

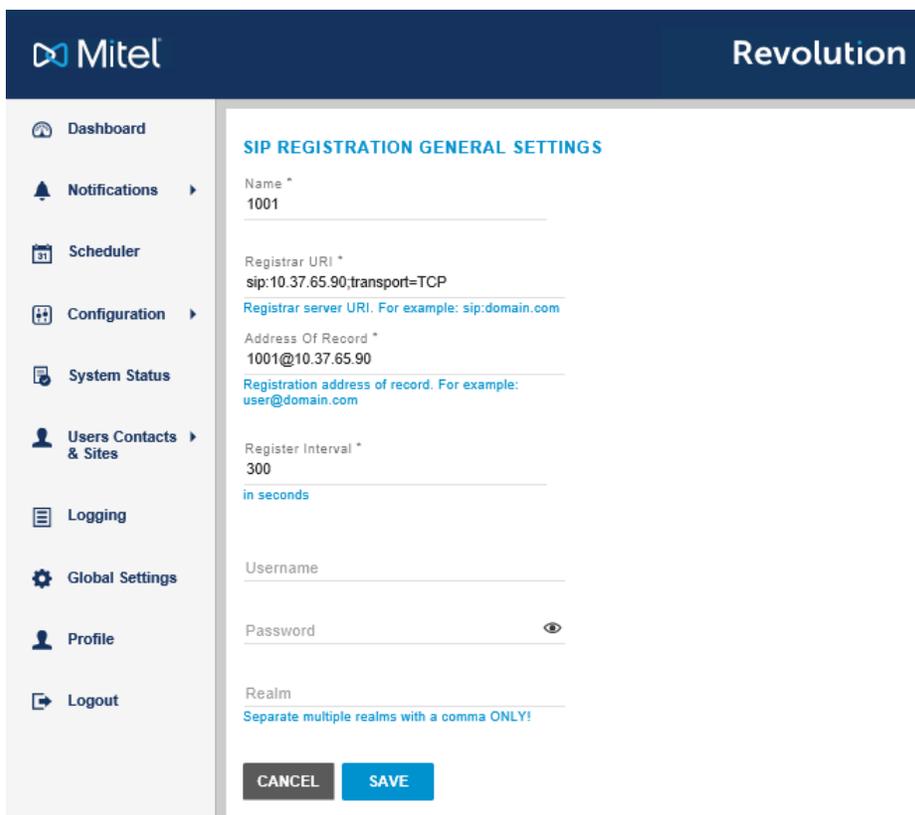

IP address of MiVoice Business Transport type is TCP

5. In the **Address of Record** field, enter the registration address of record in the format **user@domain.com**, where user is the SIP extension number defined in the **Users and Services Configuration** form of the MiVoice Business System Administration tool.

For example, 1001@XX.XX.XX.XX



6. Enter the **Registration Interval** according to the guidelines defined in MiVoice Business System Administration tool.
7. Enter the **Username** and **Password** from MiVoice Business System Administration tool.
8. Click **Save**.
9. Click **Settings** and select the **Disable Reinvites** check box.
10. Click **Save**.



For more details about SIP registration, see **Generic SIP registration** section in the [Mitel Revolution web help](#).

Authenticating the SIP Lines

Perform the following steps to authenticate the SIP lines:

1. Go to **Configuration > Phone Systems > SIP**.
2. Click **Settings**.
3. Leave the **Inbound Digest Realm** field blank.
4. In the **Inbound Username** field, enter the Mitel Business System Administration tool username.
5. In the **Inbound Password** field, enter the Mitel Business System Administration tool password.
6. In the **Settings** page, enter values for the following fields:

Field	Value
Pin Timeout Seconds	This is the length of time you want to allow a user to enter a security code before the system times out and ends the call. When the time limit is met, an audio message is played letting the user know that the system has timed out and the call will end.
STUN Server and Outbound Proxy Servers	Leave these fields blank. They do not apply to Mitel system setup.
SIP Port	You need to update this field only if your Mitel server is not using the default port.
Trusted Servers	Leave this field blank to accept connections from any IP. Your company security policies dictate whether you need to list specific servers.
Transport Layer Security	<p>Your company security policies dictate whether you need to enable TLS for transferring data over your network. (TLS is the successor to SSL.)</p> <p>When Enable TLS is selected, Mitel Revolution checks the servers, certificate store for a certificate with the friendly name of SIPACTIVATOR. This can be a CA-signed certificate that your company has created and installed. If the friendly name is SIPACTIVATOR, it will be used. If Mitel Revolution cannot find a certification with the friendly name of SIPACTIVATOR, a self-signed certificate is created. You can replace this certificate, if necessary. Just make sure its friendly name is SIPACTIVATOR. The certificate is used to encrypt data from Mitel Revolution going across your network.</p>
Disable Reinvites	<p>Select the check box to enable this option.</p> <p>By default, this field is disabled.</p> <p>If you are using a Cloud PBX system (for example, BroadSoft), you must perform the following SIP configuration:</p> <ul style="list-style-type: none"> • STUN Server - The STUN server allows clients to determine the public IP address, the type of NAT (Network Address Translators) they are using, and the Internet side port associated by the NAT with a local port. This information is used to set up UDP communication between the client (Mitel Revolution) and the VoIP provider (for example, BroadSoft) to establish a call. <p>The type of firewall you have set up determines whether you need to configure STUN server. Consult your network administrator.</p> <ul style="list-style-type: none"> • Outbound Proxy Servers - Consult your Cloud PBX vendor documentation to determine whether an Outbound Proxy Server is required for Mitel Revolution to register with your Cloud PBX system.

7. Click **Save**.

Mitel Revolution

- Dashboard
- Notifications
- Scheduler
- Configuration**
- System Status
- Users Contacts & Sites
- Logging
- Global Settings
- Help

SIP

First, configure your SIP trunk. Then configure your SIP Registration. Next, create SIP lines (within the range defined in your SIP trunk) and assign them as triggers to send notifications by dialing the line number. Set up audio notifications through a SIP call to any SIP-compliant IP devices such as analog phones, generic SIP phones, and external phone numbers.

ACTIONS SETTINGS

General Settings

STUN Server _____

Outbound Proxy Servers
Enter servers as sip:IP or sip:FQDN

SIP Port
5060 _____

Security Code Timeout
15
Hangup after this many seconds if the code is not entered.

Enable TLS
If enabled, TLS listening port is SIP Port + 1 (default 5061)

Quick Record
If enabled for Record activations, skip prompts and activate on hangup

Outbound Default Caller ID Number
000 _____

Outbound Default Caller ID Name
SIP Notifier _____

Outbound Default From URI _____

Inbound Digest Realm _____

Inbound Username _____

Inbound Password
.....
Clients (e.g. PBX systems) will be prompted for the above credentials when connecting. If blank, auth will not be required.

Trusted Servers
Only accept requests from these IPs. Leave empty to accept connections from any IP.

Disable Reinvites
Check this if using a cloud PBX or other system that does not support REINVITES

Enable Low Level Debug Messages
Only enable this if instructed to do so by support

Show advanced settings

SAVE

Creating SIP Lines

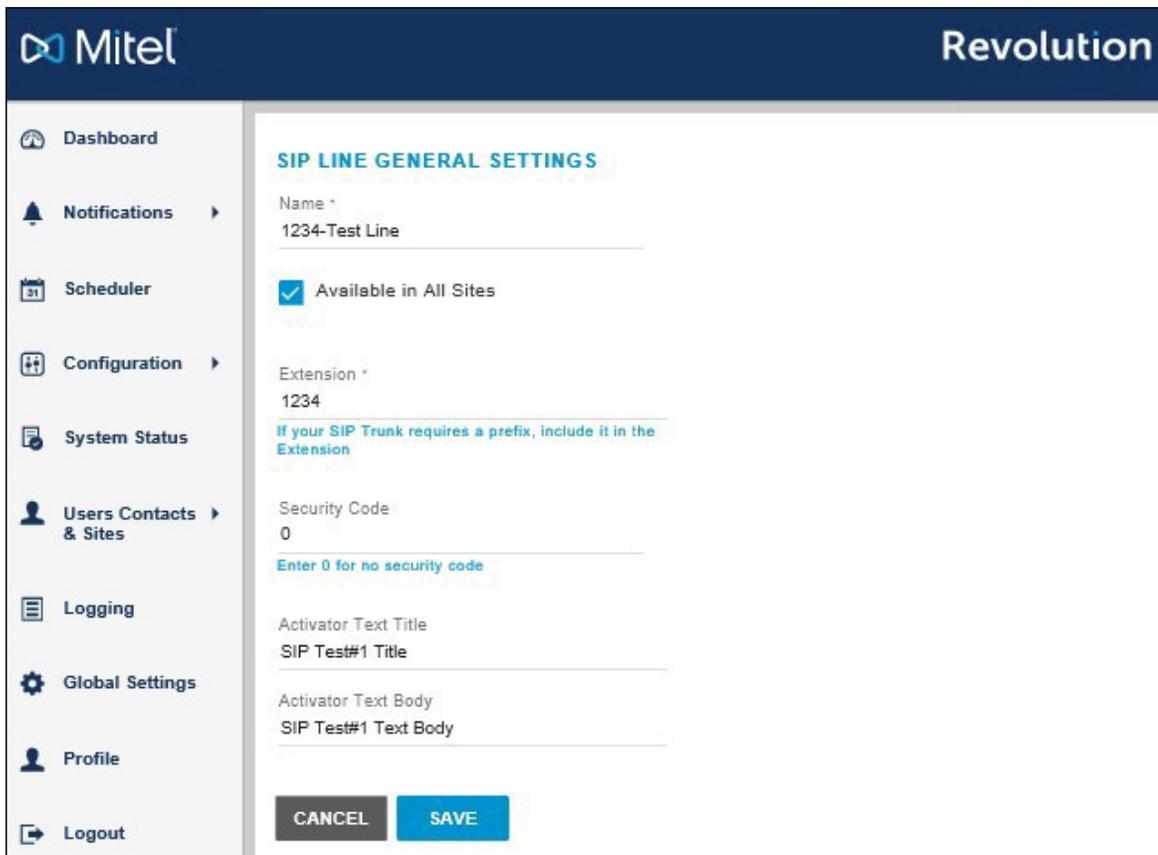
Note: SIP lines are created for the extension range that is defined in the **Digits Dialed** field of the **ARS Digits Dialed** form.

Perform the following steps to create a new SIP line:

1. Go to **Configuration > Phone Systems > SIP**.
2. Click **NEW** and select **NEW SIP LINE**.
3. Enter a descriptive **Name** for the SIP line.

For extension, enter the SIP number extension range defined in the MiVoice Business System Administration tool. For example, 1234.

4. (Optional) Enter a numeric security code of your choosing. Security codes contain at least 3 digits. Leave the field with the default value 0 if you do not want to have a security code. Security codes can be repeated.
5. (Optional) Enter **Activator Text Title** and **Activator Text Body** text that can be used with, or in place of, a notification title and body text.
6. Click **Save**.



SIP lines entered here can be assigned to notifications as actions that trigger sending the notifications.

For more details about SIP lines, see **Create SIP lines** section in the [Mitel Revolution web help](#).

Creating SIP Endpoints

Note: When setting up with GCP Flex, MiVoice Business FQDN must be used to SIP URI.

Perform the following steps to create a SIP endpoint for SIP notifier:

1. Go to **Configuration > Phone Systems > SIP**.
2. Click **NEW > NEW SIP ENDPOINT**.

The **SIP ENDPOINT GENERAL SETTINGS** page opens.

3. Enter a descriptive **Name** that will help your users know the endpoint to which they are assigning a notification. This name is displayed on the Endpoints page and in the **Manage Notifications > Endpoint & Contact Selection** section.
4. Enter the **SIP_URI** in the following format:

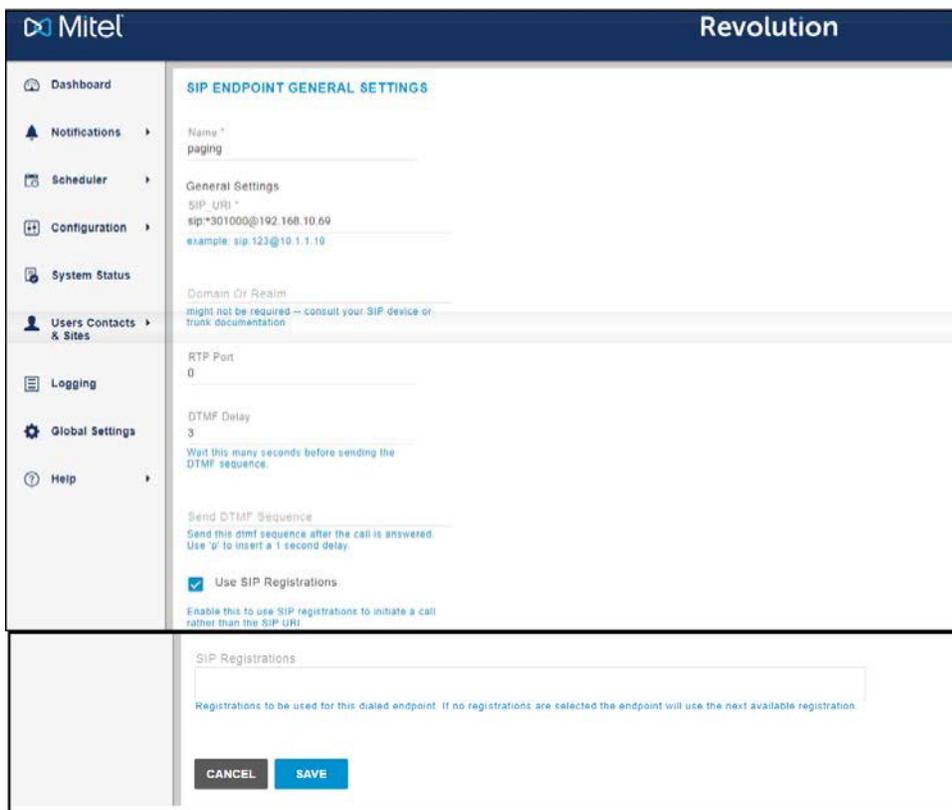
sip:SIP line number@IP address of MiVoice Business System Administration tool

Note: All SIP endpoints must include TCP as the transport type. You can prefix the direct page access code defined in the MiVoice Business System Administration tool before the SIP line number.

For example, if 1002 is the page group number and **7 is the Direct Page primary code, the corresponding SIP endpoint is *sip:**71002@XXX.X.X.X;transport=TCP*.

5. Click **Save**.

Note: By default, the **User SIP Registrations** checkbox is selected, users must not clear this check box.



For more details about creating endpoints, see **SIP Endpoints** section in the [Mitel Revolution web help](#).

Maximum Concurrent SIP Notifiers

The Mitel Revolution is tested for up to 25 SIP Notifier end points in use at a time.

Note: A recorded message is not played until all the end points have answered.

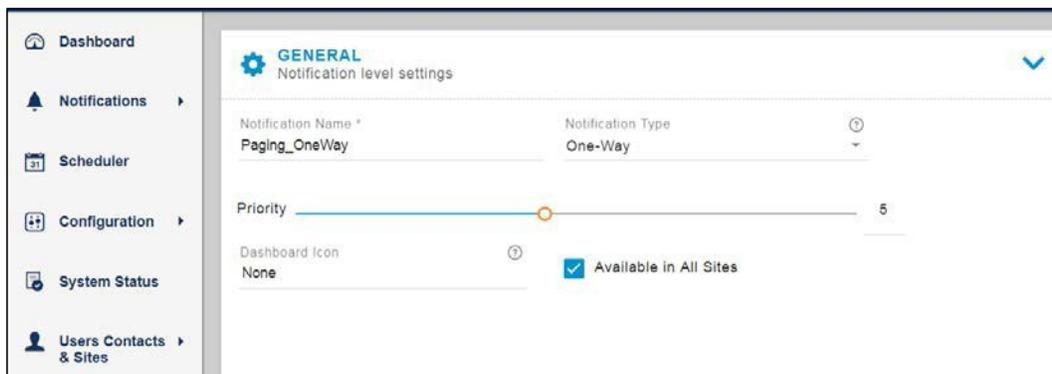
Creating Notifications

This section describes the procedure how to create a trigger for a one-way audio notification.

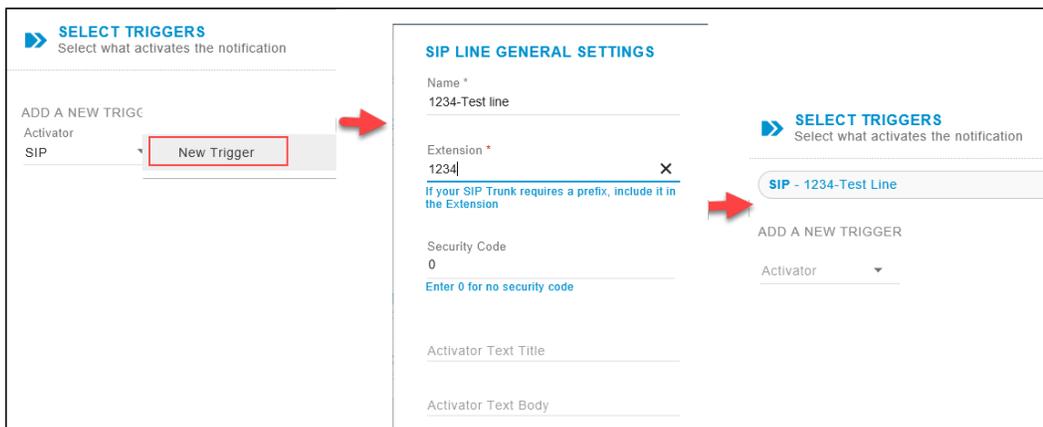
For an overview of how the system works and other types of notifications, see **Notifications Basics** and **Manage Notifications** sections in the [Mitel Revolution web help](#).

Perform the following steps to trigger a one-way audio notification:

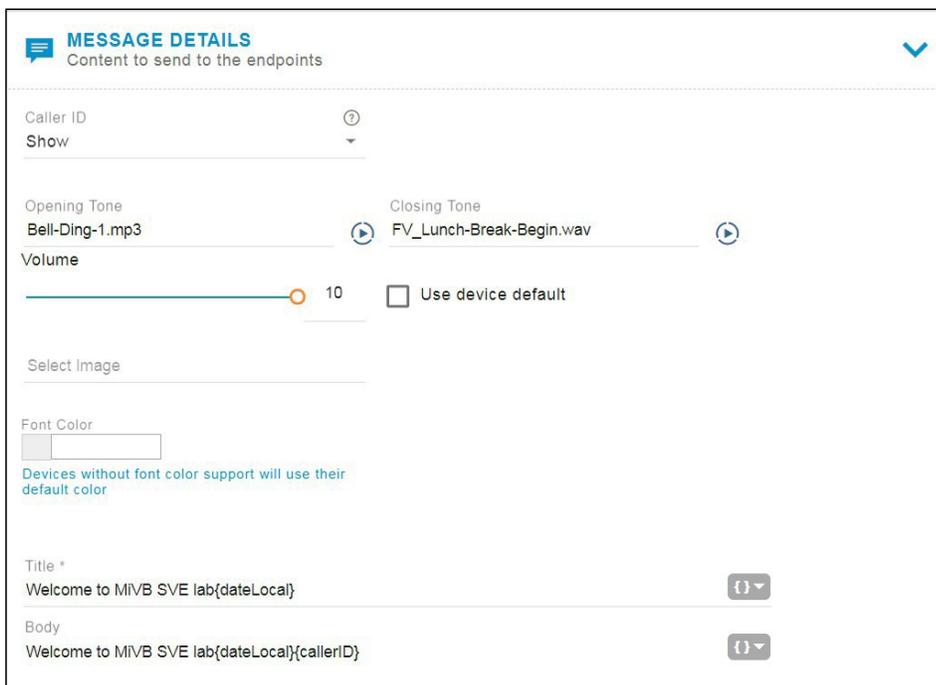
1. Go to **Notifications > Manage**.
2. Click **NEW NOTIFICATION**.
3. Enter the following **GENERAL** settings:
 - a. **Notification Name:** Enter a descriptive name for the notification.
 - b. **Notification Type:** Select **One-way** from the drop-down list.
 - c. **Priority:** You can assign a priority level of 1-10.
 - d. **Dashboard Icon:** Select an image from the drop-down list.



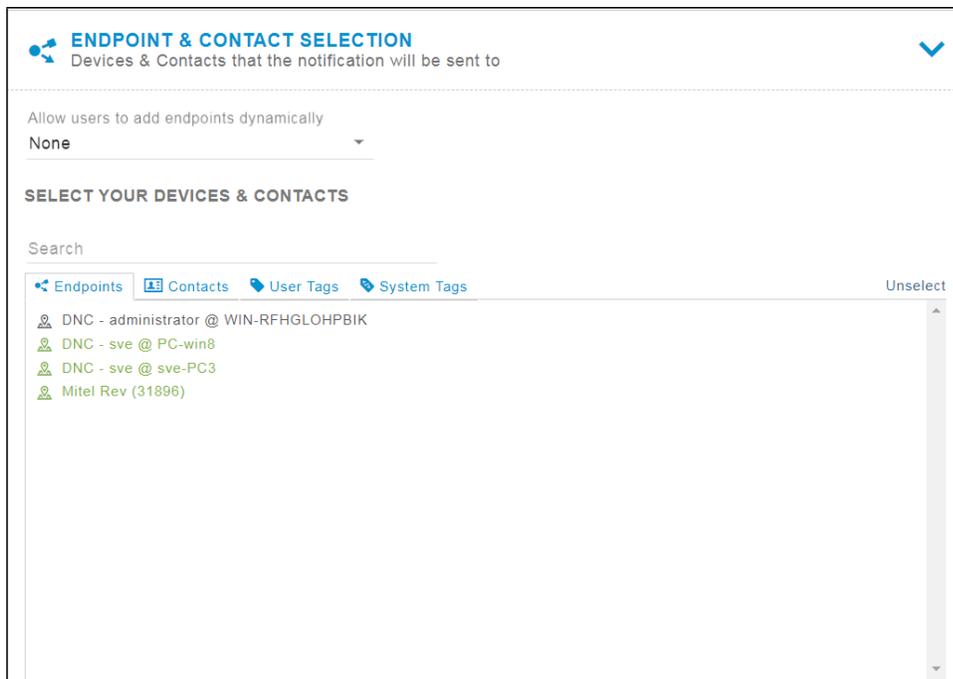
4. Click the **TRIGGERS** setting and enter the following values:
 - a. From the **Activator** drop-down list, select **SIP**.
 - b. From the **Trigger** drop-down list, select **New Trigger**.
 - c. Enter a descriptive **Name** for the SIP line.
 - d. Add the **Extension** number that you defined in the MiVoice Business System Administration tool.



5. Click the **MESSAGE DETAILS** and enter the following values:
 - a. From the **caller ID** drop-down list, select **Show**.
 - b. Select the **Opening Tone** and **Closing Tone** from the respective drop-down lists.
 - c. Set the **Volume** for the notification. This volume overrides the volume set on the endpoint receiving the notification, such as a phone or speaker.
 - d. (Optional) From the **Stored Images** drop-down list, select an image to be send with the notification. You can repeat this step to select an additional image, if needed.
 - e. Choose **Font Color** for the notification fonts.
 - f. Type the **Title** and **Body** names and add required variables from the respective drop-down lists.



In the **ENDPOINT & CONTACT SELECTION**, start typing the keyword in the **Search** field and select the endpoint where the notification must be sent. You can select individual endpoints, contacts, or user tags.



6. Click **Save**.

Cascading Notification

Following section describes the procedure how to create a Cascading notification

Note: We can include multiple Notification for Cascading. Action type notification can be stored audio only. The Initial Trigger notification can be any notification.

Initiate an announcement to a MVB page group using a tone, then a pre-recorded message through the PBX and at the end of the alert, initiate a second alert which would consist of the initiation of a page to a PBX page group with a pre-recorded message.

1. Create Stored Audio Notification with Paging/Internal Endpoints without Trigger (For example, Cascade1).
2. Create a Stored Audio/Oneway paging Notification with Trigger (For example, Cascade 2).
3. Open Cascade Notification and Select Action.
4. Action Type → Send Notification, Send Time → On End, Delay (0), Notification → select Cascade1 (you may include multiple notifications).

ACTIONS
Configure buttons for responses and actions, as well as triggering other notifications

Action 1 

Action Type	Send Time	Delay
Send Notification <input type="text"/>	On End <input type="text"/>	1 <input type="text"/>

Minutes after send time to start the notification.

Notification *

Cascade1

Action 2 

Action Type	Send Time	Delay
Send Notification <input type="text"/>	On End <input type="text"/>	0 <input type="text"/>

Minutes after send time to start the notification.

Notification *

Cascade2

Adding SNMP Activator for Emergency Call

Note:

If the customer site is configured to use an NG911 vendor for emergency call routing, the Mitel Revolution activator for emergency call notification must be the NG911 vendor service (for example, through an inbound email notification from the NG911 provider to Mitel Revolution, or through an API-based integration between the NG911 vendor and Mitel Revolution), and not a 911 activation from the PBX.

Perform the following steps to add an SNMP activator for an emergency call:

1. Go to **Configuration > Phone Systems > Dial Monitoring**.
2. Click **NEW** and select **NEW MITEL DIAL MONITOR**.

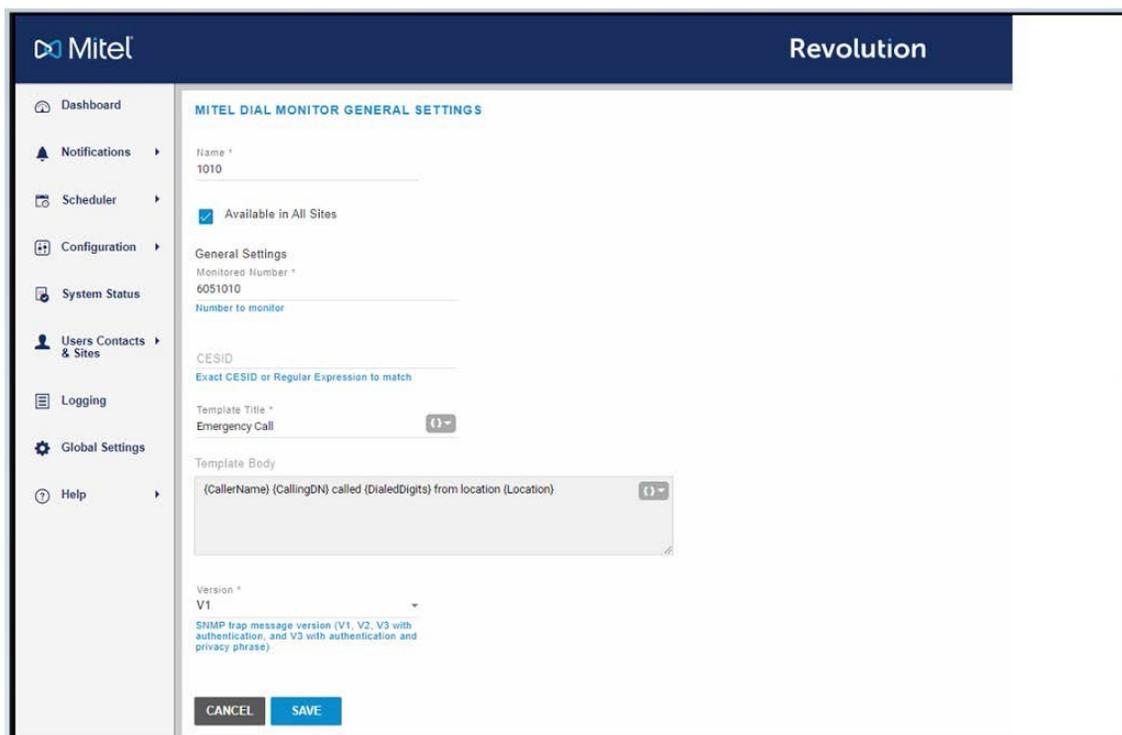
The **MITEL DIAL MONITOR GENERAL SETTINGS** page opens.

3. Enter a **Name** for the emergency number.
4. For **Monitored Number**, enter the number to be configured in your MiVoice Business System Administration tool.
5. Enter the **CESID** (Customer Emergency Services ID) assigned to the number you entered in the **Number to monitor** field.

The CESID value is defined for the number in the **CESID Assignment** form of the MiVoice Business System Administration tool.

6. Click **Save**.

Note: When a user dials the emergency number, the MiVoice Business sends out a trap to the Mitel Revolution interface and notification is initiated based on notification settings on Mitel Revolution. The Stored Message and Text & Image notification types are supported for emergency notifications.



CESID

Mitel Revolution supports Wildcard and Regular Expression for CESID for Trigger Notification. Empty value of CESID accepts all CESID.

12 is a regular expression just like any other. It would mean any string that contains 12. The field is always doing a regular expression match. The correct way to do an exact regular expression match would be to put `^12$` in the field.

`^12` matches any string that starts 12, `12$` matches a string that ends with 12, and `^12$` exact string match (starts and ends with 12).

- `abc*` matches a string that has ab followed by zero or more c
- `abc+` matches a string that has ab followed by one or more c
- `abc?` matches a string that has ab followed by zero or one c
- `abc{2}` matches a string that has ab followed by 2 c
- `abc{2,}` matches a string that has ab followed by 2 or more c
- `abc{2,5}` matches a string that has ab followed by 2 up to 5 c
- `a(bc)*` matches a string that has a followed by zero or more copies of the sequence bc
- `a(bc){2,5}` matches a string that has a followed by 2 up to 5 copies of the sequence b

Configuring SNMP trap settings

1. Go to **Configuration > Integrations > SNMP trap trigger**.
2. Go to settings tab
 1. Enter the Trap Listening Port number.
 2. In the **SNMP Community String** field, enter the same value as entered in the MiVB Community String.

SNMP TRAP TRIGGER

Activate notifications based on trap messages from SNMP-compliant devices or software.

ACTIONS SETTINGS

General Settings

Trap Listening Port
162

SNMP Community String
MitelRW
SNMP Community for Revolution access to listen for

Import Mitel Directory CSV
Choose File

No file chosen

DEPRECATED telephone directory for MiVoice Business. Please use the import feature in the Configuration->Endpoints Directory tab instead.

Last Import
Number of records and date of Mitel directory import

For more details about the fields in the emergency settings, see **Configure Revolution SNMP Activator** section in the [Mitel Revolution web help](#) and **About Emergency Services** section in the [MiVoice Business help file](#) for emergency number setup details.

Assigning the SNMP Trigger to the Notification

Perform the following steps to create a notification that you want to send and assign Mitel dial monitor triggers to the notification:

1. Go to **Notifications > Manage**.
2. Click **NEW NOTIFICATION**.

3. Enter specific values in the following fields:

Field	Value
General	<p>From the Notification Type drop-down list, select Text and Images or Stored Audio notification type.</p> <p>You can select Text to Speech as this is an emergency notification.</p> <p>To include an opening tone to get the receivers attention, select Stored Audio notification type. Do not select One-Way, Recorded, or Two-Way notification types.</p>
Select Triggers	<p>From the Activator drop-down list, select SNMP and then select the trigger you created.</p>
Message Details	<p>Select the Title and Body variables that you have defined in the Mitel Dial Monitor page for the emergency call. The following table describes about the variables that can be selected while creating a notification.</p>
Endpoint & Contacts	<p>Assign the endpoints and contacts you want the emergency notification to be sent to.</p> <p>If you want the notification to be sent to the Mobile app, add the contacts and select the Mobile check box in the Contact Methods section.</p>

While creating notifications, you can configure the following variables to derive the Caller Name, Number, Location, Department information on the SNMP trap Notification, text message, and so on.

Variable	Description
{SysName}	IP address or host name is configured in the SNMP Configuration form used to identify the system responding to the emergency call.
{SeqNumber}	An incrementing number from 1, used for correlating the retry logs.
{CallType}	Indicates that the call is an emergency call.
{CallingDN}	The DN of the device used to place the emergency call.
{DialedDigits}	The digits that are out pulsed on the outgoing trunk after digit modification is performed.
{RegistrationDN}	Used when an emergency call is placed from a hot desk service.
{CallingPNI}	The Primary Node ID for the caller (if applicable).
{DetectTime}	The date and time (in seconds) when the system initiated the emergency call.
{CesidDigits}	This is the CESID from: the CESID Assignment form (for the Directory Number), L2 to CESID Mapping form (for a device from which the emergency call is placed), Network Zones form (for a zone from which an emergency call was placed), or Default CESID form (for the whole system).
{Location}	Location of the phone as defined in the phone directory imported from

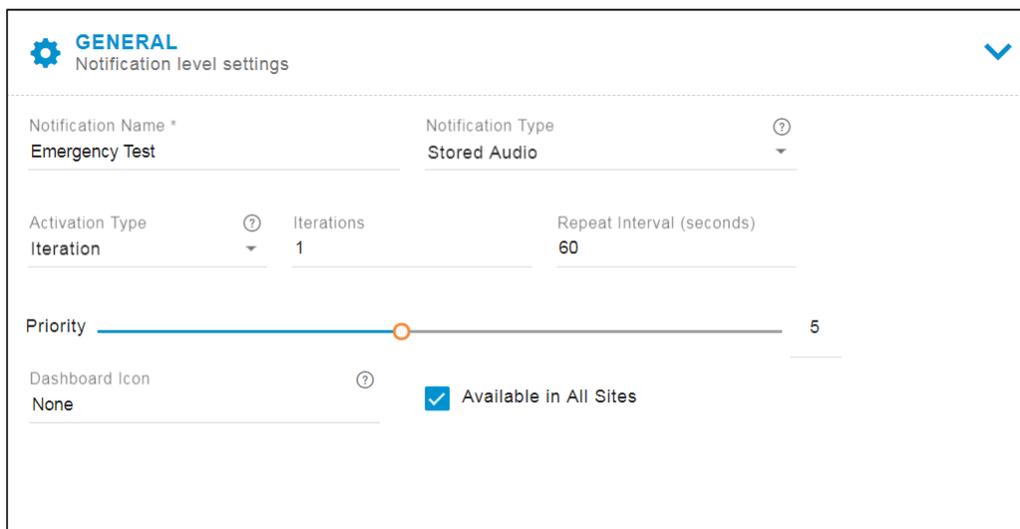
{CallerName}	Mitel. If you are not importing the phone directory, then do not use these variables.
--------------	---

For more details about creating and assigning notifications, see **Notifications Basics** and **Manage Notifications** sections in the [Mitel Revolution web help](#).

Triggering SNMP Emergency Notification

Perform the following steps to trigger an emergency notification:

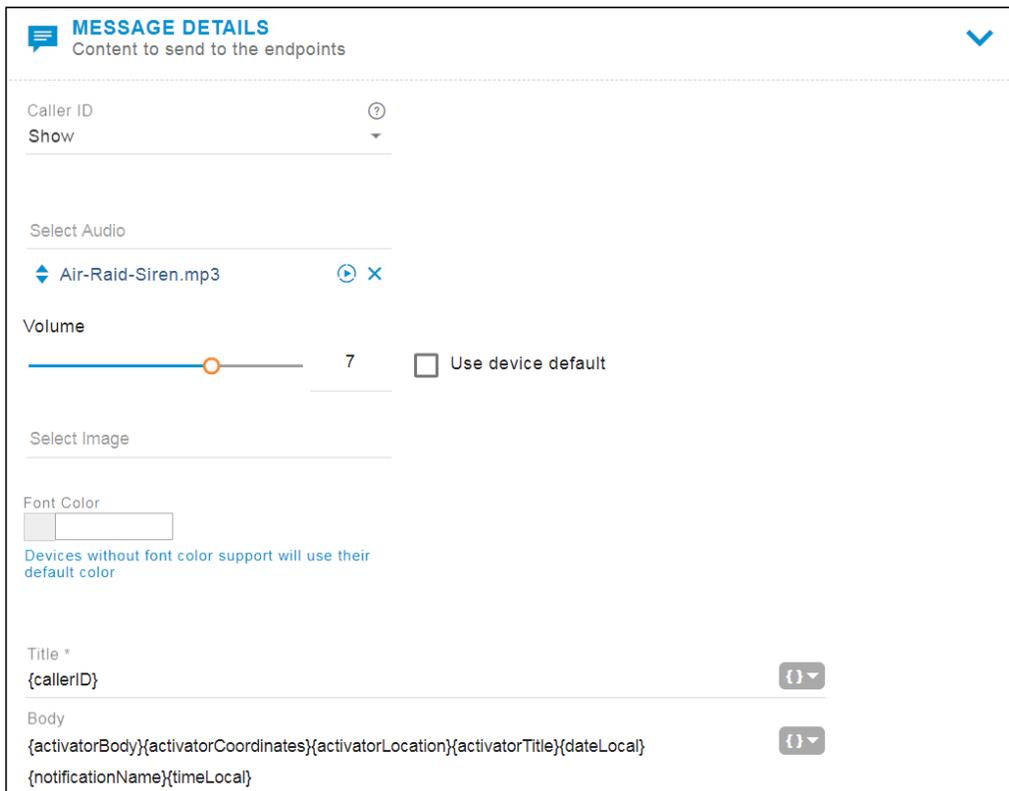
1. Go to **Notifications > Manage**.
2. Click **NEW NOTIFICATION**.
3. Enter the following **GENERAL** setting values:
 - a. **Notification Name**: Enter a descriptive name for the notification.
 - b. **Notification Type**: Select **Stored Audio** from the drop-down list.
 - c. **Activation Type**: Select the activation type from the drop-down list and set the **Repeat Interval** (in seconds) to repeat the sending of the notification.
 - d. **Priority**: You can assign a priority level of 1-10.
 - e. **Dashboard Icon**: Select an image from the drop-down list.



4. Click the **TRIGGERS** setting and enter the following values:
 - a. From the **Activator** drop-down list, select **SNMP**.
 - b. From the **Trigger** drop-down list, select **Emergency**.



5. Click the **MESSAGE DETAILS** and enter the following values:
 - a. From the **caller ID** drop-down list, select **Show**.
 - b. From the **Select Audio** drop-down list, select the **audio** to play.
 - c. Set the volume by adjusting the volume button.
 - d. Choose **Font Color** for the notification.
 - e. Type the **Title** and **Body** names and add the required variables from the respective drop-down lists.



MESSAGE DETAILS
Content to send to the endpoints

Caller ID
Show

Select Audio
Air-Raid-Siren.mp3

Volume
7 Use device default

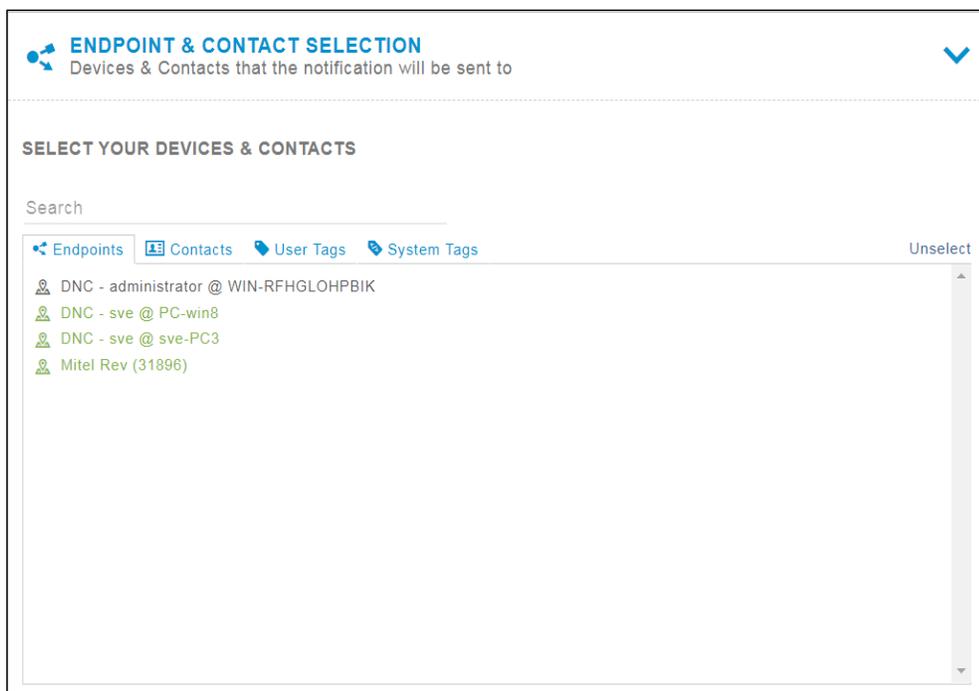
Select Image

Font Color

Title *
{callerID}

Body
{activatorBody}{activatorCoordinates}{activatorLocation}{activatorTitle}{dateLocal}
{notificationName}{timeLocal}

In the **Endpoint & Contact Selection**, start typing the keyword in the **Search** field and select the endpoint where the notification must be sent. You can select individual endpoints, contacts, or user tags.



6. Click **Save**.

Automated Mitel Notifier Import Configuration

Most of the communication between Revolution and your Mitel phone system is configured in your Mitel PBX. Once configured, the supported IP phones automatically register.

This configuration is used to automatically fetch Phone details from MiVoice Business. This auto-import feature in Revolution supports MiNET 69xx. The supported phones are shown under End Points after successful importation from MiVoice Business. To import Unsupported models and SIP Devices, select the **Directory Import** check box in **Settings** tab. Once imported, these can be further used as Notification End points (only Supported Endpoints). For the location details to populate automatically, enable the **Populate** option under **Settings**. All Endpoints including **Location in Directory** tab will be listed in Revolution, except SIP devices that also register with Revolution through XML.

Note: You may also register the phones with Revolution by explicitly pointing to them using the .cfg files.

1. Go to **Configuration > Phone Systems**
2. Select **Mitel**.
3. Select **New > New MiVB Communications Manager**.
4. For Name, enter a value that will help you identify this call manager.
5. For Server, enter the IP address or host name for the MiVoice Business server.

Note: If you have redundant MiVoice Business systems, you must add all servers in a comma-separated list.

6. For Username and Password, enter the credentials for the MiVoice Business Server.

- 🏠 Dashboard
- 🔔 Notifications ▶
- 📅 Scheduler ▶
- ⚙️ Configuration ▶
- 📄 System Status
- 👤 Users Contacts & Sites ▶
- 📄 Logging
- ⚙️ Global Settings
- ? Help ▶

MIVB COMMUNICATIONS MANAGER GENERAL SETTINGS

Name *
MIVB

Server *
192.168.10.69,192.168.10.74

IP Address or hostname for MiVoice Business server

Username *
system

Password *
•••••

CANCEL
SAVE

- 🏠 Dashboard
- 🔔 Notifications ▶
- 📅 Scheduler ▶
- ⚙️ Configuration
- 📄 System Status
- 👤 Users Contacts & Sites ▶
- 📄 Logging
- ⚙️ Global Settings
- ? Help ▶

📞 MITEL 🕒 NEW

Most of the communication between this application and your Mitel phone system is configured in your Mitel communications manager. Once configured, supported IP phones automatically register. Configure phone softkeys here to trigger notifications. Emergency numbers will not activate unless Emergency Number Monitoring is enabled in the settings tab.

- Endpoints
- User Tags
- Priority Groups
- Media
- Floor Plans
- Areas
- Phone Systems ▶
- Other Devices ▶
- Public Alerts ▶
- Integrations ▶
- Email

SETTINGS

Phone Manager ▼

Server(s)	Status
192.168.10.69	● 🔧

Mitel Revolution 03:33:04 PM IST powered by Syn-Apps

NOTIFIERS

CAP Desktop Dialer Email IP Device **Mitel** Poly SIP SMS Stream Webhook

MITEL NEW

Most of the communication between this application and your Mitel phone system is configured in your Mitel communications manager. Once configured, supported IP phones automatically register. In Mitel Activator, configure phone softkeys to trigger notifications. Emergency numbers will not activate unless Emergency Number Monitoring is enable in the setting tab.

ACTIONS **SETTINGS**

MIVB Communications Manager

Name	Server	Status
MIVB	192.168.10.69,192.168.10.74	●

MITEL

Most of the communication between this application and your Mitel phone system is configured in your Mitel communications manager. Once configured, supported IP phones automatically register. Configure phone softkeys here to trigger notifications. Emergency numbers will not activate unless Emergency Number Monitoring is enabled in the settings tab.

ACTIONS **SETTINGS**

MIVB Communications Manager

Name	Server(s)	Status
MIVB	192.168.10.69	●

- NEW CONNECT COMMUNICATIONS MANAGER
- NEW MIVB COMMUNICATIONS MANAGER**
- NEW PHONE SERVICE BACKGROUND STREAM
- NEW PHONE SERVICE DIALER
- NEW PHONE SERVICE TRIGGER

⌚
MITEL

Most of the communication between this application and your Mitel phone system is configured in your Mitel communications manager. Once configured, supported IP phones automatically register. In Mitel Activator, configure phone softkeys to trigger notifications. Emergency numbers will not activate unless Emergency Number Monitoring is enable in the setting tab.

ACTIONS
SETTINGS

Cache Update Interval
5

How often to update the MiVoice Communicator phone cache (in minutes)

Enabling Emergency Number Monitoring

The dial monitor service must be installed on the MiVoice Connect server

Populate Location

Populate endpoint Location from Jack Number (Connect) or Directory Location (MiVB) if available

Call Interrupt Priority Threshold
5

Notification priority must be higher than this value to interrupt an active phone call

Importing Location details to SIP device for XML Registration

Users registered directly with Revolution using XML post will not have their location details updated in their directory. To update the location details of these users, the admin must import their location details using the following steps:

1. Go to **Configuration > EndPoints > DIRECTORY**.

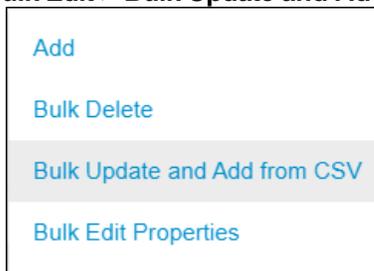
✦
ENDPOINTS

ENDPOINT LIST
ENDPOINT MAP
DIRECTORY

Manage directory names and settings from this page. Only directory entries can be deleted.

Name	Destination Code	Location	Latitude	Longitude	Elevation
Testing	1900				
testing1	1900				
Mitel Mitel6930 - 302-4000620	302-4000620				
FINDHQUSER3 - 400101-1704	400101-1704				
FINDLDVSUSER11 - 400101-1786	400101-1786	12345			
FINDLDVSUSER21 - 400101-1787	400101-1787				
FINDWDVSUSER18 - 400101-1969	400101-1969				

- Click the pencil icon (✎) **Bulk Edit > Bulk Update and Add from CSV.**

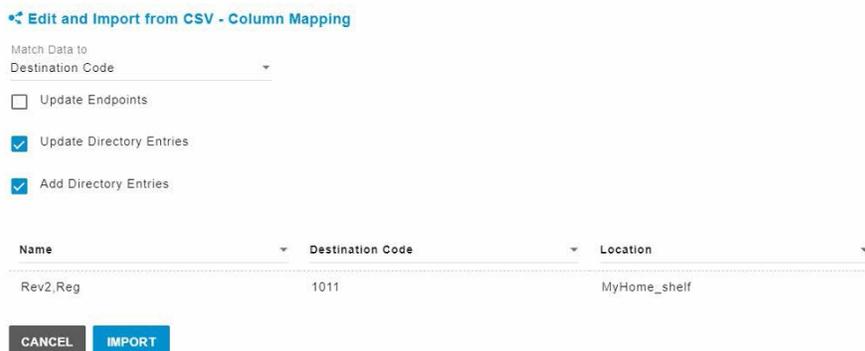


- Click **Choose File** and select the CSV file from your saved location. The **Edit and Import from CSV – Column Mapping** screen is displayed.



- From the **Match Data to** drop-down list, select **Destination Code**. Clear the **Update Endpoints** checkbox.

NOTE: By default, the **Update Endpoints** checkbox is selected.



- Click **Import**.

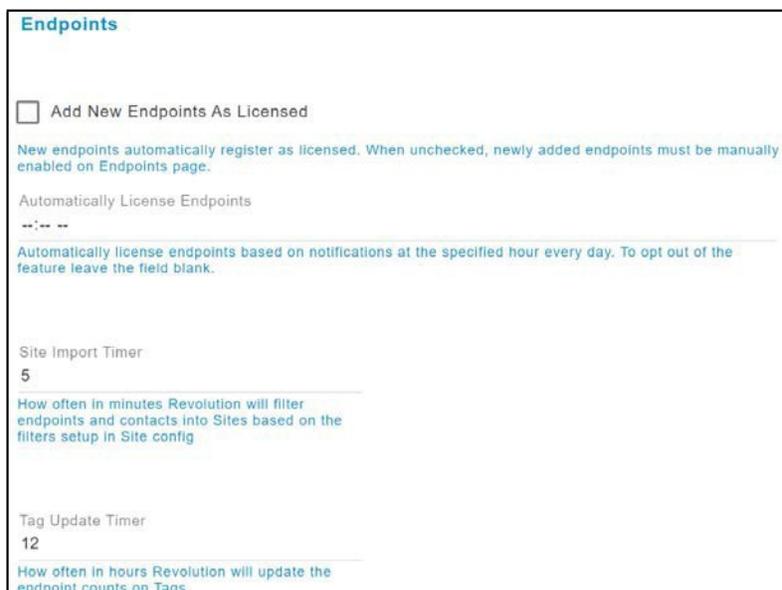
The location details of users registered directly with Revolution using XML post will be updated in their directory.

Licensing or Delicensing of Endpoints

You can choose to license or delicense an endpoint during or after you import that endpoint to Mitel Revolution.

During importing an endpoint

When you import an endpoint, you can license or delicense the endpoint by selecting or deselecting the **Add New Endpoints As Licensed check box** in the **Global Setting** page.



Note: By default this setting is enabled.

To delicense an endpoint, perform the following steps:

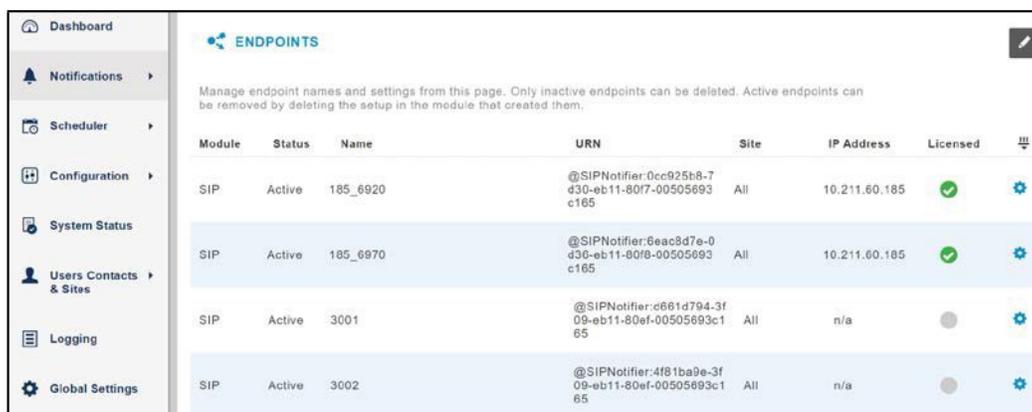
1. Navigate to **Global Setting > Endpoints**.
2. Deselect the **Add New Endpoints as Licensed** check box.
3. Click **Save**.

Note: Once the endpoint license warning message is received, letting you know that you are about to hit your license limit, any additional endpoints added are added as unlicensed even if you have the **Add New Endpoints as Licensed** check box selected. You must then manually license these endpoints.

After importing an endpoint

After you import the endpoint, you can license or delicense the endpoint by doing the following:

1. Navigate to **Configuration > Endpoints**.



2. To license an endpoint, click the  icon associated with that endpoint. After the endpoint is licensed, the icon will change to .

- To delicense the endpoint, click the  icon associated with the endpoint. After the endpoint is delicensed, the icon will change to .
- To search for an extension select  icon.

ENDPOINTS

Manage endpoint names and settings from this page. Only inactive endpoints can be deleted. Active endpoints can be removed by deleting the setup in the module that created them.

Module	Status	Name	URN	Site	IP Address	Licensed	
Web	Inactive	5340.Brad - 1031	@Mitel:08000F30E625	All	n/a		 
Desktop	Inactive	OVC - steptent @ MTL-OVZ3JM2	@OVC:119e10e-cc01-4cb3-b55e-61e3478051a2	All	10.8.49.254		 
Desktop	Inactive	OVC - whitaker @ USHOD-23085	@OVC:964f8b7-21ba-4a8b-8402-57b19ace8b56	All	10.8.48.200		 
SIP	Active	Extension 1011	@SIP:oflier:915c941a-6d83-ea11-9674-0050569c8abf	All	10.40.153.75		

Stream Notifier Configuration

This section describes the Mitel Revolution stream notifier configuration for MiVoice Business.

Perform the following steps to configure the stream notifier:

1. Go to **Configuration > Static > Stream**.
2. Click **NEW STATIC STREAM**.
3. Enter the required Multicast details (same as MIVB Configuration).
4. Click **Save**.

STATIC STREAM GENERAL SETTINGS

Name *
ML Test

IP Address *
239.10.10.13

Port *
24964

If the stream routes through a Paging Relay, the assigned port number must be an even value in the range of 20480-32768

Route To Networks

Provide comma delimited network addresses in CIDR /24 format that you would like Revolution to use to relay static stream audio.

CANCEL **SAVE**

Priority Groups

Priority Groups define a primary server and the failover order of your redundant servers.

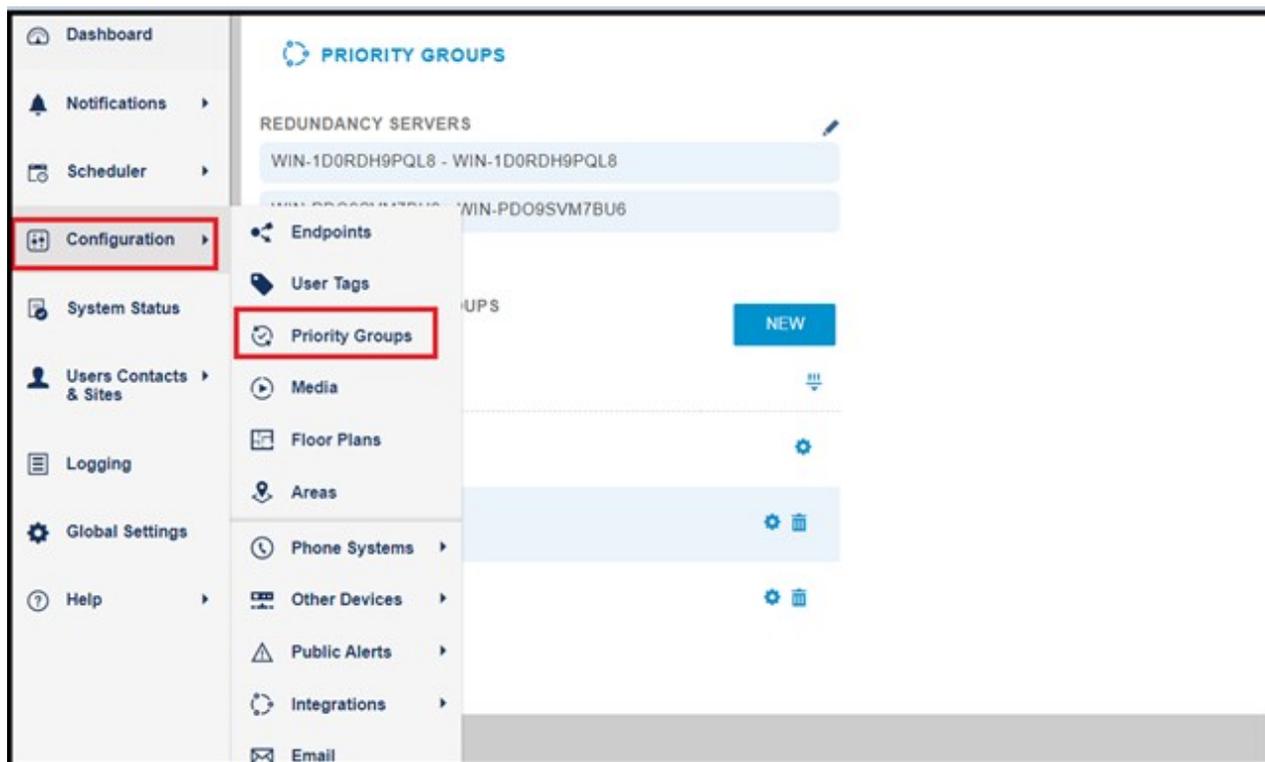
Priority groups are used to:

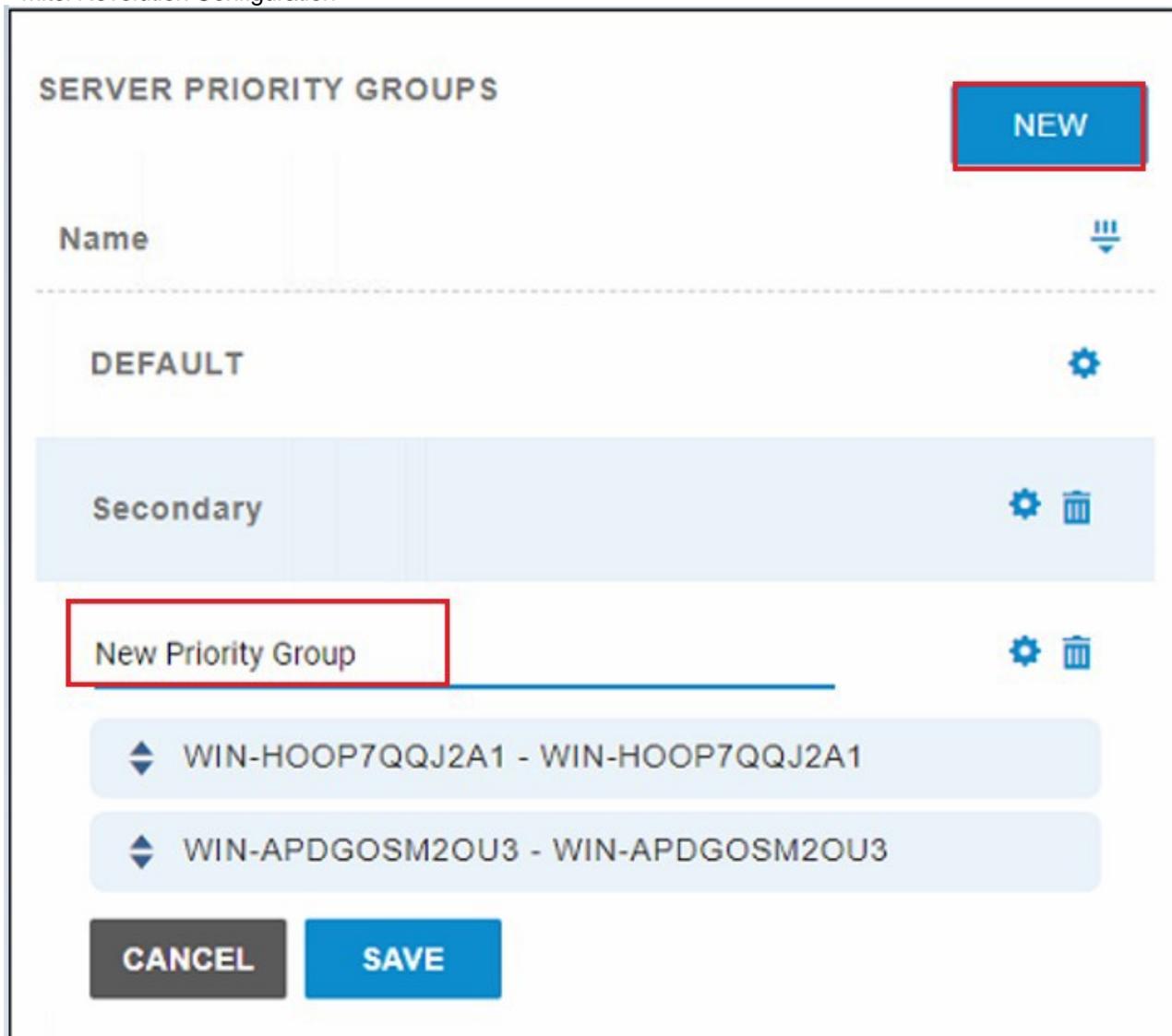
- Define failover order for your redundant servers.
- Define different server priorities such that we can distribute activations to different servers. For example, for Group A you could list your primary server first, while for Group B your secondary could be first.

If we do not create any priority groups, beyond the Default, then Revolution behaves as if it was in an Active/Standby scenario for any failover scenarios and all notifications will go through the highest priority server that is active.

Follow the steps to create the Priority Groups

1. Navigate to **Configuration > Priority Groups**. The Priority Groups page opens.
2. Click **NEW** to create a new Priority Group.
3. Click and drag the server boxes to specify a priority order of your choice, with highest priority server placed first.

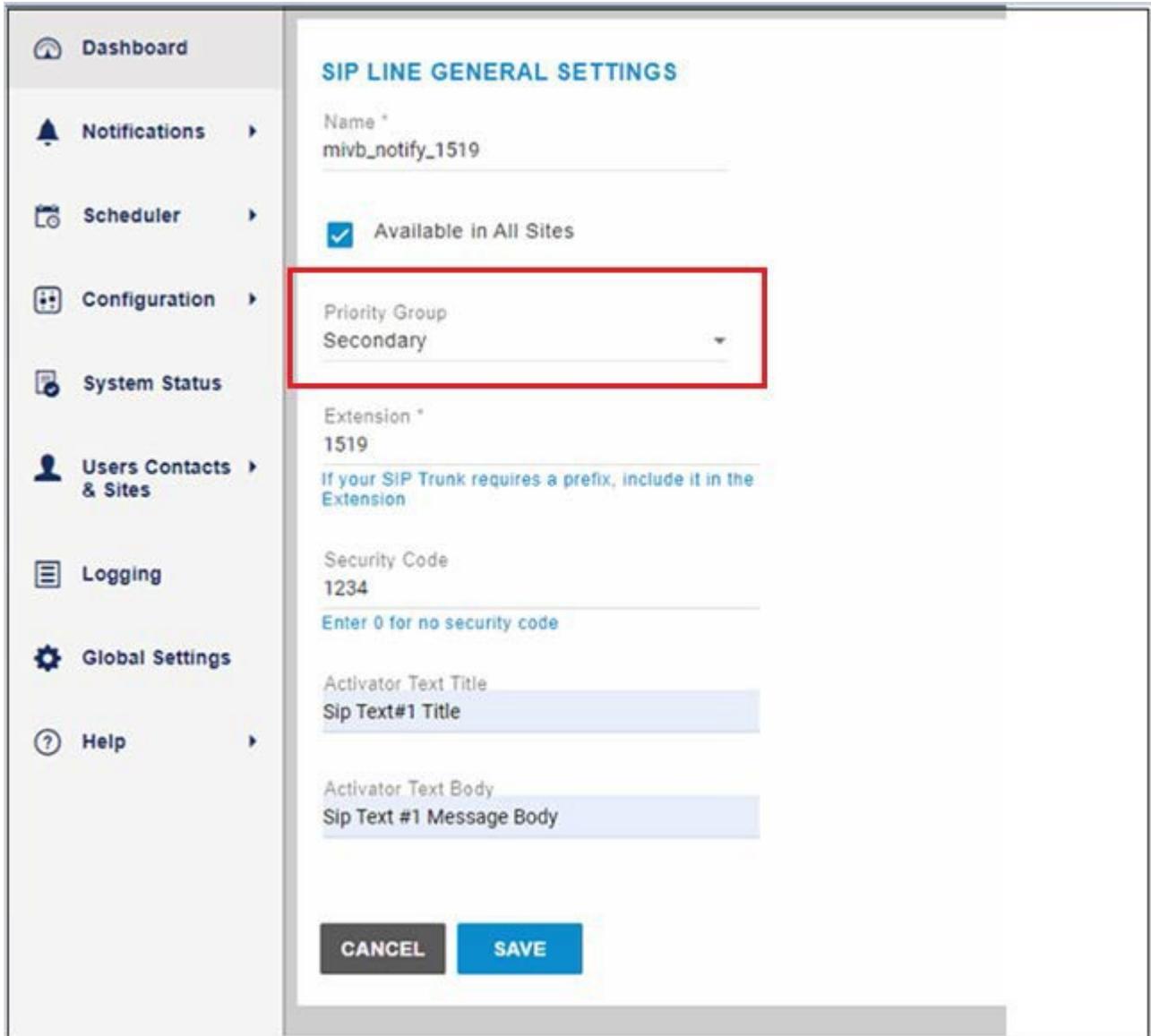




Priority Groups are referenced when trigger activators are created or edited. Priority Groups are selected from the **Priority Groups** field in the configured order. Notification triggers are activated from the first server listed (or lower priority servers in the case of failover) in the **Priority Groups** field.

Priority Group Configuration for Activators

To configure Priority Group for Activators, navigate to **Configuration > Phone Systems > SIP > SIP Line**.



Priority Group Selection for SIP Notification

To access the SIP Registration, navigate to **Configuration > Phone systems > SIP > SIP Registration**.

- Dashboard
- Notifications
- Scheduler
- Configuration
- System Status
- Users Contacts & Sites
- Logging
- Global Settings
- Help

SIP REGISTRATION GENERAL SETTINGS

Name *
1009

Priority Group
Secondary

Registrar URI *
sip:192.168.10.69
Registrar server URI. For example:
sip:domain.com

Address Of Record *
1009@192.168.10.69
Registration address of record. For example:
user@domain.com

Register Interval *
300
in seconds

Username

Password

Realm
Separate multiple realms with a comma ONLY!

CANCEL **SAVE**

Third-Party Troubleshooting

Basic troubleshooting can be done using the various Mitel Revolution log files. You can access these files from Mitel Revolution > Logging.

See the [Mitel Revolution web help](#) > [Logging](#) topic for more information.

In addition, refer to the [Mitel Revolution web help](#) > [Troubleshooting](#) topics.

Mitel Revolution Technical Support

Technicians who have completed Mitel Revolution technical training and certification can open tickets with Mitel Technical Support for further assistance with Mitel Revolution.

Creating tickets for Non-ARID Products

This section describes the procedures to create ticket for a non-ARID product by using the North America IVR and Mitel Miccess Web interface (TechCentral Tracker).

Creating an IVR Ticket (Americas Only)

1. Call the Mitel Revolution Support team at any of the following phone numbers:
 - 800-722-1301 (option 5 - # - 8)
 - 613-592-7849 (option 8)
2. When prompted to enter an ARID (License ID), press # to listen to the list of non-ARID products.
 - Press 3 for **Applications** (Mitel Revolution, Mitel Performance Analytics, Mitel Mass Notification, CT Gateway)
Note: These menu options may change at any time, based on the support status of the product.
3. When prompted, enter the product version number, using the * key for dots and the # key to submit.
Note: To know the version number of your product, log in to TechCentral Tracker to find the list of versions in the drop-down menu.

For example:

If you are using Mitel Revolution R2021.1, to enter this in the IVR you would select “2021*1#” on your keypad.

Creating a Web Ticket

1. Log in to <https://www.mitel.com/login> > **MiAccess** (partner Login) > **TechCentral Tracker**.
2. Click **Create New Service Request**.
3. Enter the **Service Request Details** (Severity, Summary) and **Contact Information**.
4. On the **Product Information** page, select **Select a product**.

The screenshot shows the 'Product Information' tab selected. Under the 'Select a product' radio button, a dropdown menu is open for 'Product Name'. The dropdown list contains the following items: 'Please select an entry', '5624 WiFi Handset', '5634 WiFi Handset', and 'CT Gateway'. Other fields like 'License ID', 'SW Version', 'On-Site Version', 'Platform', and 'Sub-Product' are visible but not filled.

5. In the **Site Information** page, select the site from the drop-down list under **Select Site**.

➤ If the customer site is not listed, please use your company's name

The screenshot shows the 'Site Information' tab selected. The 'Select Site' dropdown menu is set to 'Company Name'. Below it, the following fields are visible: 'Site Name: Company Name', 'Address: Street', 'City: City', 'Zip Code: Unknown', 'State/Province: STATE OR PROVINCE', 'Country: Country', and 'Phone Number: Unknown'.

6. In the **Troubleshooting Notes** page, enter the details of the issue and click **SUBMIT**.

The screenshot shows the 'Troubleshooting Notes' tab selected. The 'Symptoms/Details' text area is empty, and a red message 'Value is required' is visible on the right side. At the bottom, there is a 'Navigation' section with three buttons: 'BACK', 'CANCEL', and 'SUBMIT'. The 'SUBMIT' button is highlighted in blue.

Appendix 1 Mitel Revolution Integration Notes for MiVoice Business

The following table summarizes a list of Integrated features when Mitel Revolution is connected to the MiVoice Business.

Activator Active-Standby – The scenario where PBX can successfully switch to Standby server when the Revolution Active is not responding.

Activator Active-Active – The scenario where PBX can send Activator to both primary and secondary Revolution server as needed.

Notification Active-Standby – The scenario where Revolution can successfully use the Standby server to dispatch notifications when the primary stops responding.

Notification Active-Active – The scenario where both primary and secondary can simultaneously process notifications.

Feature/Activator/Notification	Integration Detail	
Activators		
SIP Activator	Supported through SIP trunks.	
Emergency Call Activator	SNMP traps Note: Supported version is SNMP Version 1.	
SIP Activator (Active-Standby)	MiVoice Business uses route set to fail-over to secondary (fail-over timer configurable in SIP profile) Revolution up on primary failure. Some issues are noticed with the DNS SRV approach.	
Emergency call trigger (Active-Standby)	Supported. MiVoice Business support multiple IPs for SNMP traps.	
SIP Activator (Active-Active)	MiVoice Business sends Activator code to Primary or Secondary Revolution as specified in SIP Profiles and Networks element. A separate network element and SIP profile are required for each Revolution.	
Emergency Call trigger (Active-Active)	Supported. MiVoice Business support multiple IPs. It can be pointed to either Primary or Secondary Revolution at a time.	
Notifications		
SIP Paging Notification	MiNET	Supports 53XX and 69XX.
	SIP	Not supported. (SIP cannot be added as a Page member)
XML Text Display	MiNET	69XX Supports Text. Tested and supported on MiVoice Business Release 9.1 onwards. Note: 6905/10 (MiNET) do not support

		XML. Supported devices include 6920, 6930, 6940, and 6970 (MiNET R1.5+ required for 6970 support). 53XX does not support XML text display.
	SIP	SIP XML is independent of call controller platform. SIP supports XML Text Display.
XML Audio	MiNET	MiNET XML API does not support audio.
	SIP	SIP XML API is independent of the call controller platform. SIP XML API supports two-way Audio (Rx).
XML Notifications	XML Notifications are not supported on 68xx and 69xx sets that are configured as Teleworker phones.	
Multicast	MiNET	Supported from MiVoice Business Release 9.1. MiNET phones do not have an option to drop the stream. They continue to play the stream until the originator disconnects the call. Note: 53XX phones do not support multi-cast streaming.
	SIP	SIP Multicast setting is independent of the call controller platform. SIP supports Multicast streams.
Location details	Supported.	
SIP Paging Notification (Active-Standby)	Supported. Secondary Revolution takes around 5-10s to register with MiVoice Business once the primary goes down.	
XML Notification (Active-Standby)	Secondary Revolution sends XML Notifications when the primary instances are no longer active. Notifications to MiNET phones will indefinitely work if they are added through MiVoice Business. SIP devices (release later than 6.0) support registering with multiple XML servers. XML notifications work as long as the registration with Revolution is active.	
Multicast Notification (Active-Standby)	Supported.	
SIP Paging Notification (Active-Active)	For SIP Active-Active Notifications to work, both Primary and Secondary Revolution should be registered separately on Mitel PBX.	
XML Notification (Active-Active)	Supported. The phones need to be pointed to the respective Revolution to receive the notifications.	
Multicast Notification (Active-Active)	Supported. The phones need to be pointed to the respective Revolution to receive the notifications.	

Appendix

Automated Notifier Import	Supported Endpoints 69xx, 53xx, and Generic SIP.
Manual CSV Directory Import	Supported Endpoints 53xx, 69xx, SIP, and Analog.
HTML Audio	53xx MiNET MiNET 53xx HTML API does not support Audio.
HTML Test/Image Notification	53xx MiNET 53xx phones supports text and image only using the Mitel HTML API (MiNET).
Clearing notifications display after a specified time	By default, the notifications are cleared after a pre-set time duration. Set the duration to delay clearing of notifications beyond the default time duration.
Queuing Notifications	<p>Revolution will queue the notifications for any overlapping endpoints running high priority notifications. In this case, the lower-priority notifications will return a status of "Queued" and will attempt to run only after the high priority notifications complete.</p> <p>Note: This functionality is available only for non-live notification types. Therefore, you cannot use this for one-way, two-way, conference, answer, or listen-in notification types.</p>
XML and priority XML notifications (one way/stored audio/two-way) to devices	When a call is ringing, only the priority XML notifications (stored audio / one-way / two-way) will be sent out.
XML and priority XML notifications (one way/stored audio/two-way) to devices that are in calling state	During a call, both XML and priority XML notifications for one-way and two-way will be sent out. For stored audio, only the priority XML notifications will be sent out.



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