

# 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

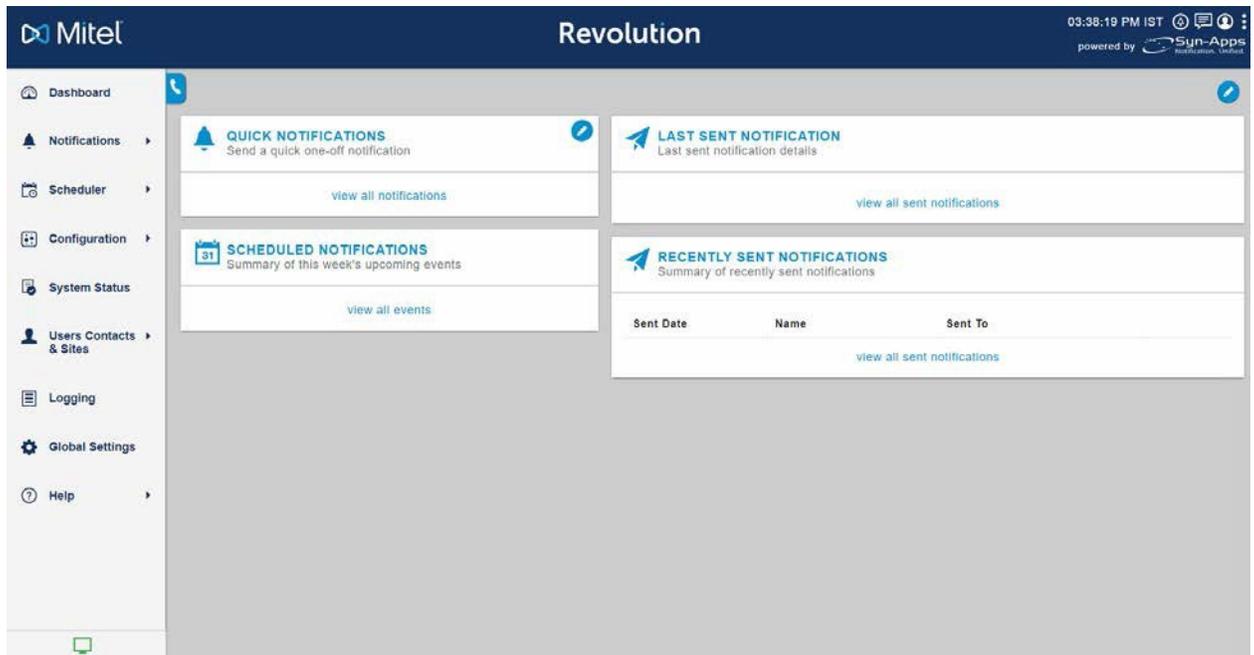
This document describes the configuration of Mitel Revolution for the Mitel MiVoice Business platform.

## 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

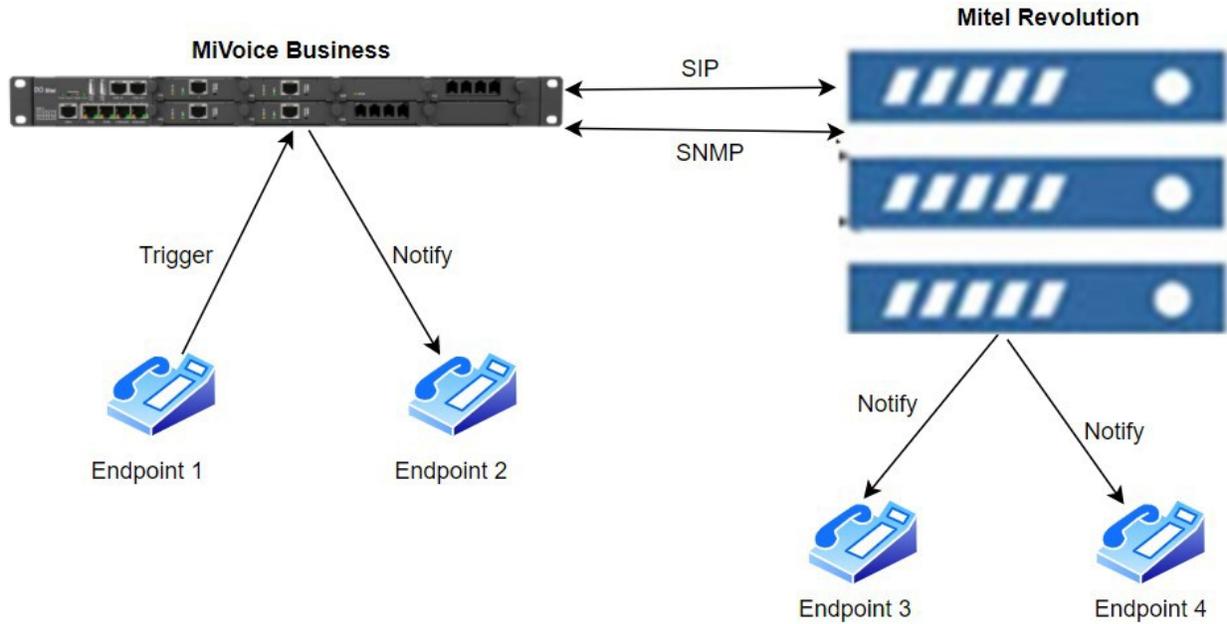
Creating notifications involve the following three main steps:

- Assigning the triggers for sending notifications (SIP Activator/SNMP).
- 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

- [Home](#)
- [System Users](#)
- [Time Zone](#)
- [AMC Sync Status](#)
- [Backup](#)
- [Restore](#)
- [SNMP](#)
- [Mitel Business Analytics](#)
- [MPA Probe](#)
- [Solution Info](#)
- [Log Files](#)

## Configure SNMP

	<b>Status</b>	<input type="text" value="Enable"/>
	<b>SNMPv2c community string for read-only access</b>	<input type="text" value="MitelRO"/>
	<b>SNMPv2c community string for read-write access</b>	<input type="text" value="MitelRW"/>
	<b>SNMPv3 Settings</b>	<a href="#">Configure SNMPv3 Users</a>
	<b>System contact address</b>	<input type="text" value="admin@mitel.com"/>
	<b>System location</b>	<input type="text" value="cloud"/>
	<b>Trap host or address</b>	<input type="text" value="mpa-probe"/>
	<b>SNMPv2c Trap community string</b>	<input type="text" value="public"/>
	<b>SNMPv3 Trap username</b>	<input type="text" value="-----"/>

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 host or address for ER Notification** field, enter the Mitel Revolution IP address.
  - d. 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.
  - e. Click **Save**.

**Shared System Options**

DPNS/QSIG Diversion Enabled Yes

Enable CTI Application Authentication No

**Emergency Response**

Enable ER TRAPS Yes

Trap host or address for ER Notification 192.168.1.10

TRAP Community String MitelRW

Enable access to Server Manager No

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**.

**SNMP Trap Forwarding**

Enable MITEL Traps

Yes

Change Member Clear Member

**Trap Forwarding Attributes**

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 <b>Generic SIP Phone</b> 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 administration interface. The top navigation bar includes the Mitel logo, 'MiVoice Business', and an 'Admin Group Alarm Status: Critical' indicator. The left sidebar lists various system management options, with 'User and Services Configuration' selected. The main content area displays the 'User and Services Configuration' form for a user named 'MR, Revolution'. The 'Service Profile' tab is active, and the 'Number' field is set to '1001' and the 'Device Type' is set to 'Generic SIP Phone'. The search results on the left show a list of users, with 'MR, Revolution' and 'Phone Service (1001)' highlighted.

## 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
<b>Name</b>	Enter an alphanumeric name of up to nine characters for the Mitel Revolution interface. For example, MitelRev.
<b>Type</b>	Select <b>Other</b> from the drop-down list.
<b>FDQN or IP Address</b>	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.

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

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
<b>Routing Medium</b>	Select <b>SIP Trunk</b> from the drop-down list.
<b>SIP Peer Profile</b>	Select the SIP peer profile name that you have created for Mitel Revolution.
<b>Route Type</b>	Select the routing type from the drop-down list. By default, select <b>PSTN Access Via DPNSS</b> 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	Change to ▾	<input style="width: 100px;" type="text" value="3"/>	<input style="width: 100px;" type="text"/>
2nd Choice route	Change to ▾	<input style="width: 100px;" type="text" value="4"/>	<input style="width: 100px;" type="text"/>
2nd Choice Warning Tone	Change to ▾	<input checked="" type="radio"/> No <input type="radio"/> Yes	-
3rd Choice route	Change to ▾	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>
3rd Choice Warning Tone	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
<b>Digits Dialed</b>	Enter the partial or complete external numbers dialed to access subsequent routing information. For example, 1234.
<b>Number of Digits to Follow</b>	Select the number of digits expected to follow the partial number specified under Digits Dialed. For example, 2.
<b>Termination Type</b>	Select <b>Route</b> from the drop-down list if the calls to the specified digits are to go directly to a route.
<b>Termination Number</b>	Enter the <b>Route Number</b> you have selected in the <b>ARS Routes</b> 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
<b>Digits Dialed</b>	Enter the partial or complete external number dialed to access subsequent routing information, for example, 1234.
<b>Number of Digits to Follow</b>	Select the number of digits expected to follow the partial number specified under Digits Dialed, for example, 2.
<b>Termination Type</b>	Select <b>List</b> from the drop-down menu if calls to the specified digits go directly to a route.
<b>Termination Number</b>	Enter the <b>Route List</b> you have selected in the <b>ARS Routes List</b> 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: 50px;" 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: 50px;" 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.

## 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 example Notepad, Notepad++), for each model you must create one .cfg file and file name must be ApplInfo-<phonemodel>.cfg Ex: ApplInfo-6920.cfg , ApplInfo-6930.cfg , ApplInfo-6940.cfg.

2. Use the following XML configuration parameters to create the file:

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

action uri startup:
http://revolution server IP/MitelRegistrar/?dn=$$SIPUSERNAME$$&ip=$$LOCALIP$$

action uri registered:
http://revolution server IP/MitelRegistrar/?dn=$$SIPUSERNAME$$&ip=$$LOCALIP$$

action uri poll:
http://revolution server IP/MitelRegistrar/?dn=$$SIPUSERNAME$$&ip=$$LOCALIP$$

action uri poll interval: 60
```

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

Filename	Size
ApplInfo-6920.cfg	348 Bytes
ApplInfo-6930.cfg	348 Bytes
ApplInfo-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:08000FBBC02	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
<b>Page Group</b>	Enter the number of the Page Group. For example, 1002.
<b>Local-only DN</b>	By default, this field is disabled. Do not change the selection.
<b>Page Group Name</b>	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
<b>Number</b>	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.
<b>Default</b>	Select <b>Yes</b> to Indicate this page group is the directory number's default or prime page group.

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

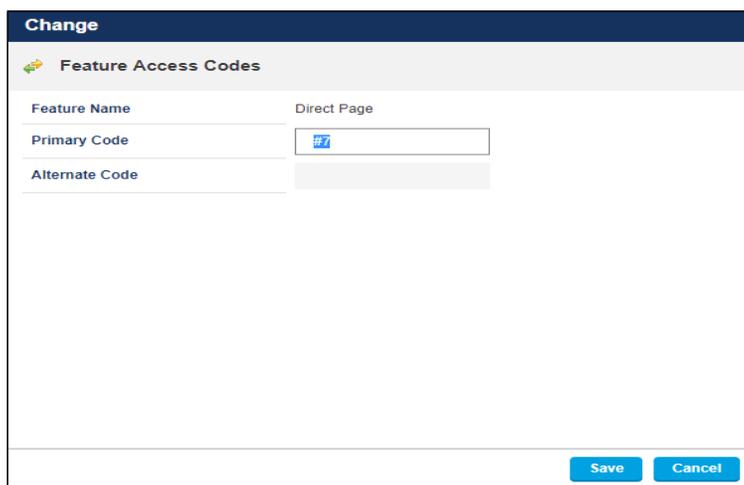
7. In the **Class of Service Options** form, configure the following:
  - To allow a user to initiate a Group Page, select **Group Page Allow**. A user does not need to be a member of a Page Group to initiate a Group Page.
  - To allow a user to receive Group Pages, select **Group Page Accept**.
8. Assign 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 (#).



Change	
Feature Access Codes	
Feature Name	Direct Page
Primary Code	<input type="text" value="#"/>
Alternate Code	<input type="text"/>

Save Cancel

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

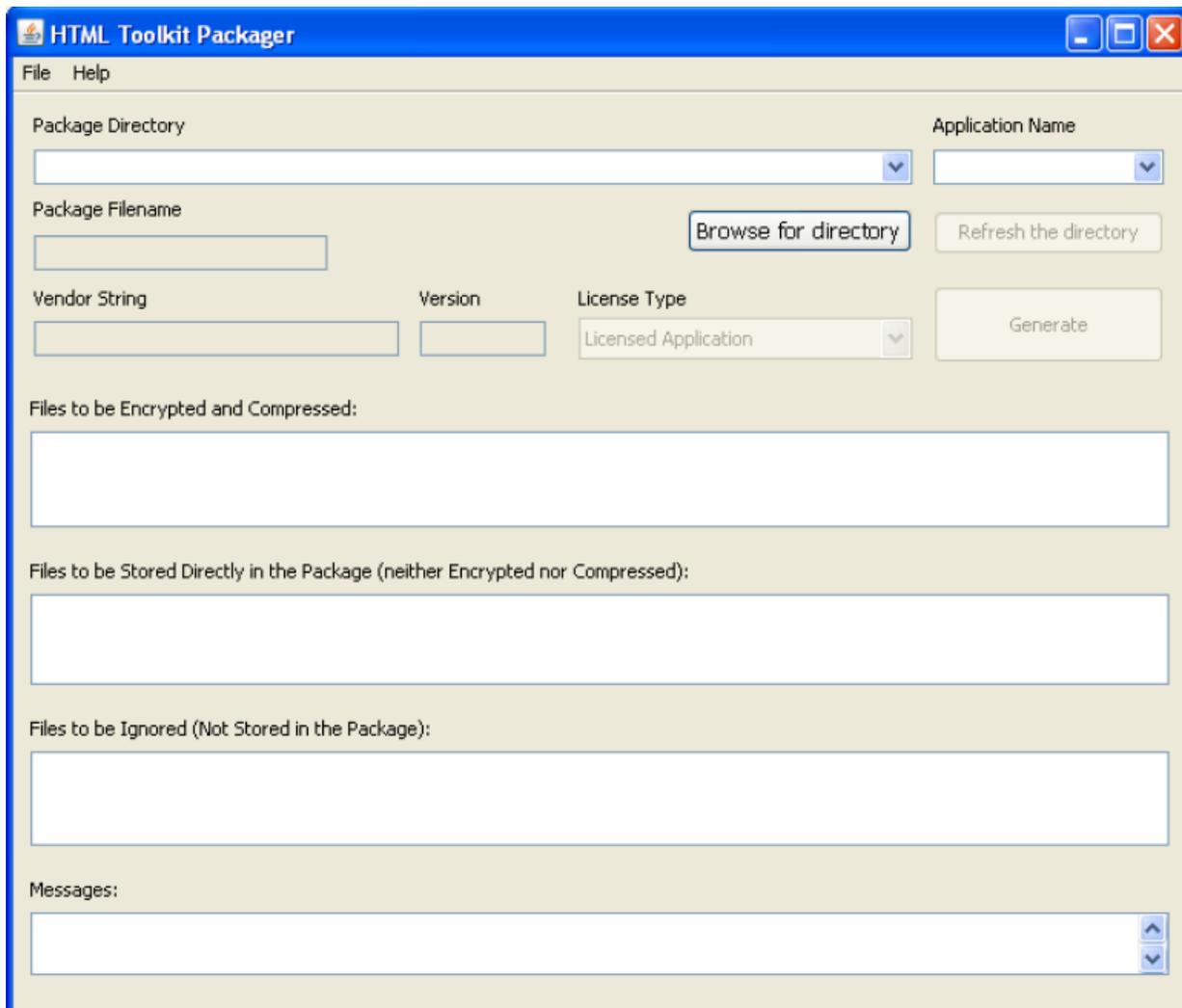
Follow this procedure to set up your Mitel 53xx devices to work with Revolution 5320(e), 5330(e), 5340(e), 5360.

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.

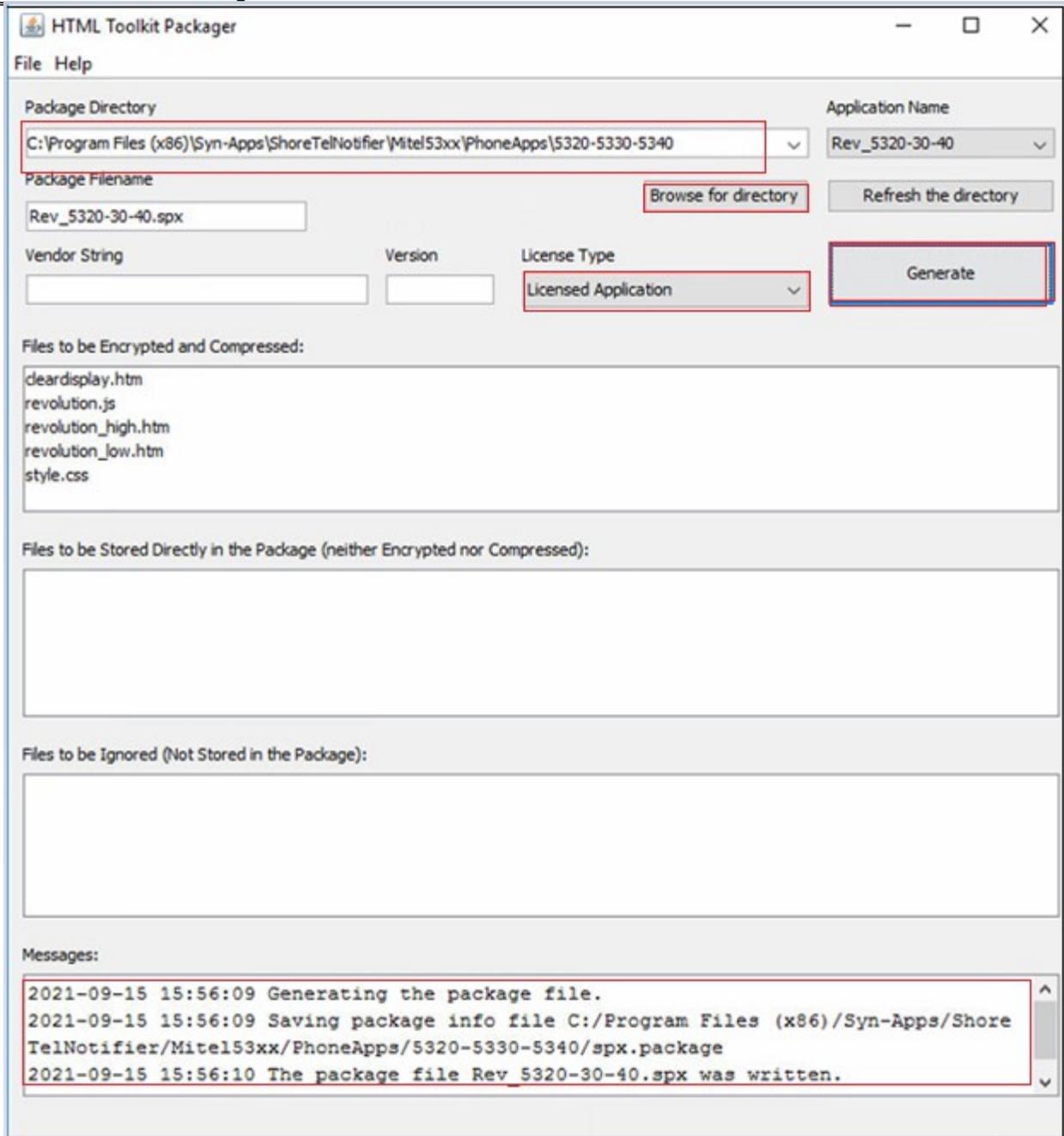
This script updates the various files to include your IP address in preparation for the next steps.

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.

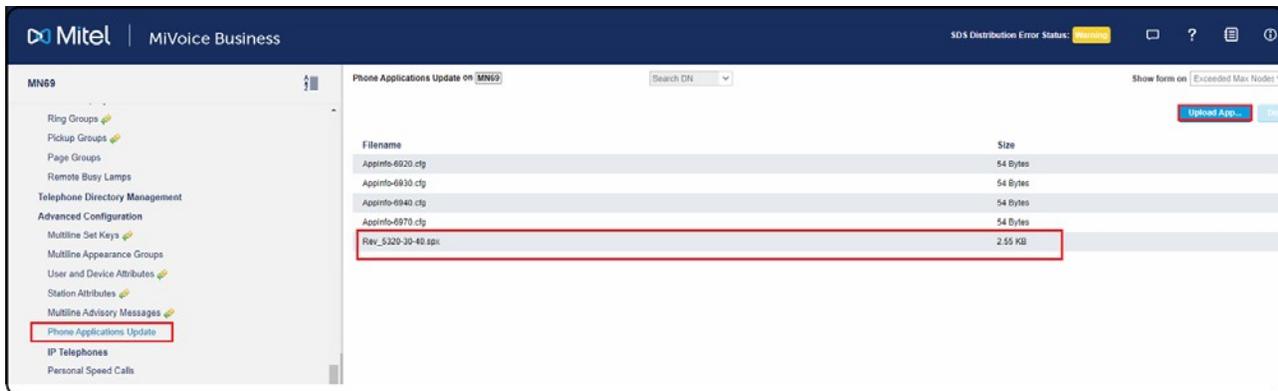


**Note:** If you are running the application for the first time, you will be prompted for a password. Enter the text Mitel Licensed Applications in the password field and click **OK** to activate the license.

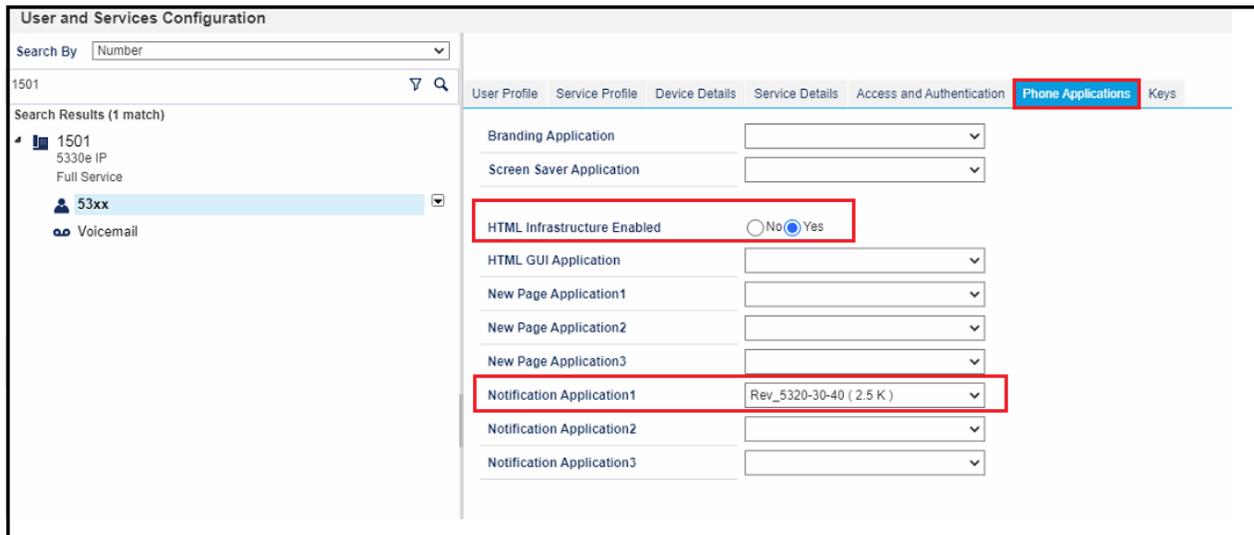


**Configuration From MiVoice Business System Administration Tool:**

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

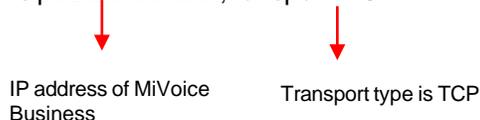
Perform the following steps to configure the SIP registration:

1. Go to **Configuration > Activators** or **Notifiers > 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

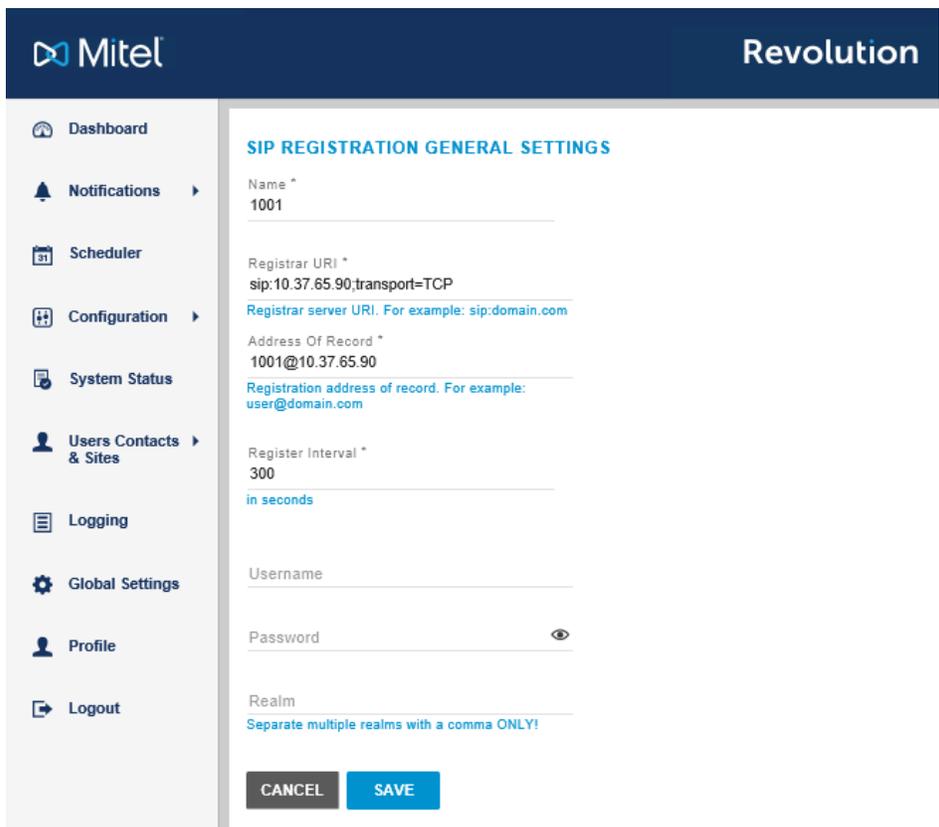


5. In the **Address of Record** field, enter the registration address of record in the format **user@domain.com**, where user is the SIP extension number defined in the **Users and Services Configuration** form of the MiVoice Business System Administration tool.

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](#).

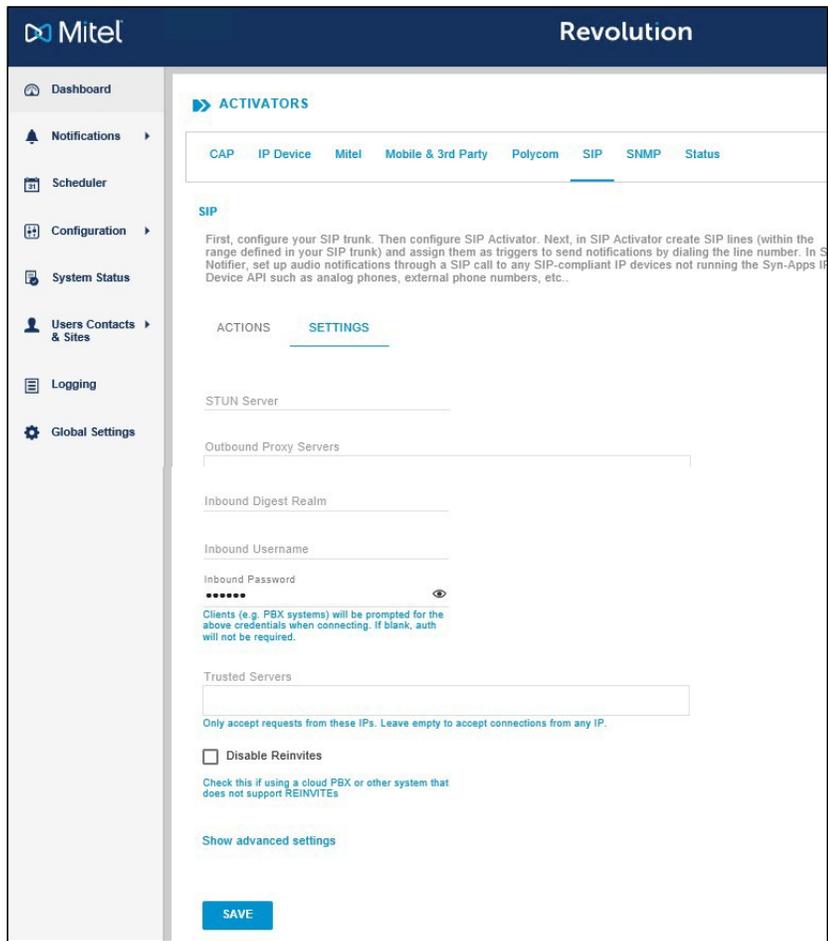
## Authenticating the SIP Lines

Perform the following steps to authenticate the SIP lines:

1. Go to **Configuration > Activators or Notifiers > 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
<b>Pin Timeout Seconds</b>	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.
<b>STUN Server and Outbound Proxy Servers</b>	Leave these fields blank. They do not apply to Mitel system setup.
<b>SIP Port</b>	You need to update this field only if your Mitel server is not using the default port.
<b>Trusted Servers</b>	Leave this field blank to accept connections from any IP. Your company security policies dictate whether you need to list specific servers.
<b>Transport Layer Security</b>	<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>
<b>Disable Reinvites</b>	<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"> <li>• <b>STUN Server</b> - 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.</li> </ul> <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"> <li>• <b>Outbound Proxy Servers</b> - 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.</li> </ul>

7. Click **Save**.

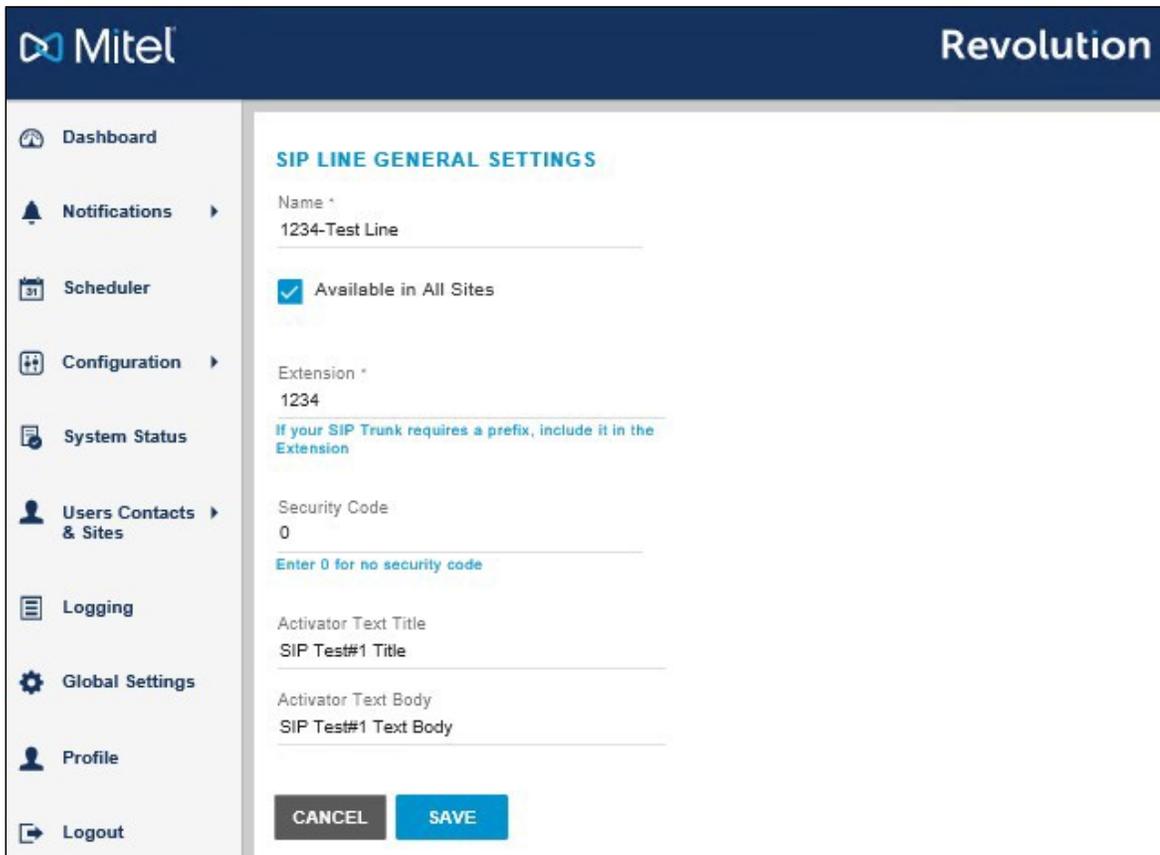


## Creating SIP Lines

**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 > Activator > 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 > Notifiers > 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.

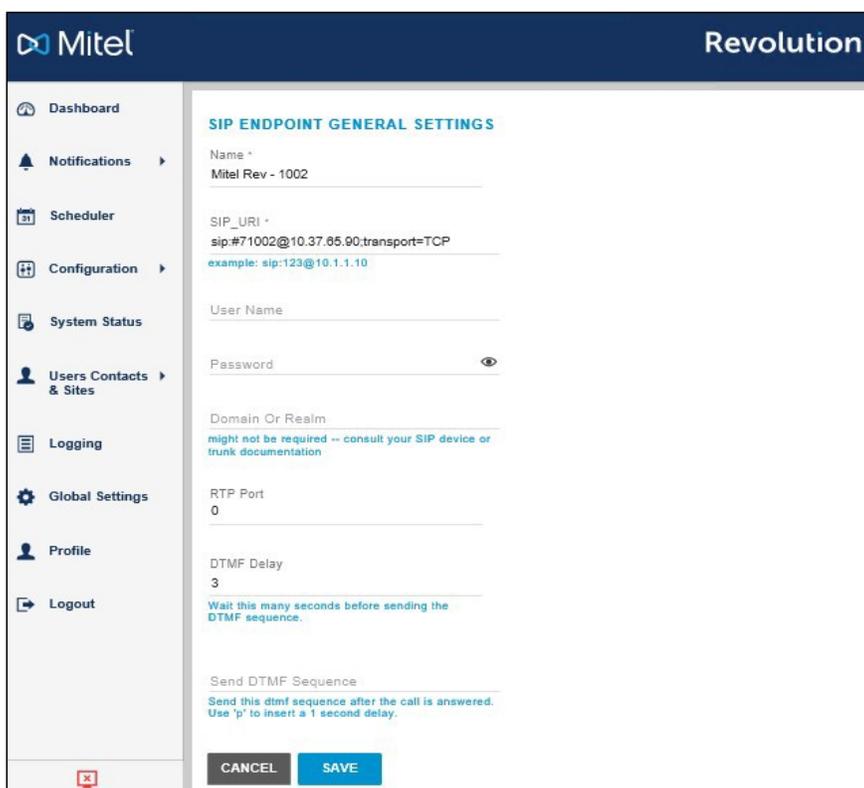
4. Enter the **SIP\_URI** in the following format:

*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.XX;transport=TCP*.

5. Click **Save**.



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.

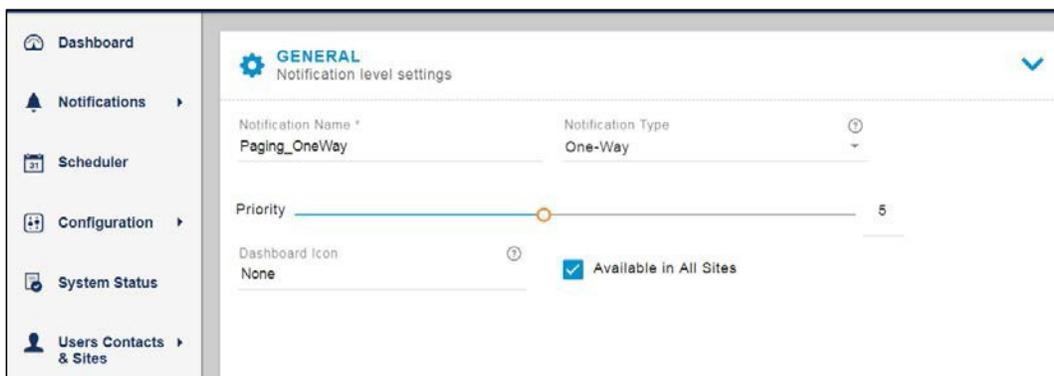
## Creating Notifications

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:

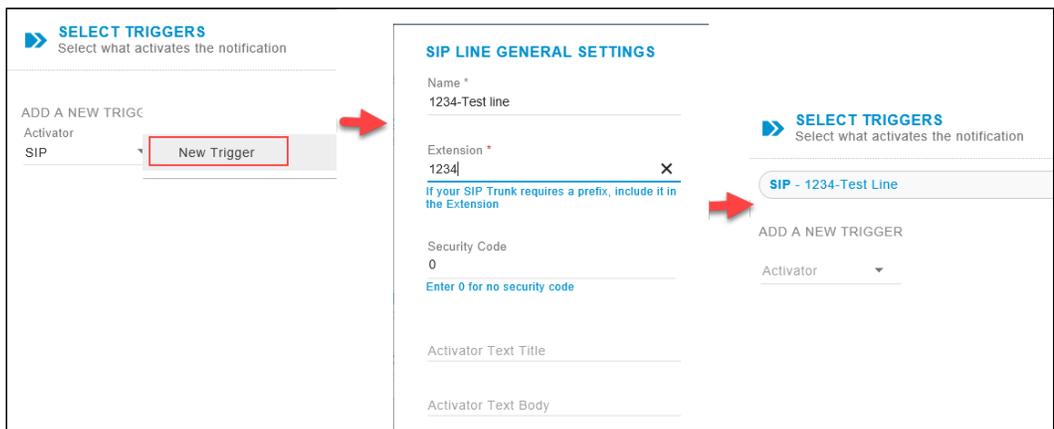
1. Go to **Notifications > Manage**.
2. Click **NEW NOTIFICATION**.
3. Enter the following **GENERAL** settings:
  - a. **Notification Name:** Enter a descriptive name for the notification.
  - b. **Notification Type:** Select **One-way** from the drop-down list.
  - c. **Priority:** You can assign a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



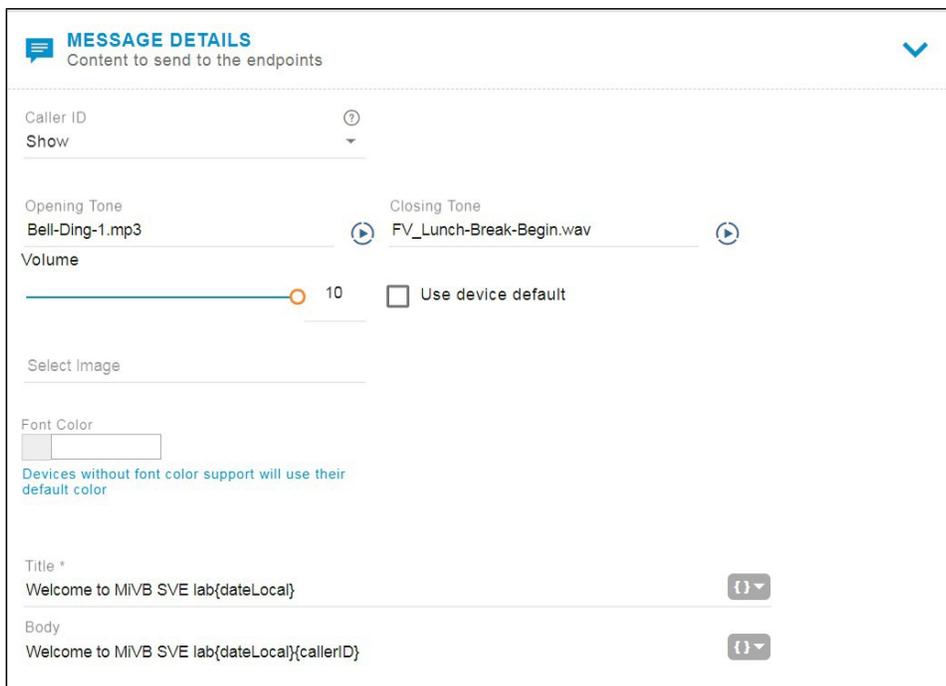
The screenshot displays the 'GENERAL' settings for a notification. The interface includes a sidebar with navigation options: Dashboard, Notifications, Scheduler, Configuration, System Status, and Users Contacts & Sites. The main content area is titled 'GENERAL Notification level settings' and contains the following fields:

- Notification Name \***: Paging\_OneWay
- Notification Type**: One-Way (selected from a dropdown menu)
- Priority**: 5 (set on a slider from 1 to 10)
- Dashboard Icon**: None (selected from a dropdown menu)
- Available in All Sites**:

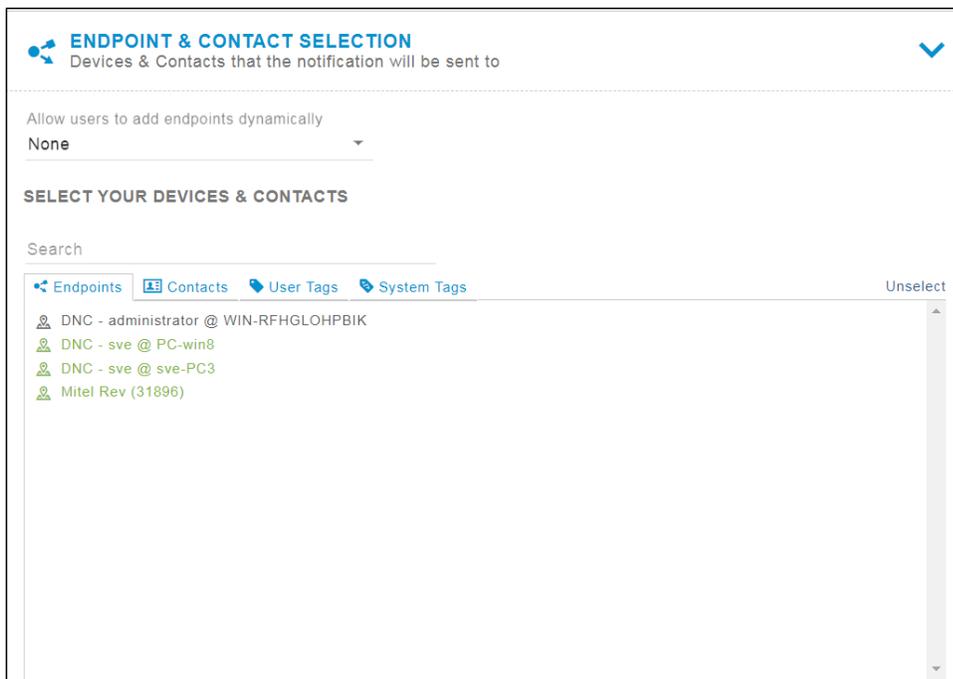
4. Click the **TRIGGERS** setting and enter the following values:
  - a. From the **Activator** drop-down list, select **SIP**.
  - b. From the **Trigger** drop-down list, select **New Trigger**.
  - c. Enter a descriptive **Name** for the SIP line.
  - d. Add the **Extension** number that you defined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

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

Minutes after send time to start the notification.

**Notification \***

---

**Action 2** 

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

Minutes after send time to start the notification.

**Notification \***

## Adding SNMP Activator for Emergency Call

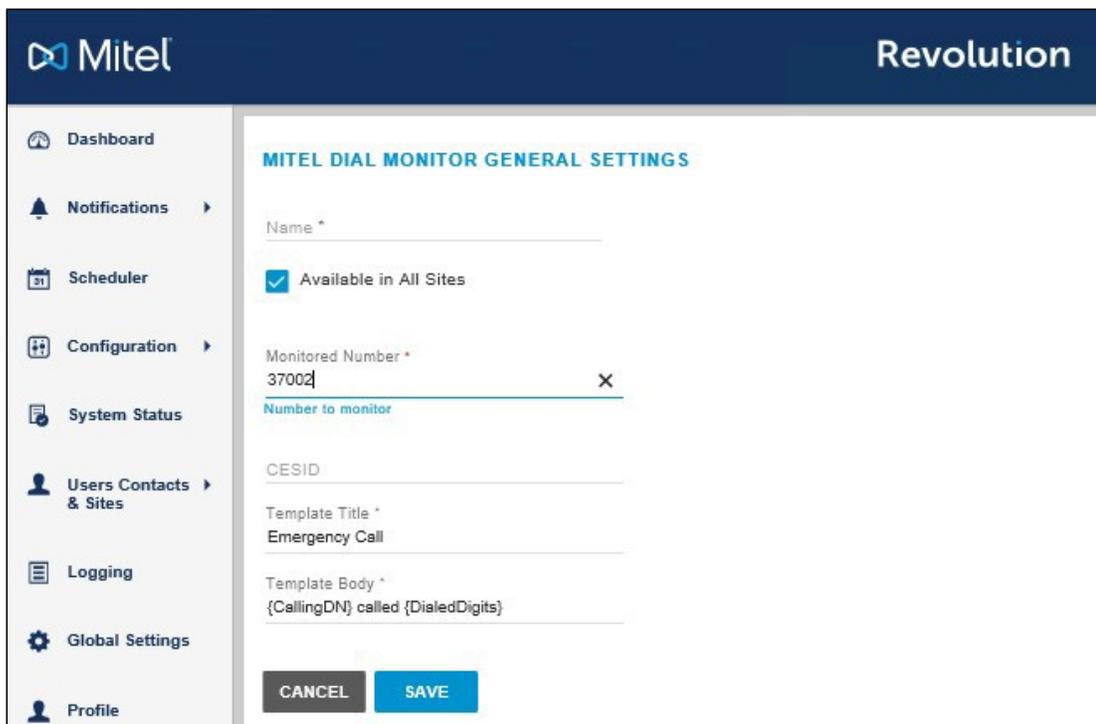
Perform the following steps to add an SNMP activator for an emergency call:

1. Go to **Configuration > Activators > SNMP**.
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 bc

## 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.

The screenshot shows the 'ACTIVATORS' configuration page with the 'SNMP' tab selected. Under the 'SNMP' section, there are two sub-tabs: 'ACTIONS' and 'SETTINGS', with 'SETTINGS' being the active one. The 'Trap Listening Port' is set to 162. The 'SNMP Community String' field is highlighted with a red box and contains the text 'MitelRW'. Below this, there is a section for 'Import Mitel Directory CSV' with a 'Choose File' button and a note that no file has been chosen. A warning message at the bottom states: 'Import telephone directory CSV file exported from MiVoice Business. After picking a file, you must click 'save'. WARNING: the previously imported data will be replaced.'

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
<b>General</b>	<p>From the <b>Notification Type</b> drop-down list, select Text and Images or Stored Audio notification type.</p> <p>You can select <b>Text to Speech</b> as this is an emergency notification.</p> <p>To include an opening tone to get the receivers attention, select <b>Stored Audio</b> notification type. Do not select <b>One-Way, Recorded, or Two-Way</b> notification types.</p>
<b>Select Triggers</b>	<p>From the <b>Activator</b> drop-down list, select <b>SNMP</b> and then select the trigger you created.</p>
<b>Message Details</b>	<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>
<b>Endpoint &amp; Contacts</b>	<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 <b>Mobile</b> check box in the <b>Contact Methods section</b>.</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 <b>CESID Assignment</b> 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

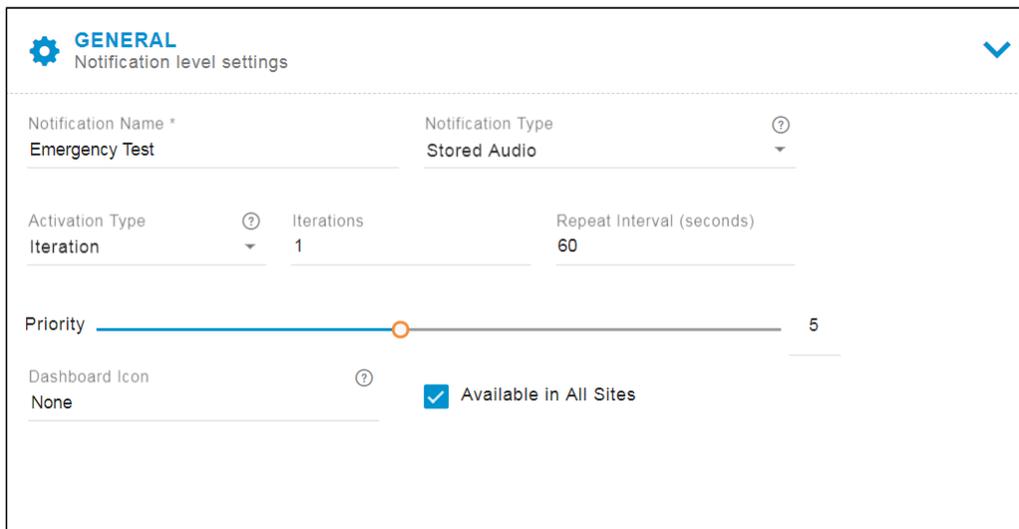
{CallerName}	Mitel. If you are not importing the phone directory, then do not use these variables.
--------------	---

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

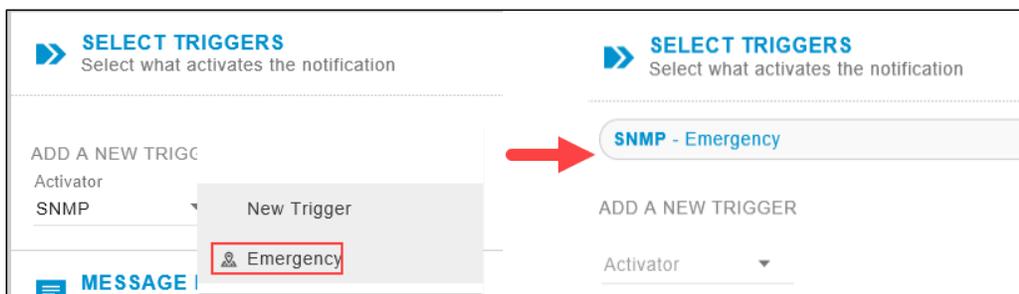
### Triggering SNMP Emergency Notification

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

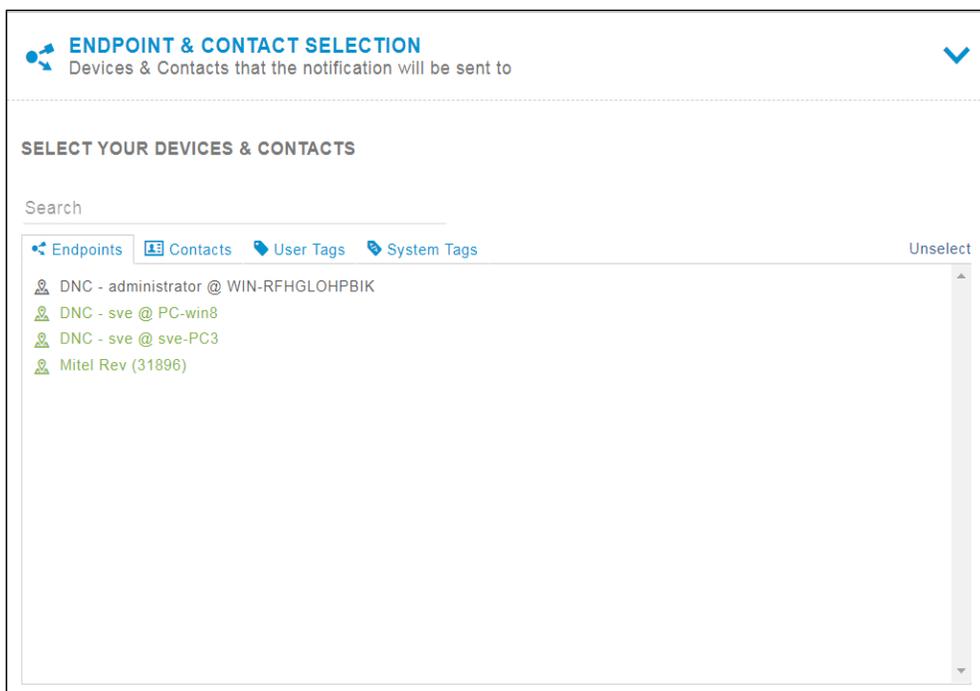
Select Image

Font Color  
Devices without font color support will use their default 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 > Notifiers**.
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

Mitel
Revolution
03:33:04 PM IST

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

**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. 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](#)

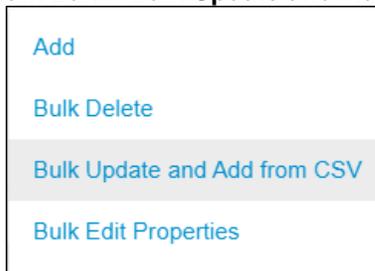
## Importing Location details to SIP device for XML Registration

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.**

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				
FINDWDVSUSER16 - 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**.

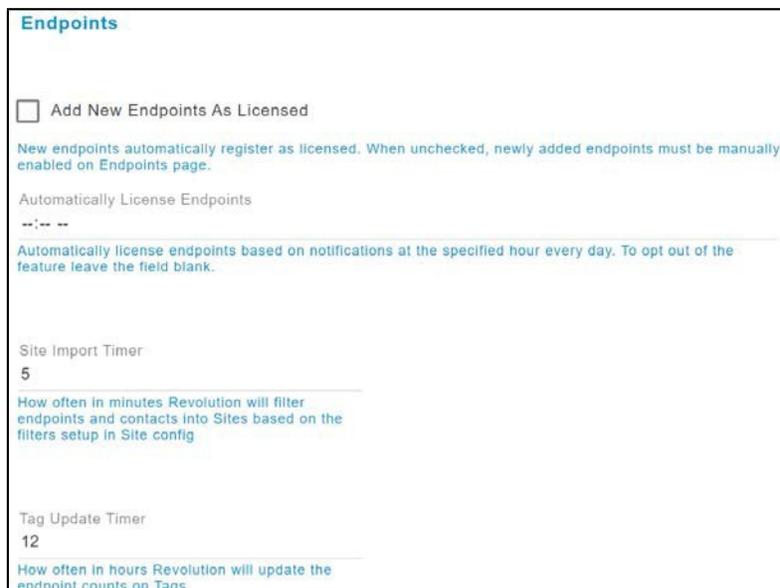
The location details of users registered directly with Revolution using XML post will be updated in their directory.

## 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:

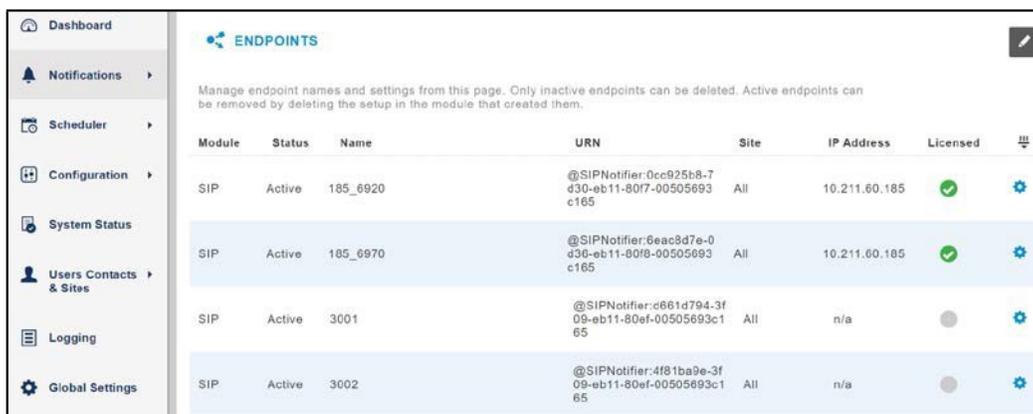
1. Navigate to **Global Setting > Endpoints**.
2. Deselect the **Add New Endpoints as Licensed** check box.
3. Click **Save**.

**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 .

3. To delicense the endpoint, click the  icon associated with the endpoint. After the endpoint is delicensed, the icon will change to .

4. To search for an extension select  icon.

ENPOINTS

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-8402-07b19ace8b56	All	10.8.48.200		 
SIP	Active	Extension 1011	@SIP:oflier:915c941a-6d93-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 > Notifiers > 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.

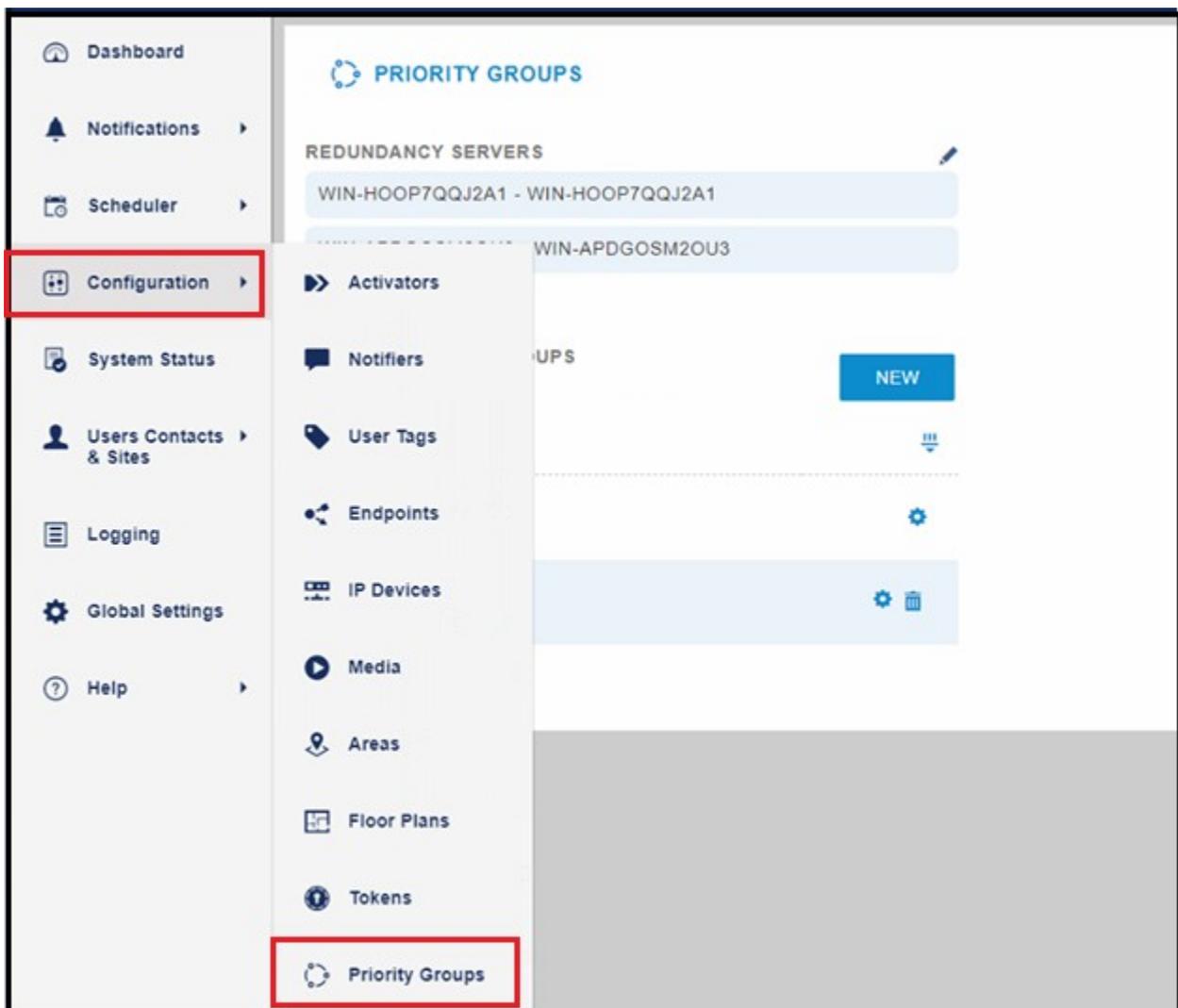
Priority groups are used to:

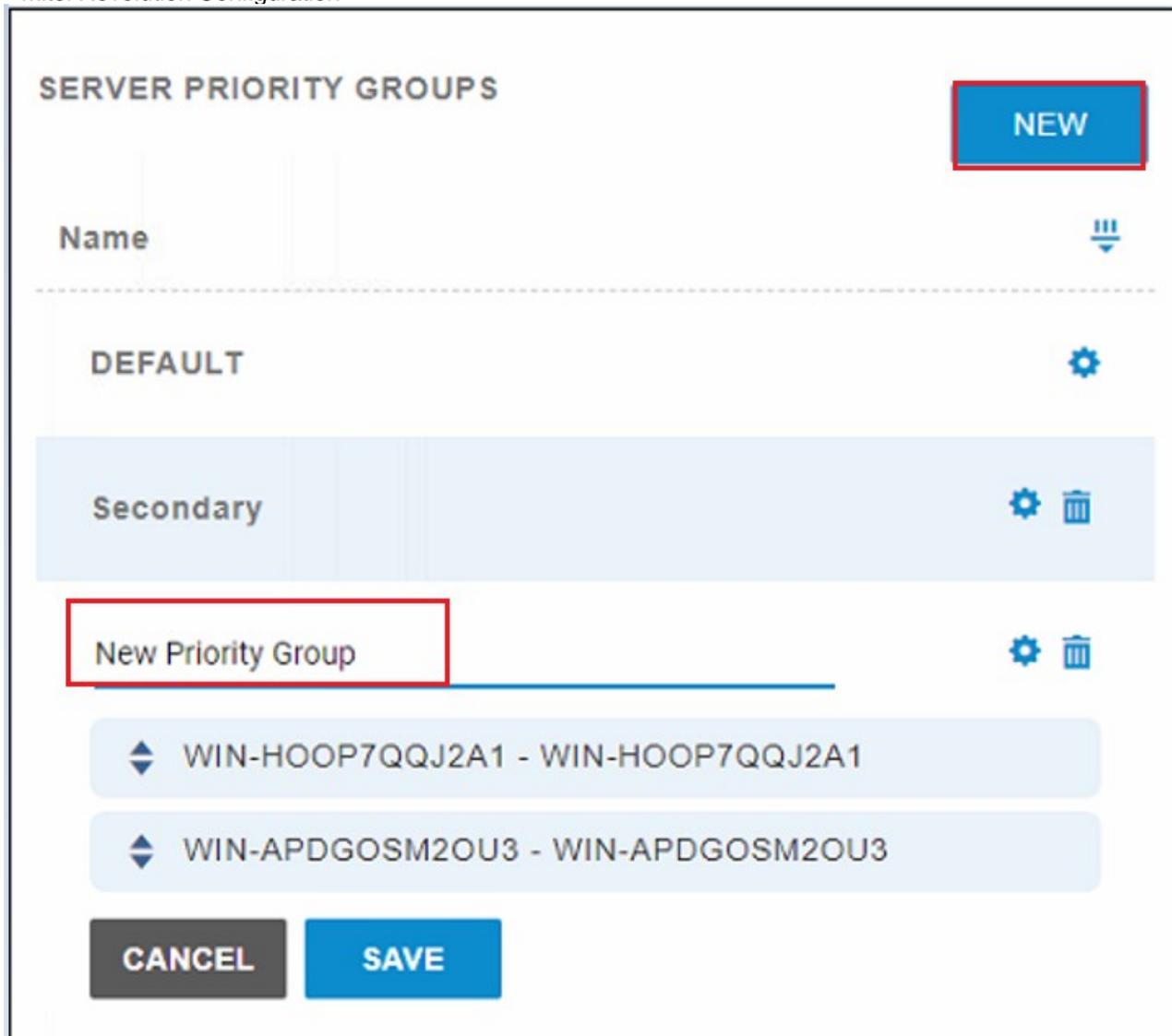
- Define failover order for your redundant servers.
- Define different server priorities such that we can distribute activations to different servers. For example, for Group A you could list your primary server first, while for Group B your secondary could be first.

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 > Activators > SIP > SIP Line**.

The screenshot displays the 'SIP LINE GENERAL SETTINGS' configuration page. On the left is a navigation sidebar with the following items: Dashboard, Notifications, Scheduler, Configuration, System Status, Users Contacts & Sites, Logging, Global Settings, and Help. The main content area is titled 'SIP LINE GENERAL SETTINGS' and contains the following fields and options:

- Name \***: mivb\_notify\_1519
- Available in All Sites**
- Priority Group**: Secondary (highlighted with a red box)
- Extension \***: 1519  
If your SIP Trunk requires a prefix, include it in the Extension
- Security Code**: 1234  
Enter 0 for no security code
- Activator Text Title**: Sip Text#1 Title
- Activator Text Body**: Sip Text #1 Message Body

At the bottom of the form are two buttons: **CANCEL** and **SAVE**.

## Priority Group selection for SIP notification

To access the SIP Registration, navigate to **Configuration > Activators > 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. There are two radio buttons: 'Enter a license ID' (unselected) and 'Select a product' (selected). Below these are input fields for 'License ID', 'Product Name', 'SW Version', 'On-Site Version', 'Platform', and 'Sub-Product'. The 'Product Name' dropdown is open, displaying a list of products: '5624 WiFi Handset', '5634 WiFi Handset', and 'CT Gateway'.

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 is set to 'Company Name'. Below it are input fields for 'Site Name', 'Address', 'City', 'Zip Code', 'State/Province', 'Country', and 'Phone Number'. The values in these fields are: 'Company Name', 'Street', 'City', 'Unknown', 'STATE OR PROVINCE', 'Country', and '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' field is empty and has a red error message 'Value is required'. Below the field is a 'Navigation' section with three buttons: 'BACK', 'CANCEL', and 'SUBMIT'.

## 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
<b>Activators</b>		
SIP Activator	Supported through SIP trunks.	
Emergency Call Activator	SNMP traps <b>Note:</b> 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)	MiVoice Business does not 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)	MiVoice Business does not support multiple IPs. It can be pointed to either Primary or Secondary Revolution at a time.	
<b>Notifications</b>		
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. <b>Note:</b> 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.  <b>Note:</b> 53XX phones do not support multicast 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-	Supported. The phones need to be pointed to the	

Active)		respective Revolution to receive the notifications.
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).



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