

# Mitel Revolution

## Configuration Guide for Mitel MiVoice

### Connect

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## Mitel Revolution Configuration Guide for Mitel MiVoice Connect July 2022

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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 Mitel XML and MGCP IP Phones; 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 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 notification.

## About this Guide

This document describes the configuration of Mitel Revolution for Mitel MiVoice Connect.

## 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.

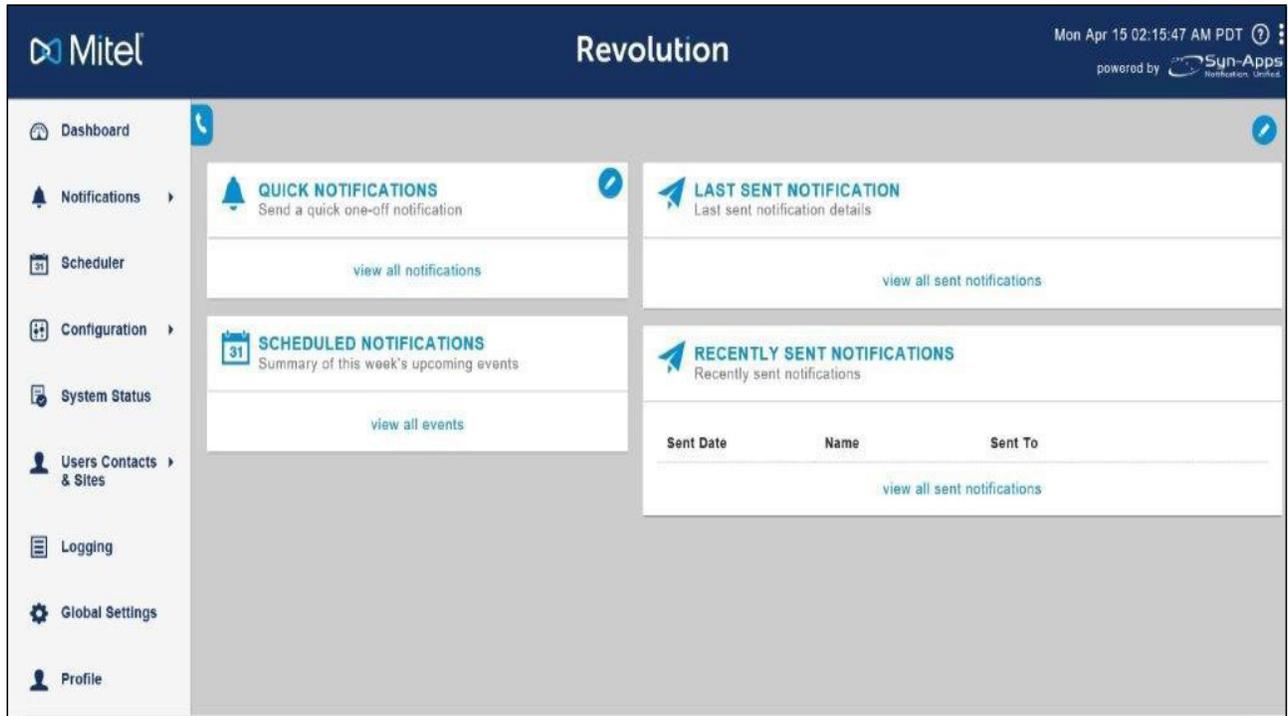
If the customer is not using a NG911 vendor for emergency calls then Mitel Revolution can serve as the primary notifier and mechanism for enabling local alerts associated with Kari's Law.

## Documentation

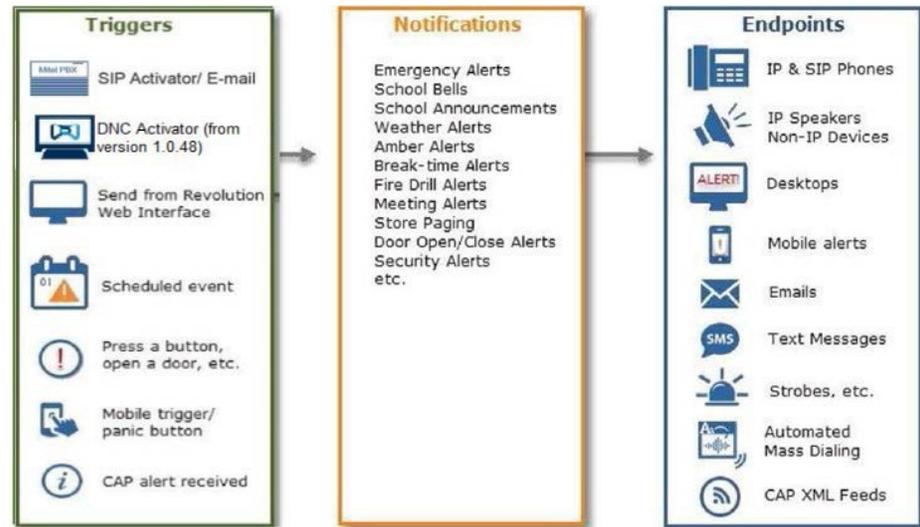
- Mitel MiVoice Connect Planning and Installation Guide: The Mitel MiVoice Connect Planning and Installation Guide describes how to plan and install a MiVoice Connect system. The Installation Guide can be downloaded from Mitel [MiVoice Connect Planning and Installation Guide](#).
- Mitel MiVoice Connect System Administration Guide: The Mitel MiVoice Connect System Administration Guide explains how to use Connect Director to configure, administer, and maintain all features of the Mitel MiVoice Connect system. The Mitel MiVoice Connect System Administration Guide can be downloaded from [Mitel MiVoice Connect System Administration Guide](#).
- Mitel Revolution webhelp: The Mitel Revolution webhelp contains the information required to install Mitel Revolution, initial setup, feature configuration, maintenance and troubleshooting, end-user tasks, system monitoring, and upgrade related details. You can access the webhelp at [Mitel Revolution Web Help](#).

# Overview

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



## MitelRevolutionOverview



Creating notifications involve the following three main steps:

- Assigning the triggers for sending notifications.
- 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](#).

# MiVoice Connect Director Configuration

This section outlines the steps to configure a Mitel MiVoice Connect Director for Mitel Revolution.

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

- Creating generic SIP profiles and SIP servers – See [Configuring SIP Users](#)
- Setting switches – See [Creating SIP Trunks](#)

## Configuring SIP Users

This section describes how to create a SIP profile and a SIP server in the MiVoice Connect Director.

### Creating SIP Profiles

Perform the following steps to create a new SIP profile:

1. Click **Administration > Appliances/Servers > Integrated Servers > SIP Profiles**.
2. Click **New** to create a new SIP Profile.
3. In the **settings** tab, enter the values for the following fields:

Field	Value
<b>Name</b>	Enter a descriptive <b>Name</b> for the profile.
<b>User agent</b>	Used to identify devices covered by this profile. This field is not used for SIP servers.
<b>Priority</b>	Leave at default of 100.
<b>Enable</b>	Select the check box to make the profile available for use.

- a. **System parameters** – List of device characteristics and their default settings (Use defaults).
  - b. **Custom parameters** – (Optional) Additional device settings or overrides for default settings listed in System parameters field (None necessary).
4. Click **Save**.

The screenshot shows the Mitel Connect Director interface. On the left is a navigation menu with categories like Administration, Users, Trunks, Telephones, Appliances/Servers, Integrated Servers, SIP Servers, SIP Profiles, Options, Features, and System. The main area displays a table of SIP Profiles:

NAME	ENABLED	USER AGENT	PRIORITY
Microsoft Exchange	<input checked="" type="checkbox"/>	*	50
Mitel Revolution SIP Profile	<input checked="" type="checkbox"/>	Mitel Revolution Agent	100

Below the table, the configuration for the 'Mitel Revolution SIP Profile' is shown in the 'GENERAL' tab. The fields are:

- Name: Mitel Revolution SIP Profile
- User agent: Mitel Revolution Agent
- Priority: 100
- Enable
- System parameters:
 

```
acceptMWI=notify
Accept302=sip
HoldSupport=no
AddrSupport=diversion
EnableSymmetricDtmf=yes
UseSipProxyOut=yes
OAEMedialessPort=8600
AllowedCodecs=PCMU/8000
OptionsPing=1
```

## Creating SIP Servers

Perform the following steps to create a new SIP server:

1. Click **Administration > Appliances/Servers > Integrated Servers > SIP Servers**.
2. Click **New**.
3. Enter the values for the following fields:
  - a. **Name** – Enter a descriptive **Name** for the server.
  - b. **Site** – From the **Site** drop-down list, select an appropriate site location.
  - c. **Protocol** – From the **Protocol** drop-down list, select TCP. (We recommend TCP, but UDP is also acceptable.)
  - d. **Host (name / address / domain)** – Enter Mitel Revolution server IP address.
  - e. **Override default port** – Leave the field blank.
  - f. **Allow external voice mail for Extension-Only user** – By default, the field is disabled. Do not change the selection.
  - g. **Allow fax redirect to this server** – By default, the field is disabled. Do not change the selection.
  - h. **Extension** – System automatically assigns next available number. You can enter a different extension.

- i. **Assigned user group** – Select appropriate group that has access to the necessary trunks. For example, Executives.
- j. **SIP Profile** – Select the new SIP profile you created.
- k. **Digest Authentication** – By default, **None** is selected. Do not change the selection.
- l. **Username** – Leave the field blank.
- m. **Password** – Leave the field blank.

The screenshot displays the Mitel Connect Director web interface. On the left is a navigation menu with categories like Users, Trunks, Telephones, and Appliances/Servers. The main area shows a table of SIP Servers with columns for Name, Extension, Site, Host, Override Default Port, Profile Name, Protocol, Voice Mail, and Fax. Below the table is a form for editing a server named 'Mitel Revolution'. The form includes fields for Name, Site, Protocol, Host, Extension, Assigned user group, SIP profile, Digest authentication, Username, and Password. A 'SHOW REFERENCES' button is also present.

NAME	EXTENSION	SITE	HOST	VERRIDE DEFAULT PORT	PROFILE NAME	PROTOCOL	VOICE MAIL	FAX
Mitel Revolu...	200	Site1	10.211.20.111		Mitel Revolu...	TCP	<input type="checkbox"/>	<input type="checkbox"/>

**Mitel Revolution**

**GENERAL**

Name: Mitel Revolution  
 Site: Site1  
 Protocol: TCP  
 Host (name / address / domain): 10.211.20.111  
 Override default port:   
 Allow external voice mail for Extension-Only user  
 Allow fax redirect to this server  
 Extension: 200  
 Assigned user group: IP Telephones  
 SIP profile: Mitel Revolution SIP Profile  
 Digest authentication: -None-  
 Username:   
 Password:   
 (6 - 26 characters)

## Creating SIP Trunks

### What you need to know

- SIP Trunks are utilized to call analog paging systems.
- Trunks cannot be used for inter-site calls.
- Each site must have its own Trunk Group configured with at least one SIP Trunk, or as many trunks as the desired amount of simultaneous calls to the Mitel Revolution Server. *For example: If there are two trunks in a trunk group for a specific site, then two groups can be called at the same time.*

### Notes:

- Allocating SIP Trunk ports on Mitel switches also requires valid Mitel SIP Trunk licenses. Contact your Mitel representative for details.
- Mitel trunk groups only support Static IP Addresses for Individual Trunks.

### Create Trunk Groups

Perform the following steps to create a SIP trunk group:

1. Click **Administration > Trunks > Trunk Groups > Trunk Groups**.
2. Click **New**.



3. In the **GENERAL** tab, enter the values for the following fields:
  - a. **Name** – Enter a descriptive **Name** for the trunk. (*Our example uses Syn- Apps Trunk Group.*)
  - b. **Site** – From the Site drop-down list, select an appropriate site location.
  - c. **Trunk type** – From the **Protocol** drop-down list, select **SIP**.
  - d. **Language** – From the drop-down list, select the appropriate language.
  - e. **Enable SIP info for G.711 DTMF Signaling** – Select the check box to enable this option.
  - f. **Profile** – From the drop-down list, select **Default Tie Trunk**.
  - g. **Digest Authentication** – By default, **None** is selected. Do not change the selection.
  - h. **Username** – Leave the field blank.
  - i. **Password** – Leave the field blank.

**Revolution Trunk Group** [SAVE] [RESET] [CANCEL]

GENERAL INBOUND OUTBOUND

Name: Revolution Trunk Group

Site: Headquarters

Trunk type: SIP

Language: English(US)

Enable SIP info for G.711 DTMF signaling

Profile: Default Tie Trunk

Digest authentication: -None-

Username:

Password: (6 - 26 characters)

Note:

4. In the **INBOUND** tab, enter the values for the following fields:
  - a. **Number of digits from CO** – Enter a number that matches your system extension length. (Mitel Revolution does not use this setting.)
  - b. **DNIS** – By default, the field is disabled. Do not change the selection.
  - c. **DID** – By default, the field is disabled. Do not change the selection.
  - d. **Extension** – Select the check box to enable this option. Select **Translation Table** check box and keep default of None.
  - e. **Tandem trunking** – If your Mitel Revolution license includes SIP Notifier, select the check box to enable tunking; otherwise leave disabled.
  - f. **User group** – Select group that contains analog paging system lines, if applicable.
  - g. **Prepend dial in prefix** – Leave the field blank.
  - h. **Destination** – User the default value or select one of your choice.

**Revolution Trunk Group** [SAVE] [RESET] [CANCEL]

GENERAL INBOUND OUTBOUND

Number of digits from CO: 2

DNIS [Edit DNIS](#)

DID [Edit DID Range](#)

Extension

Translation table: <None>
  Prepend dial in prefix:
  Use site extension prefix

Tandem trunking

User group: Executives

Prepend dial in prefix:

Destination: 700 : Default

5. In the **OUTBOUND** tab, enter the values for the following fields:
  - a. **Outbound** – Select the check box to enable outbound feature.
  - b. **Network call routing** – Specify appropriate access code and local area code.
  - c. **Trunk services** – Access to the Mitel Revolution server is via Off System Extensions (OSE). Therefore, most trunk services can be disabled except:
    - i. Local

- ii. Caller ID not blocked by default
- iii. Enable caller ID name

**Mitel Revolution Trunk Group** SAVE RESET CANCEL

GENERAL INBOUND **OUTBOUND**

---

**Outgoing:**

**Network call routing:**

Access code:

Local area code:  must be between 2 and 4 digits

Additional local area codes: [Add](#)

Nearby area codes: [Add](#)

Billing telephone number:  (e.g. +91 11-2419-8000)

**Trunk services:**

Local

Long distance

National mobile

International

Enable original caller information

Caller ID not blocked by default

Enable caller ID name (Please confirm with the carrier(s) or the service provider(s) on how the end-to-end caller name is delivered)

When Site Name is used for the   
 Caller ID, overwrite it with:

Emergency

**Trunk digit manipulation:**

Dial local numbers in national form

Dial in E.164 format

Prepend dial out prefix:

Translation table:  [Edit OSE](#)

6. Configure OSE:

**Emergency**

**Trunk digit manipulation:**

Dial local numbers in national form

Dial in E.164 format

Prepend dial out prefix:

Translation table:  Edit OSE

OSE defines the SIP extension range that can be configured as SIP lines in Mitel Revolution SIP Activator. This can be any extension that is currently not used on the Mitel system.

- a. Click **Save** before proceeding to set OSE.

- b. Click the **Edit OSE** link in the Trunk digit manipulation section. Click **New**.



- c. From the **Trunk Group** drop-down list, select the trunk group you created and define an **extension range** within your Mitel PBX extensions.

The screenshot shows the 'GENERAL' configuration form for an extension range. It has three buttons at the top: SAVE, RESET, and CANCEL. The form contains the following fields:

- Trunk group: Mitel Revolution Trunk Group (dropdown menu)
- From: 201 (text input)
- To: 210 (text input)

- d. Click **Save**.

### Create Individual SIP Trunks

Perform the following steps to create an individual SIP trunk:

1. Click **Administration > Trunks > Trunks**.
2. Click **New**.



3. Enter values for the following fields:
  - a. **Site** – From the drop-down list, select the appropriate **Site**.
  - b. **Trunk group** – From the drop-down list, select the appropriate group.
  - c. **Name** – Enter a descriptive **Name** for the trunk.
  - d. **Switch** – From the drop-down list, select a **Switch** that is configured for this site.
  - e. **IP address or FQDN** – Enter the Mitel Revolution server IP address.

The screenshot shows the 'Syn-apps (1)' configuration form. It has three buttons at the top: SAVE, RESET, and CANCEL. The form contains the following fields:

- Site: Headquarters (dropdown menu)
- Trunk group: Revolution Trunk Group (SIP) (dropdown menu)
- Name: Syn-apps (1) (text input)
- Switch: SG90\_HQ (dropdown menu)
- IP address or FQDN: 10.211.46.72 (text input)

## Configuring Switch Settings

Perform the following steps to configure a switch:

1. Click **Administration > Appliances/Servers > Platform Equipment**.

NAME	DESCRIPTION	SITES	SERVER	DATABASE SERVER	TYPE	IP ADDRESS	SECONDARY ADDRESS	MAC ADDRESS
collab	SoftSwitch	Site1	Headquarters	Headquarters	vCollab	10.211.18.68		00-50-56-93-F7-AF
Headquarters	SoftSwitch	Headquarters	Headquarters	Headquarters	WinHQ	10.211.18.55		
site	SoftSwitch	Site1	Headquarters	Headquarters	vPhone	10.211.18.69		00-50-56-93-06-19
Site1	SoftSwitch	Site1	Site1	Headquarters	WinDVS	10.211.18.57		
Site2	SoftSwitch	Site2	Site2	Headquarters	LinuxDVS	10.211.18.66		00-50-56-93-EB-3A

2. Click the **Name** of the switch to configure.
3. Define one of the **Port Type** settings from the available ports to **100 SIP Proxy**.

G90: SG90\_HQ - 10.211.45.70

GENERAL SWITCH

IP phone + SIP trunks = Total  
15 10 25 of 30 (100 SIP proxy ports)

Enable Jack based Music on hold  
Jack based Music on hold gain: 0 dB (-49 to 13)

Use analog extension port as DID trunks

Port	Port Type	Trunk Group	Description	Jack Number	Tx Gain (dB)	Rx Gain (dB)	Location
1	100 SIP Proxy		P01		0	0	
2	Trunk		P02		0	0	
3	Available		P03		0	0	
4	5 IP Phones		P04		0	0	
5	100 SIP Proxy		P05		0	0	
6	SIP Trunk with Media Proxy						

4. Select the desired number of SIP trunks from the ports available and click Save. Each port designated as a SIP trunk port type supports 5 individual SIP trunks.

G90: SG90\_HQ - 10.211.45.70

GENERAL SWITCH

IP phone + SIP trunks = Total  
15 10 25 of 30 (100 SIP proxy ports)

Enable Jack based Music on hold  
Jack based Music on hold gain: 0 dB (-49 to 13)

Use analog extension port as DID trunks

Port	Port Type	Trunk Group	Description	Jack Number	Tx Gain (dB)	Rx Gain (dB)	Location
1	5 IP Phones		Analog trunk		0	0	
2	100 SIP Proxy		P02		0	0	
3	5 SIP Trunks		P03		0	0	
4	5 IP Phones		P04		0	0	
5	Trunk		P05		0	0	
6	Available		P06		0	0	
7	5 IP Phones		P07		0	0	
8	Conference						
9	5 SIP Trunks						
10	100 SIP Proxy						

### Notes:

Virtual phone switch has built-in SIP Proxy ports.

## Configuring Emergency Numbers to Monitor

**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 configure the numbers you want to monitor:

1. Click **Administration > System > Sites** [select your site] > **General**.
2. Add the numbers you want to monitor to the **Emergency Number List**. 911 is included by default in the **Emergency number list** section.
3. Use default values for the other fields.

The number is configured to the Mitel Revolution Notifier page during the next phone refresh, which occurs every 15 minutes, or you can refresh the data for the Mitel notifier from the system status. This creates a new trigger that you can now add to notifications. Create notification and select trigger corresponding to 911. Any time the number being monitored is dialed; the notification is triggered.

For more details about configuring emergency number and triggering notification in the Mitel Revolution interface, see [Creating Notifications](#).

### Configuring Jack Number

Perform the following steps to configure the jack number:

1. Go to **Administration > Users > Users**.
2. Click on a username.
3. In the **General** tab, enter the Jack# such as building number, room number etc.
4. Click **Save**.

## Enabling Phone API for User Accounts

For an IP Phone to receive notifications, the associated user account must have the Allow Phone API checkbox enabled. If this setting is not enabled, the IP phone will not be able to receive any notifications.

1. Click **Administration > Users > Users**.
2. Click on a **username**.
3. In the **Telephony** tab, select the **Enable phone API (PAPI)** check box.

The screenshot shows the configuration page for 'Extension 122: admin'. At the top, there are links for 'View Escalation Profile' and 'View Programmable Buttons', and buttons for 'SAVE', 'RESET', and 'CANCEL'. Below these are tabs for 'GENERAL', 'TELEPHONY', 'VOICE MAIL', 'ROUTING', 'MEMBERSHIP', 'APPLICATIONS', and 'DNIS'. The 'TELEPHONY' tab is active. The settings include: 'Enable handsfree mode' (unchecked), 'Enable call waiting tone' (checked), 'Trunk access code' (dropdown set to '9'), 'Mailbox for recorded calls' (text input), 'Fax support' (dropdown set to 'User - Redirect'), 'Enable video calls' (unchecked), 'Standard' (dropdown), 'Enable telephony presence' (checked), 'Enable shared call appearances' (unchecked), 'Enable use of soft phone' (unchecked), and 'Enable phone API (PAPI)' (checked).

4. Click **Save**.

---

## Authorized Server

Trusted server entries must be entered in the custom text file for each IP phone model.

IP400 series phones custom files are in `C:\Inetpub\ftproot\phoneconfig`.

Mitel IP Phones	Custom File Name
485g	custom_IP485g.txt
480g	custom_IP480g.txt
480	custom_IP480.txt
420	custom_IP420.txt

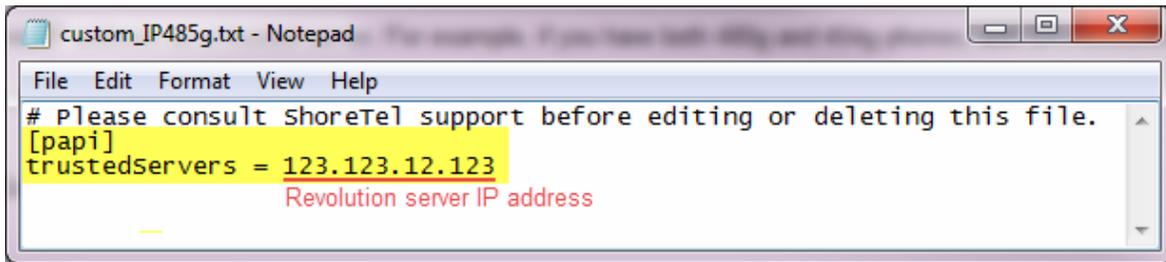
IP655 and IP5xx series phones series custom files are in `C:\Inetpub\ftproot`.

Mitel IP Phones	Custom File Name
655	swecustom.txt
565 / 565g	s6ccustom.txt
560g	s6gcustom.txt
560	s6custom.txt

### Rules:

- Edit each custom text file for your phones to add the Mitel Revolution server IP address as a trusted server. For example, if you have both 480g and 485g phones, add Mitel Revolution as a trusted server to both `custom_IP480g.txt` and `custom_IP485g.txt`.
- For IP400 series phones, it is not recommended to add the trusted server to the global `custom.txt` file. You should add the trusted server to each phone model's custom file.
- Place the entry on a separate line.

For **IP400 series** phones:

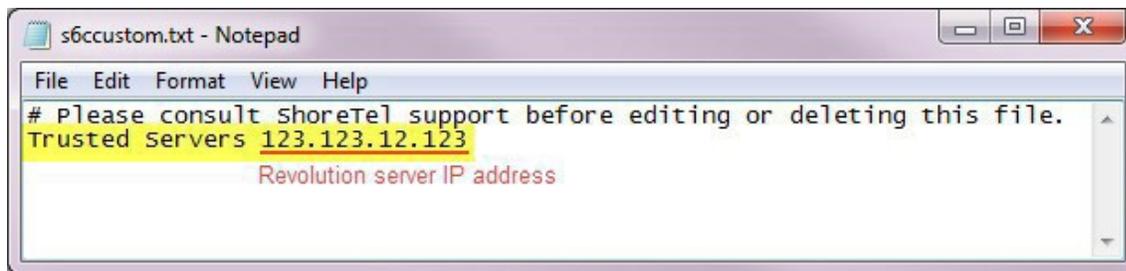


The screenshot shows a Notepad window titled "custom\_IP485g.txt". The menu bar includes File, Edit, Format, View, and Help. The text content is as follows:

```
# Please consult ShoreTel support before editing or deleting this file.  
[papi]  
trustedServers = 123.123.12.123  
                Revolution server IP address
```

**Note:** Use uppercase S in servers – trustedServers.

For **IP655 and IP5xx series** phones:



The screenshot shows a Notepad window titled "s6ccustom.txt". The menu bar includes File, Edit, Format, View, and Help. The text content is as follows:

```
# Please consult ShoreTel support before editing or deleting this file.  
Trusted Servers 123.123.12.123  
                Revolution server IP address
```

---

## Configuring 6900 IP phones

To configure 6900 series IP phones with Mitel Revolution, add the following configuration parameters in the IP phone configuration file (*startup.cfg* located *C:\netpub\ftproot\phoneconfig*) which registers the phones on the Mitel Revolution server:

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

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

*action uri poll interval: 60*

where,

- *xml application post list* is the HTTP server that is pushing XML applications to the IP phones and *revolution server IP* is the IP address of the Mitel Revolution server.
- *action uri poll* is the URI to be called every *action uri poll interval* seconds
- *action uri poll interval* is the interval, in seconds, between calls from the phone to the *action uri poll*. The interval between 60 and 300 seconds depending on how frequently you want the phone to register.

**Note:**

- Ensure to reboot the phone after the parameters are included in the configuration file.
- The IP phones display the “**Cannot display**” error message when the Mitel Revolution server is not reachable.

## Mitel Revolution Configuration

This section describes how to configure Mitel Revolution with the MiVoice Connect Director.

The communication with Mitel IP phones is done based on the following settings:

- Adding the Mitel Revolution server IP address as a trusted server in each phone model custom file
- Enabling Allow Phone API for users in Mitel MiVoice Connect.

If you are using Mitel Revolution SIP Activator, so you can trigger notifications by dialing an extension number, you also need to setup a SIP trunk in your Mitel communications manager.

**Note:** SIP Activator is required to trigger live broadcast notifications.

Refer to the [Revolution WebHelp](#) for comprehensive details on configuring Mitel and Revolution functionality. The following sections are setup requirements specific to Mitel Revolution communicating with a Mitel system.

---

## Installation and Configuration

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

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

## Network Requirements

### Firewall Requirements/Port Usage

Port	Description
Mitel Revolution to Mitel Connect Director	Protocol Description
5060	UDP SIP
3306, 4308	TCP, MySQL – 3306 (Mitel v9), 4308 (Mitel v10+)
20480 – 32767	RTP, UDP
2748	TCP
Mitel Revolution Server to IP Phones IP Phones to Mitel Revolution Server	
80	TCP, HTTP
20480 – 32767	RTP, UDP – unicast and multicast
Mitel Revolution to IP Speakers and PagingRelays	
80	TCP, HTTP
6789	UDP, Mitel Revolution IP device protocol
20480 – 32767	RTP, UDP – unicast and multicast

### Multicast Requirements

If users choose to use multicast, which is strongly suggested with over 100 endpoints, then multicast must be enabled on the network. All interfaces between the Mitel Revolution server and the destination endpoints need to have IP PIM enabled. The switches should have IGMP/CGMP enabled.

If the entire network cannot be multicast enabled or enabling multicast would require a large or recurring investment, the Mitel Revolution Paging Relay should be deployed at the remote site. This allows Mitel Revolution to send a single unicast stream over the WAN connection. The Paging Relay converts the unicast stream into a multicast stream at the remote site. See the Mitel Revolution WebHelp or contact Mitel Revolution Sales for more information. Refer to your network support or your telephony partner for the best approach for implementing multicast on your network.

## Configuring the MiVoice Connect Director

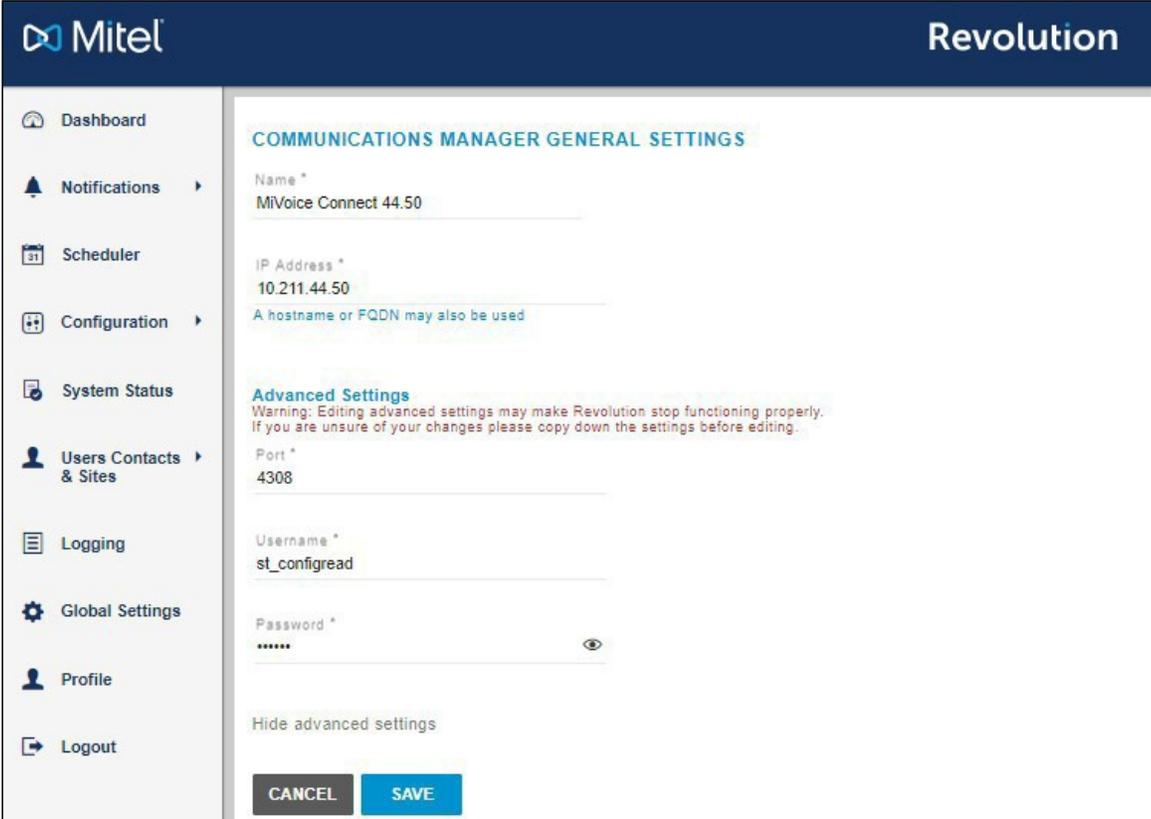
Perform the following steps to configure the MiVoice Connect Director in Mitel Revolution:

1. Go to **Configuration > Phone Systems > Mitel**.
2. Click **New Connect Communications Manager**.
3. Enter a descriptive **Name** to the MiVoice connect server.
4. Enter the MiVoice Connect Server address in the **IP Address** field.
5. Enter the Mitel server port or username/password in the **Advanced Settings** section if you are not using the default Mitel server port and credentials.

**Note:** By default, the Mitel port is set as 4308.

Do the following to change the advanced settings:

- a. Click **Show Advanced Settings**.
  - b. Change the **Port**, **Username**, or **Password**.
6. Click **Save**.



The screenshot displays the Mitel Revolution web interface. The top navigation bar shows the Mitel logo on the left and the word 'Revolution' on the right. A left-hand sidebar contains a menu with the following items: Dashboard, Notifications, Scheduler, Configuration, System Status, Users Contacts & Sites, Logging, Global Settings, Profile, and Logout. The main content area is titled 'COMMUNICATIONS MANAGER GENERAL SETTINGS'. It contains the following fields and sections:

- Name \***: A text input field containing 'MiVoice Connect 44.50'.
- IP Address \***: A text input field containing '10.211.44.50'. Below this field is a note: 'A hostname or FQDN may also be used'.
- Advanced Settings**: A section with a warning: 'Warning: Editing advanced settings may make Revolution stop functioning properly. If you are unsure of your changes please copy down the settings before editing.' It includes:
  - Port \***: A text input field containing '4308'.
  - Username \***: A text input field containing 'st\_configread'.
  - Password \***: A password input field with masked characters '\*\*\*\*\*' and a toggle icon for visibility.
- A link labeled 'Hide advanced settings'.
- At the bottom, there are two buttons: 'CANCEL' and 'SAVE'.

## SIP Activator Configuration

This section describes the Mitel Revolution configurations for MiVoice Connect Director.

### Creating SIP Lines

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.
4. In the **Extension** field, enter one of the SIP line number you defined in MiVoice Connect Director.
5. (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.
6. (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.
7. Click **Save**.

The screenshot shows the 'SIP LINE GENERAL SETTINGS' configuration page in the Mitel Revolution interface. The left sidebar contains navigation options: Dashboard, Notifications, Scheduler, Configuration, System Status, Users Contacts & Sites, Logging, Global Settings, Profile, and Logout. The main content area includes the following fields and options:

- Name \***: SIP Trigger 1
- Available in All Sites
- Extension \***: 850
- If your SIP Trunk requires a prefix, include it in the Extension
- Security Code**: 0
- Enter 0 for no security code
- Activator Text Title**: SIP Trigger#1 Title
- Activator Text Body**: SIP Trigger#1 Text Body

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

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

**SIP ACTIVATOR**
NEW SIP LINE

First, configure your SIP trunk and define a range of SIP lines in your phone system communications manager. Then add SIP lines here, which are made available to assign to notifications to allow end users to send those notifications by dialing extension numbers on their IP phone.

ACTIONS
SETTINGS

**SIP Lines**

Name	Extension	Security Code	Notification(s)	
Line 5100 - Campus A	5100	321	All Sites - All Hands Meeting, DailyAnnouncements	
Line 5101 - Campus A	5101	321	Site 1 - Network Outage, Prison Yard Carnage	
Line 5102 - Campus A	5102	321	Building 102 - Maintenance	
Line 5103 - Campus A	5103	321	Campus A - Weather Closure, Gen Pop Melee	
Line 5104 - Campus A	5104	321	Campus A - Lockdown	
Line 5105 - Campus A	5105	321	Campus A - Remote Gate Lock	
Line 5106 - Campus A	5106	321	Campus C - Fire Drill	
Line 5107 - Campus A	5107	321	Code Blue	
Line 5108 - Campus A	5108	321		
Line 5109 - Campus A	5109	321		

## Authenticating the SIP lines

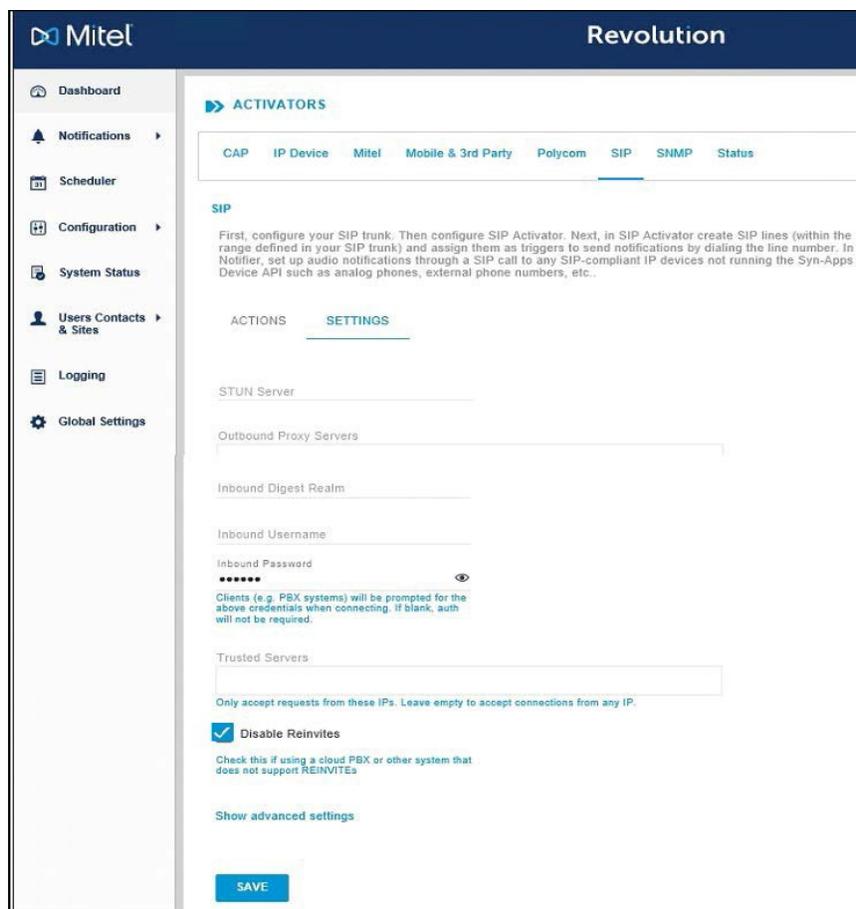
If you configured authentication when you created your SIP trunk in Mitel MiVoice Connect, configure Mitel Revolution with those credentials.

1. Go to **Configuration > Phone Systems > SIP**.
2. Click **Settings**.
3. Leave **Inbound Digest Realm** field blank. (Mitel authenticates at the trunk level. It doesn't use realms.)
4. In the **Inbound Username** field, enter the Mitel MiVoice Connect username.
5. In the **Inbound Password** field, enter the Mitel MiVoice Connect password.
6. Enter specific values in 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 only need to update this field 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.

<p><b>Transport Layer Security</b></p>	<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>
--	--

7. Select the **Disable Reinvites** checkbox.



8. Click **Save**.

## Creating Notifications

To create and send notifications, read through the Mitel Revolution [WebHelp](#) for an overview of how the system works and how to configure other features. The Notification Overview topic provides a description of the different types of notifications that can be created.

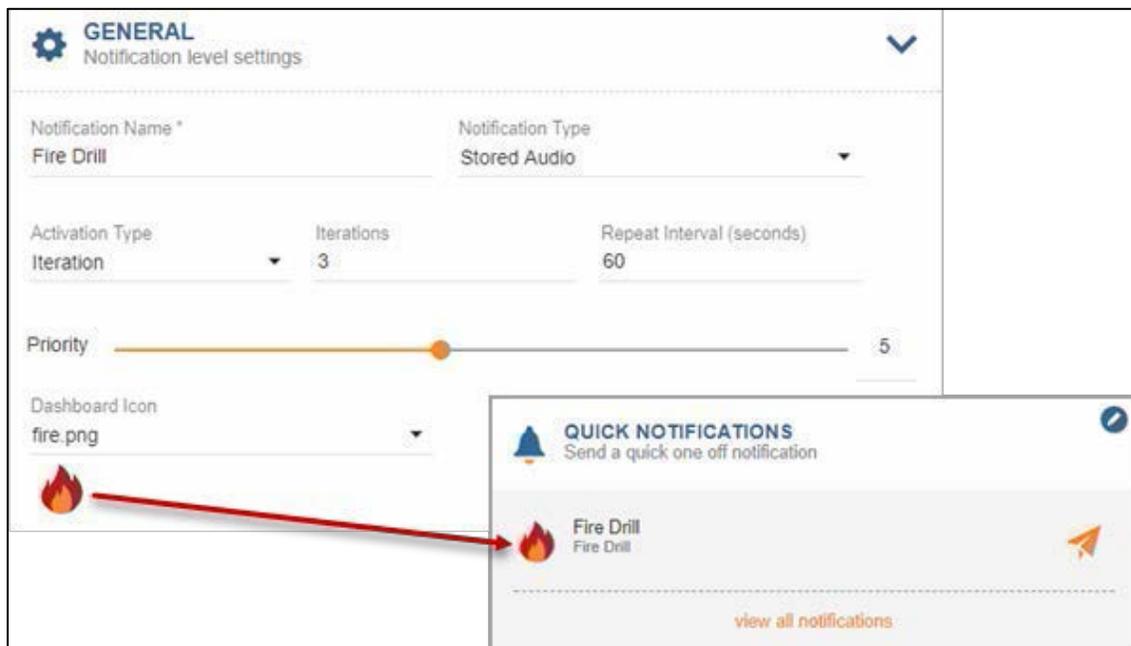
On dialing a SIP Line number, the Mitel Revolution interface sends notification to contacts in the **Endpoint and Contact Selection** section.

Perform the following steps to send a notification from the Mitel Revolution interface:

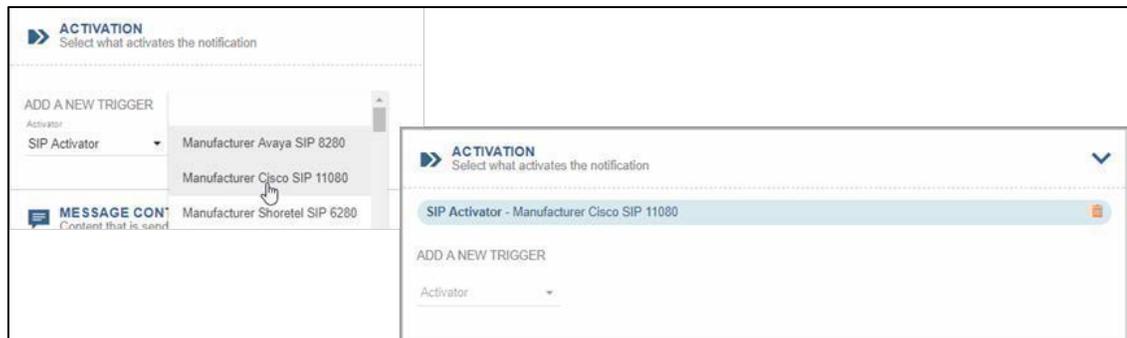
1. Create the content (audio, image, text) to be sent.
2. Assign endpoint/s to receive the notification.
3. Click **Save** and **Send**.

Perform the following steps to create a Stored Audio notification:

1. Go to **Notifications > Manage**.
2. Click **NEW NOTIFICATION**.
3. Enter the following **GENERAL** Settings:
  - a. Provide a descriptive **Notification Name**.
  - b. (Optional) From the Dashboard Icon drop-down list, select an image to display with the notification.
  - c. Select a **Priority** level for the notification.
  - d. From the **Notification Type** drop-down list, select **Stored Audio**.



4. Click the **TRIGGERS** settings and enter the following values:
  - a. From the **Activator** drop-down list, select **SIP Activator**.
  - b. From the Trigger drop-down list, select the SIP line you want to use.



5. Click the **Message Details** settings and enter the following values:
  - a. Set **Caller ID** to Show.
  - b. Select an **Audio tone** or **prerecorded message** from the **Stored Audio** drop-down list. Repeat the process to select additional audio files, if necessary. Audios play in the order listed. Drag and drop files to rearrange the order.
  - 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) Select an image from the **Stored Images** drop-down list to send with the notification. You can repeat this step to select an additional image, if desired.
  - e. Choose Font Color for the notification fonts.
  - f. Enter a **Title** for the notification.
  - g. Enter the **content** of your notification in the **Body**.
  - h. Leave '**Clear notification...**' **unchecked**. (Checking 'Clear notification...' removes the message content from a phone endpoint display once the selected audio files finish playing).

**MESSAGE DETAILS**  
Content to send to the endpoints

Carrier ID: Show

Select Audio: EV General-Test.mp3

Volume: 7  Use device default

Select Image: Idea\_full.png

Font Color: #2222E7  
Devices without font color support will use their default color

Title: Title for Notification#1

Body: Body for Notification#1

**RESPONSE OPTIONS**

Response 1

Short text: Short Text for Notification#1

Long text: Long Text for Notification#1

+ Add Response

Clear notification from display on completion

6. Select **Endpoints** to receive the notification:  
Leave '**Allow users to add endpoints dynamically**' at **None**.

**ENDPOINT & CONTACT SELECTION**  
Devices & Contacts that the notification will be sent to

Allow users to add endpoints dynamically: None

**Contact Methods**  
Check all communication methods to use for selected contacts.

Mobile  Email  Internal

Show: Endpoints Contacts **User Tags** System Tags Search

Endpoint	Count
All Sites	33
billy test	9
<b>Building 101</b>	<b>3</b>
Building 102	3
Building 103	3

**SELECTED ENDPOINTS & CONTACTS**

- AtlasSound - 192.168.10.68
- AtlasSound - 192.168.11.78
- Building 101

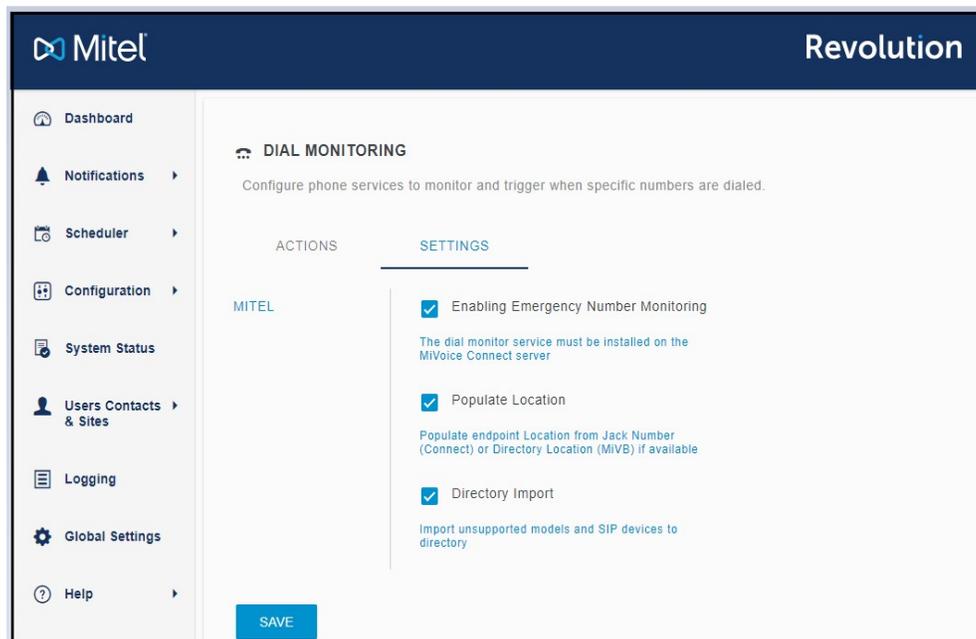
CLOSE SAVE

7. Click **Save**.

## Configuring Emergency Number

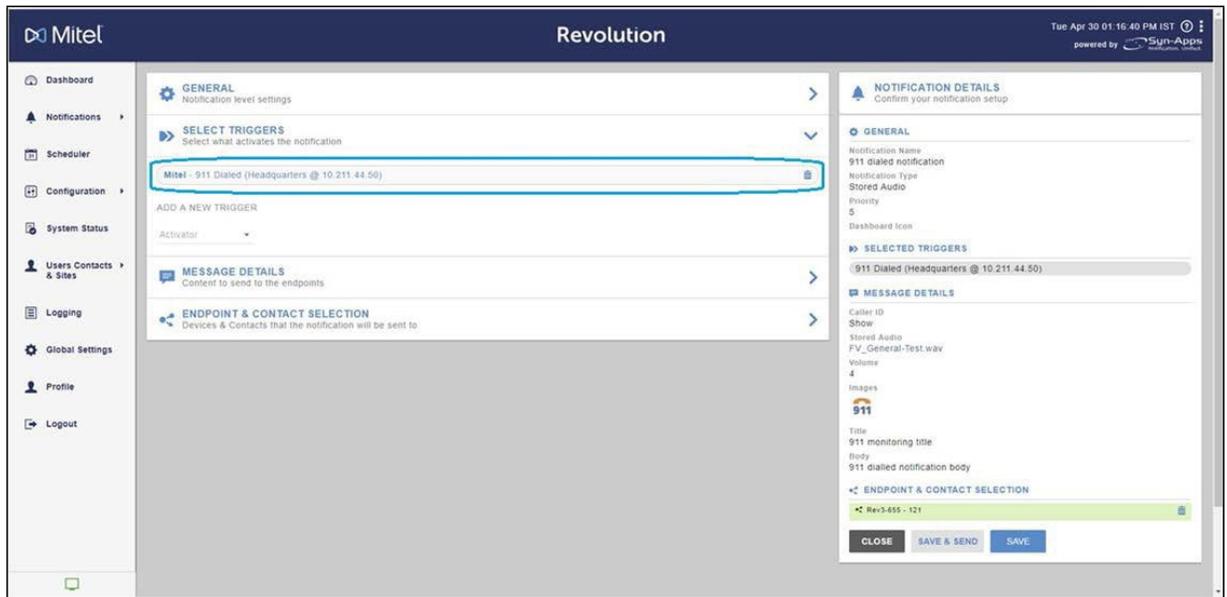
There is no configuration required in the Mitel Revolution interface. The numbers to be monitored are configured in the Mitel communications manager, which is pulled into the Mitel Revolution interface, and displayed in the **Dial Monitor** section. The numbers are available as triggers to assign to notifications. Any time the number being monitored is dialed; the notification is triggered.

- All numbers are initially assigned to All Sites.
- You can edit numbers to change their display name and site assignment.
- You cannot change the number being monitored in Revolution. Changes must be made in your Mitel communications manager.
- To stop monitoring a number, remove it in your Mitel communications manager. On the next Revolution phone refresh, the Revolution Mitel Notifier page is updated, and the trigger is automatically removed from any notifications it is assigned to.
- To populate the endpoint location from MiVoice Connect, you must enable **Populate Location**; and to import unsupported SIP device models, you must enable **Directory Import**. To do this, navigate to **Configuration > Phone Systems > Mitel > Dial Monitoring** and select the check boxes associated with **Populate Location** and **Directory Import** respectively.



**Note:**

If the **Dial Monitor** Service program is not installed, or is not running, on your Mitel communications manager server, notifications cannot be triggered. Emergency numbers configured to monitor in Mitel Connect Direct are still pulled into Mitel Notifier, but without the Dial Monitor Service program installed, Revolution Mitel Notifier does not know when a monitored number is dialed.



## Disable Using Mitel Call Monitoring

If you do not want to use the call monitoring feature in the Mitel Revolution interface, or your security policies prevent you from installing the **Dial Monitor** Service program on your Mitel server, go to **Configuration > Phone Systems > Mitel > Settings** and uncheck **Enable Emergency Number**. This prevents Mitel Notifier from displaying an error message when there is no link to the Dial Monitor Service. The emergency numbers configured in your Mitel communications manager still display on the Mitel Notifier page, but they are not monitored by the Mitel Revolution interface.

## Triggering Emergency Notification

Perform the following steps to create an emergency notification in Mitel Revolution:

1. Go to **Notifications > Manage**.
2. Click **NEW NOTIFICATION**.
3. Enter **General** Setting:
  - a. Provide a descriptive name that's meaningful to your users.
  - b. (Optional) Select an image to display with the notification when it's assigned to the Dashboard.
  - c. Select a Priority level for the notification.
  - d. Select the type from the **Notification Type** drop-down list.

The screenshot shows the 'GENERAL' settings for a notification. The title is 'GENERAL Notification level settings'. The fields are as follows:

- Notification Name \***: 911 Dialed
- Notification Type**: Text And Images
- Activation Type**: Iteration
- Iterations**: 1
- Repeat Interval (seconds)**: 60
- Priority**: 8 (indicated by a slider)
- Dashboard Icon**: 911-monitoring.svg
- Available in All Sites**:

A 911 icon is located at the bottom left of the form.

4. Select **Triggers**.
  - a. Select **Mitel** from the **Activator** drop-down list.
  - b. Select the emergency number from the **Trigger** drop-down list.
5. Enter **Message details**.
  - a. Set Caller ID to Show.
  - b. Select an **audio tone** or **prerecorded message** from the **Stored Audio** drop-down list. Repeat the process to select additional audio files, if necessary. Audios play in the order listed. Drag and drop files to rearrange the order.
  - 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) Select an image from the Stored Images drop-down list to send with the notification. You can repeat this step to select an additional image, if desired.

- e. Enter the **Title** and content for Notification.
- f. Select variables from the drop-down list. Click on **Source>Activating Endpoint Location** {source.Location}.

**MESSAGE DETAILS**
Content to send to the endpoints
▼

---

Caller ID
ⓘ

Show ▼

---

Select Audio
ⓘ

↕ Air-Raid-Siren.mp3
▶
✕

Volume

2

Use device default

---

Select Image
ⓘ

↕ 911 911-monitoring.svg
✕

Font Color

Devices without font color support will use their default color

Clear notification from display on completion

Delay before clearing (seconds)

Title \*

{source.Location} ⓘ

Body

{source.Location} ⓘ

- g. Leave '**Clear notification...**' **unchecked**. (Checking 'Clear notification...' removes the message content from a phone endpoint display once the selected audio files finish playing).

**6. Select Endpoints** to receive the notification.

**ENDPOINT & CONTACT SELECTION**
Devices & Contacts that the notification will be sent to
▼

---

Allow users to add endpoints dynamically
ⓘ

None ▼

---

**Contact Methods**

Check all communication methods to use for selected contacts.

Mobile
  Email
  Internal

Show: Endpoints Contacts User Tags System Tags

Unselect

Endpoint	Count	Action
All Sites	33	▶
billy test	9	▶
Building 101	3	▶
Building 102	3	▶
Building 103	3	▶

**SELECTED ENDPOINTS & CONTACTS**

- AtlasSound - 192.168.10.68 ✕
- AtlasSound - 192.168.11.78 ✕
- Building 101 ✕

CLOSE
SAVE

7. Click **Save**.

On dialing 911, the Mitel Revolution interface sends the notification and Jack number to the contacts in the **ENDPOINT & CONTACT SELECTION** section.

**Note:**

- The endpoints do not receive the Jack info when 911 is dialed from the soft phone.
- According to Kari's law, Jack number and caller ID are mandatory for 911 notifications.
- The endpoint receives Jack info even when 911 is triggered from the unsupported phone model in Revolution.

## Third-Party Troubleshooting

Basic troubleshooting can be done using the various SA-Announce log files. You can access them from Mitel Revolution > Logging. See the Mitel Revolution WebHelp > [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 IVR and Mitel Web.

#### 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.

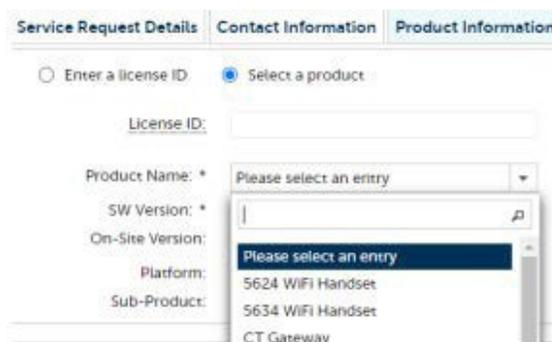
**Note:** To know the version number of your product, log in to TechCentral Tracker to find the list of versions in the drop-down menu.

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 in the TechCentral Tracker interface. It features a form with several fields: 'License ID', 'Product Name', 'SW Version', 'On-Site Version', 'Platform', and 'Sub-Product'. The 'Product Name' field is currently open, displaying a dropdown menu with the text 'Please select an entry' and a list of product options: '5624 WiFi Handset', '5634 WiFi Handset', and 'CT Gateway'. The 'Platform' field is set to '5624 WiFi Handset' and the 'Sub-Product' field is set to '5634 WiFi Handset'. The 'License ID' field is empty. The 'SW Version' and 'On-Site Version' fields are also empty.

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

Service Request Details	Contact Information	Product Information	Site Information
Select Site: *	<input type="text" value="Company Name"/>		
Site Name:	<i>Company Name</i>		
Address:	<i>Street</i>		
City:	<i>City</i>		
Zip Code:	<i>Unknown</i>		
State/Province:	<i>STATE OR PROVINCE</i>		
Country:	<i>Country</i>		
Phone Number:	<i>Unknown</i>		

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

Create New Service Request

Service Request Details	Contact Information	Product Information	Site Information	Troubleshooting Notes
Symptoms/Details: *	<div style="border: 1px solid #ccc; height: 100px;"></div>			Value is required

Navigation

# Appendix 1 Mitel Revolution Integration Notes for MiVoice Connect

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

Activator/Notification	Integration Detail	
<b>Activators</b>		
SIP Activator	Supported through SIP trunks.	
Emergency Call Activator	Dial Monitoring	
SIP Activator (Active-Standby)	MiVoice Connect utilizes multiple Trunks/Trunk Groups (one for each Revolution server) with Custom Rules configured to designate trunk priority.	
Emergency call trigger (Active-Standby)	The Dial Monitor program running on the MiVoice Connect server sends the configured Emergency numbers to each Revolution server the Connect server is added to, making emergency call triggers available in all Revolution servers.	
SIP Activator (Active-Active)	MiVoice Connect utilizes multiple Trunks/Trunk Groups (one for each Revolution server) with Custom Rules configured to designate trunk priority.	
Emergency Call trigger (Active-Active)	The Dial Monitor program running on the MiVoice Connect server sends the configured Emergency numbers to each Revolution server the Connect server is added to, making emergency call triggers available in all Revolution servers.	
<b>Notifications</b>		
SIP Paging Notification	MiNET	Not applicable
	SIP	Supports 4XX and 69XX.
XML Text Display	MiNET	Not applicable
	SIP	4XX and 69XX support XML text display.
XML Audio	MiNET	Not applicable
	SIP	4XX and 69XX supports two-way XML audio.
Multicast	MiNET	Not applicable
	SIP	4XX and 69XX support Multicast streams.
Location details	Location details (Jack number) are sent as part of the notification.	

---

	(MR-19 - No Jack info when dialed from Soft-client)
SIP Paging Notification (Active-Standby)	Supported
XMLNotification (Active-Standby)	The phone receives XML notifications from any Revolution server designated in the approved server list of the phone's config file.
Multicast Notification (Active-Standby)	Supported
SIP Paging Notification (Active-Active)	MiVoice Connect utilizes multiple Trunks/Trunk Groups (one for each Revolution server) with Custom Rules configured to designate trunk priority.
XMLNotification (Active-Active)	The phone receives XML notifications from any Revolution server designated in the approved server list of the phone's config file.
Multicast Notification (Active-Active)	Supported



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