

# Mitel Revolution

## Configuration Guide for Mitel MiVoice Connect

2023.2

April 2024



---

## NOTICE

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks™ Corporation (MITEL®). Mitel makes no warranty of any kind with regards to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

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

## TRADEMARKS

The trademarks, service marks, logos and graphics (collectively "Trademarks") appearing on Mitel's Internet sites or in its publications are registered and unregistered trademarks of Mitel Networks Corporation (MNC) or its subsidiaries (collectively "Mitel") or others. Use of the Trademarks is prohibited without the express consent from Mitel. Please contact our legal department at [legal@mitel.com](mailto:legal@mitel.com) for additional information. For a list of the worldwide Mitel Networks Corporation registered trademarks, please refer to the website: <http://www.mitel.com/trademarks>.

## Mitel Revolution Configuration Guide for Mitel MiVoice Connect

®,™ Trademark of Mitel Networks Corporation  
© Copyright 2024 Mitel Networks Corporation  
All rights reserved

Introduction .....	5
About this Guide .....	5
EmergencyCallNotifications(USAOnly).....	5
Documentation .....	5
Overview.....	6
Mitel Revolution Overview .....	7
MiVoice Connect Director Configuration .....	8
Configuring SIP Users.....	9
Creating SIP Profiles .....	9
Creating SIP Servers .....	10
Creating SIP Trunks .....	12
What you need to know .....	12
Create Trunk Groups .....	12
Create IndividualSIP Trunks .....	15
Configuring Switch Settings.....	16
Configuring Emergency Numbers to Monitor .....	17
Configuring Jack Number.....	17
Enabling Phone API for User Accounts.....	18
Authorized Server.....	19
Configuring 6900 IP phones.....	21
Mitel Revolution Configuration.....	22
Installation and Configuration.....	23
Network Requirements .....	24
Firewall Requirements/Port Usage .....	24
Multicast Requirements .....	24
Configuring the MiVoice Connect Director.....	25
SIP Activator Configuration.....	26
Creating SIP Lines .....	26
Authenticatingthe SIP lines .....	27
Creating Notifications.....	29
Configuring Emergency Number .....	32
Disable Using Mitel Call Monitoring.....	33
Triggering Emergency Notification .....	34

Third-Party Troubleshooting.....	37
Mitel Revolution Technical Support.....	38
Creating tickets for Non-ARID Products .....	38
Creating an IVR Ticket (Americas Only) .....	38
Creating a Web Ticket.....	38
Appendix 1    Mitel Revolution Integration Notes for MiVoice Connect.....	40

---

---

# 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.

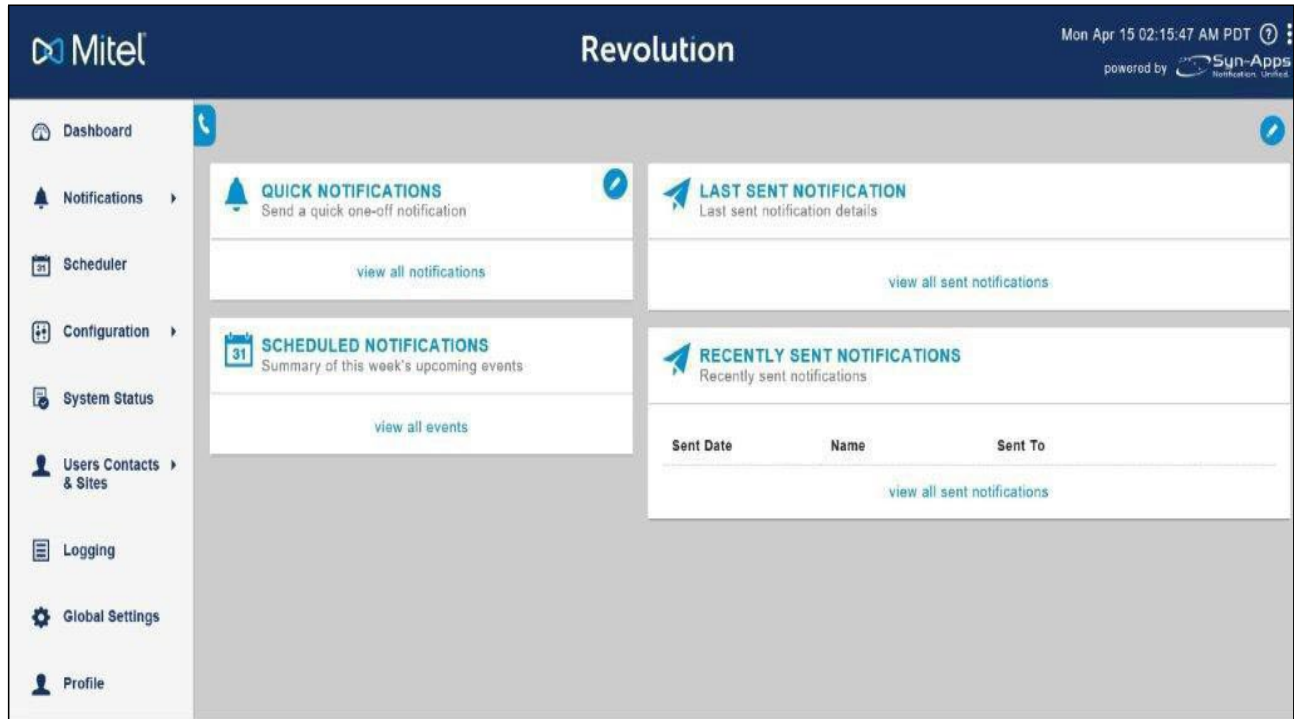
If the customer is not using a NG911 vendor for emergency calls then Mitel Revolution can serve as the primary notifier and mechanism for enabling local alerts associated with Kari's Law.

## Documentation

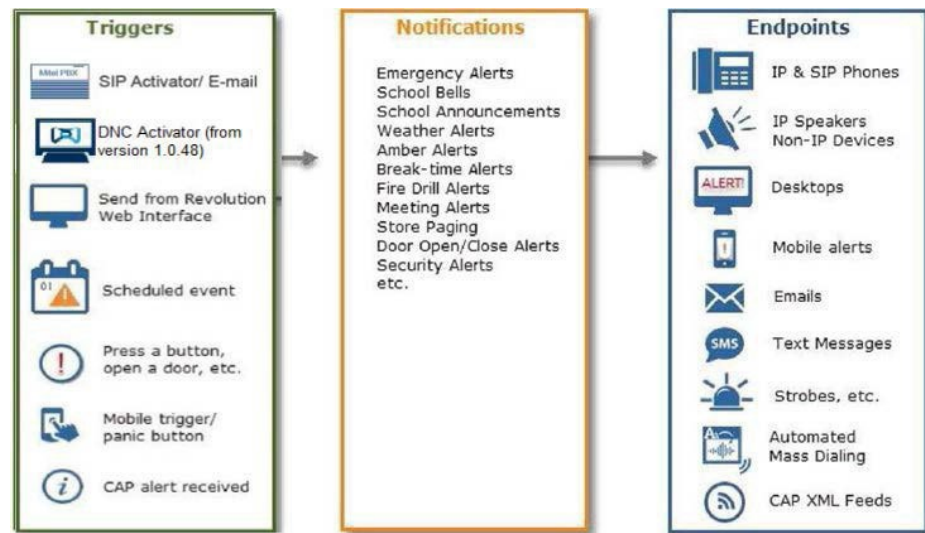
- Mitel MiVoice Connect Planning and Installation Guide: The Mitel MiVoice Connect Planning and Installation Guide describes how to plan and install a MiVoice Connect system. The Installation Guide can be downloaded from Mitel [MiVoice Connect Planning and Installation Guide](#).
- Mitel MiVoice Connect 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.



## Mitel Revolution Overview



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**.

**Mitel Connect Director** | Help | admin

Search

**SIP Profiles** | NEW | COPY | DELETE | BULK DELETE

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

Page 1 of 1 | Rows / page: 50 | View 1 - 2 of 2

**Mitel Revolution SIP Profile** | SAVE | RESET | CANCEL

**GENERAL**

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.

**Mitel Connect Director** Help | admin

Search

**ADMINISTRATION**

- Users
- Trunks
- Telephones
- Appliances/Servers
  - Platform Equipment
  - Spare Equipment
  - Integrated Servers
    - SIP Servers**
    - SIP Profiles
  - Options
- Features
- System

**SIP Servers** NEW | COPY | DELETE | BULK DELETE

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

Page 1 of 1 Rows / page: 50 View 1 - 1 of 1

**Mitel Revolution** SAVE | RESET | CANCEL

**GENERAL**

Name:

Site:

Protocol:

Host (name / address / domain):

Override default port:

☐ Allow external voice mail for Extension-Only user

☐ Allow fax redirect to this server

Extension:  SHOW REFERENCES

Assigned user group:

SIP profile:

Digest authentication:

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.*

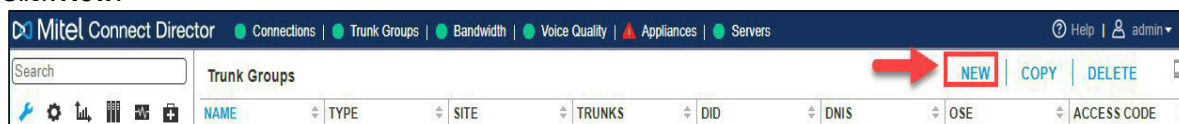
### Notes:

- 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 trunking; 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

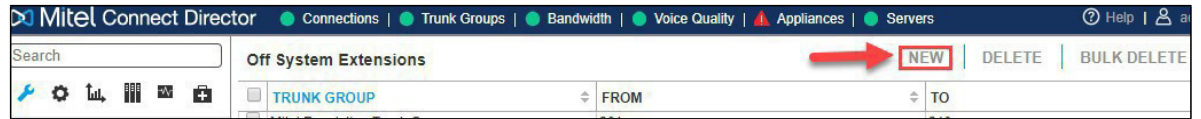
Prepend dial out prefix:

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 **EditOSE** link in the Trunk digit manipulation section. Click **New**.



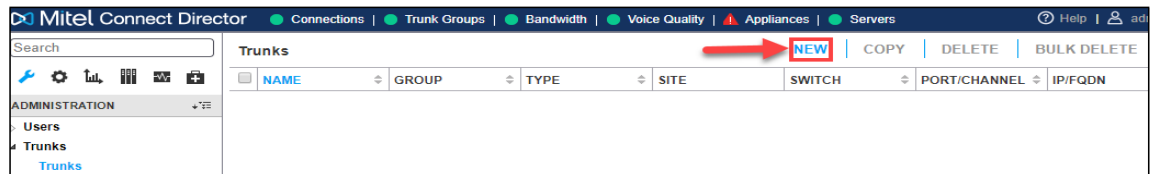
- c. From the **Trunk Group** drop-down list, select the trunk group you created and define an **extension range** within your Mitel PBX extensions.

- 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.

## Configuring Switch Settings

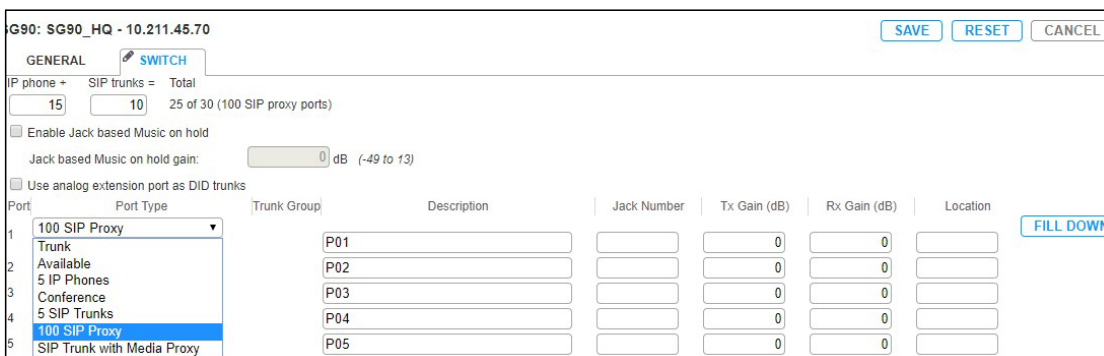
Perform the following steps to configure a switch:

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	Site1	Headquarters	Headquarters	WinHQ	10.211.18.55		
Site1	SoftSwitch	Site1	Site1	Headquarters	vPhone	10.211.18.69		00-50-56-93-06-19
Site2		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 **PortType** 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)

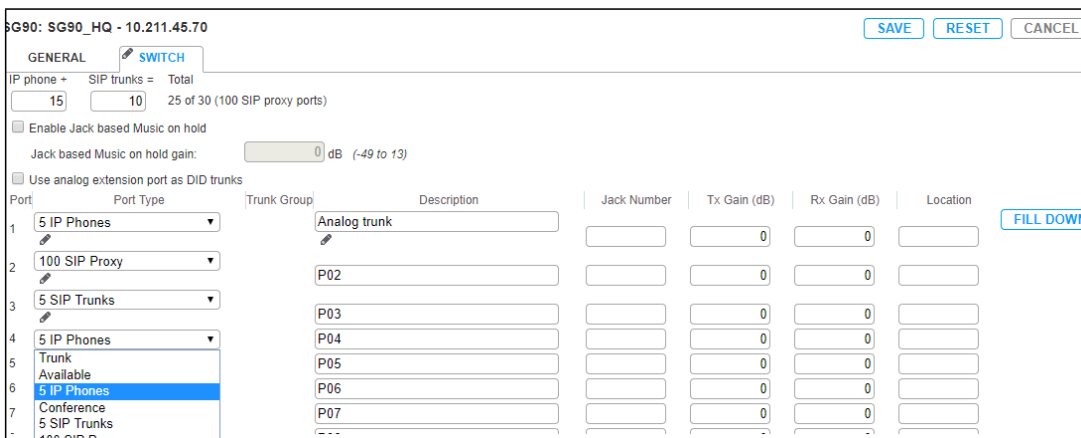
☐ Enable Jack based Music on hold  
Jack based Music on hold gain: 0 dB (-49 to 13)

☐ 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	5 SIP Trunks		P05		0	0	

FILL DOWN

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	

FILL DOWN

### 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 NumberList**. 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

Jack number can be configured either in Users page or in IP address Map page.

- Perform the following steps to configure the Jack number from Users page:
  1. Go to **Administration > Users > Users**.
  2. Click a username.
  3. In the **General** tab, enter the **Jack#** such as building number, room number etc.
  4. Click **Save**.
- Perform the following steps to configure the Jack number from IP address Map page:
  1. Go to **Administration > System > Additional Parameters**.
  2. Enable **Use Jack number** from IP Address Map.
  3. Go to **Administration > Telephones > IP Address Map**.
  4. Click **New** and select a site.
  5. Enter the low and high IP address and then provide the Jack number.
  6. 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 selected. The configuration options 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 IPPhones	CustomFile Name
485g	custom_IP485g.txt
480g	custom_IP480g.txt
480	custom_IP480.txt
420	custom_IP420.txt

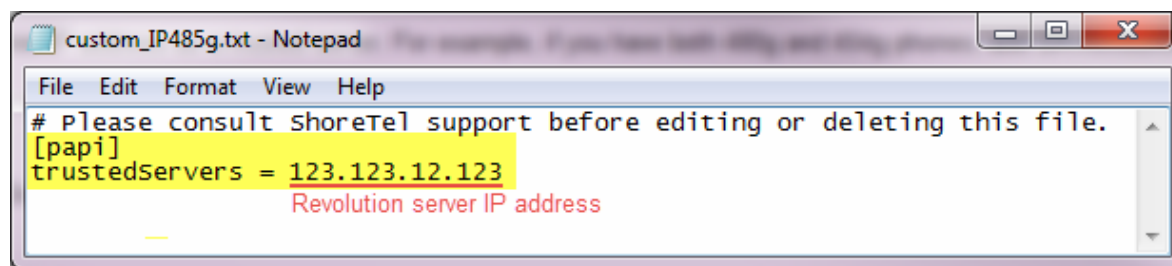
IP655 and IP5xx series phones series custom files are in C:\Inetpub\ftproot.

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

### Rules:

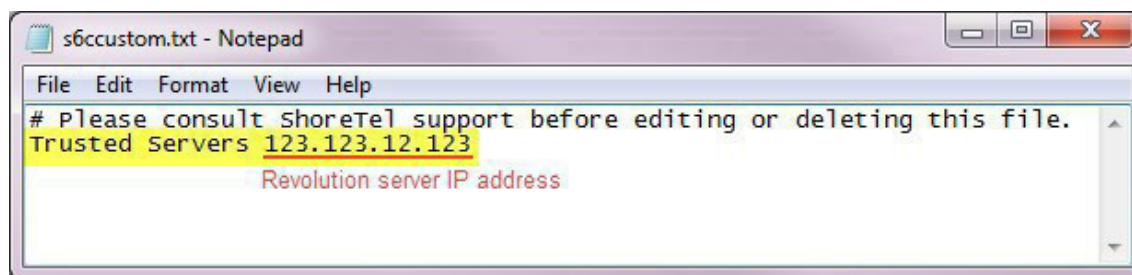
- Edit each custom text file for your phones to add the Mitel Revolution server IP address as a trusted server. For example, if you have both 480g and 485g phones, add Mitel Revolution as a trusted server to both `custom_IP480g.txt` and `custom_IP485g.txt`.
- For IP400 series phones, it is **not** recommended 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:



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

For **IP655 and IP5xx series** phones:



---

## Configuring 6900IP 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\ftpboot\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
MitelRevolution to MitelConnect Director 5060 3306,4308	Protocol Description UDP SIP TCP, MySQL – 3306 (Mitelv9), 4308 (Mitelv10+)
20480 – 32767	RTP,UDP
2748	TCP
MitelRevolution Server to IP Phones IP Phones to Mitel Revolution Server	
80	TCP,HTTP
20480 – 32767	RTP, UDP – unicast and multicast
MitelRevolution to IP Speakersand PagingRelays	
80	TCP,HTTP
6789	UDP, MitelRevolutionIP 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 > PhoneSystems > 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 header features the Mitel logo on the left and the word "Revolution" on the right. A left-hand navigation menu includes links for 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 a "Name" field with the value "MiVoice Connect 44.50", an "IP Address" field with the value "10.211.44.50", and a note stating "A hostname or FQDN may also be used". Below this is the "Advanced Settings" section, which includes 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." The "Advanced Settings" section has three fields: "Port" with the value "4308", "Username" with the value "st\_configread", and "Password" which is masked with asterisks. At the bottom of the form are "CANCEL" and "SAVE" buttons.

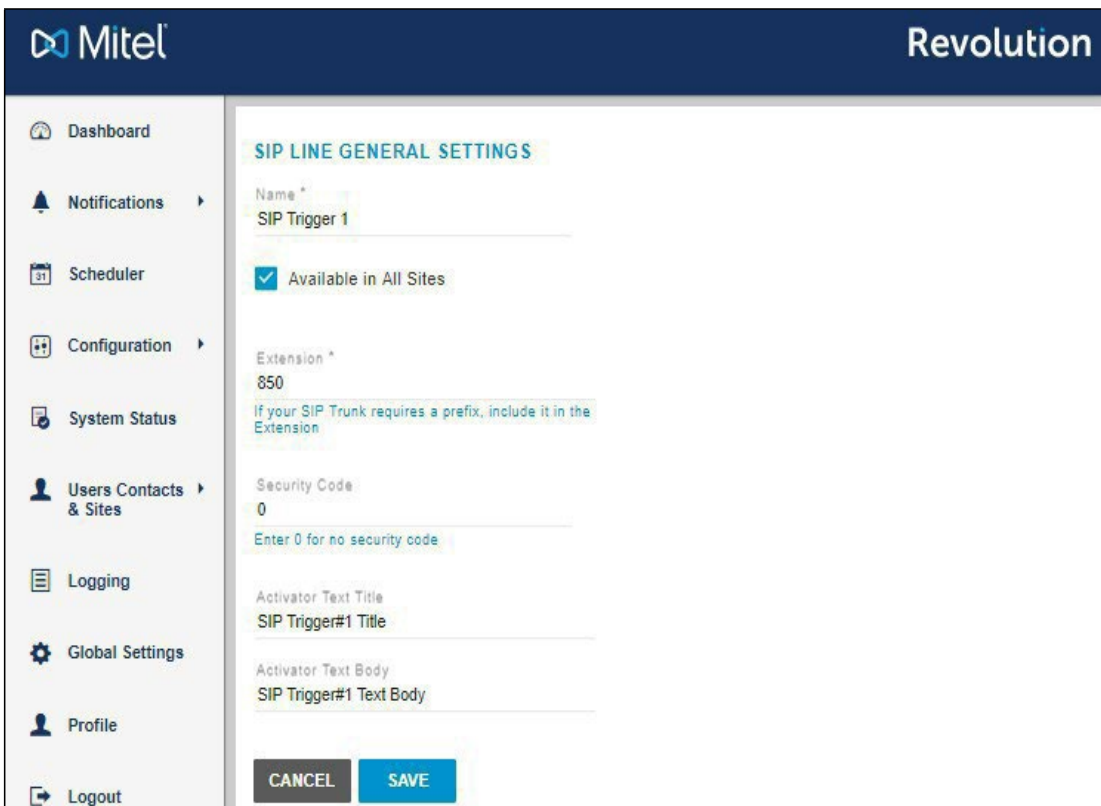
## SIP Activator Configuration

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 Mitel Revolution web interface. On the left is a navigation menu with options: Dashboard, Notifications, Scheduler, Configuration, System Status, Users Contacts & Sites, Logging, Global Settings, Profile, and Logout. The main content area is titled 'SIP LINE GENERAL SETTINGS'. It contains the following fields and options:

- Name \***: A text input field containing 'SIP Trigger 1'.
- Available in All Sites**: A checkbox that is checked.
- Extension \***: A text input field containing '850'. Below it is a note: 'If your SIP Trunk requires a prefix, include it in the Extension'.
- Security Code**: A text input field containing '0'. Below it is a note: 'Enter 0 for no security code'.
- Activator Text Title**: A text input field containing 'SIP Trigger#1 Title'.
- Activator Text Body**: A text input field containing '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, Daily Announcements	
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

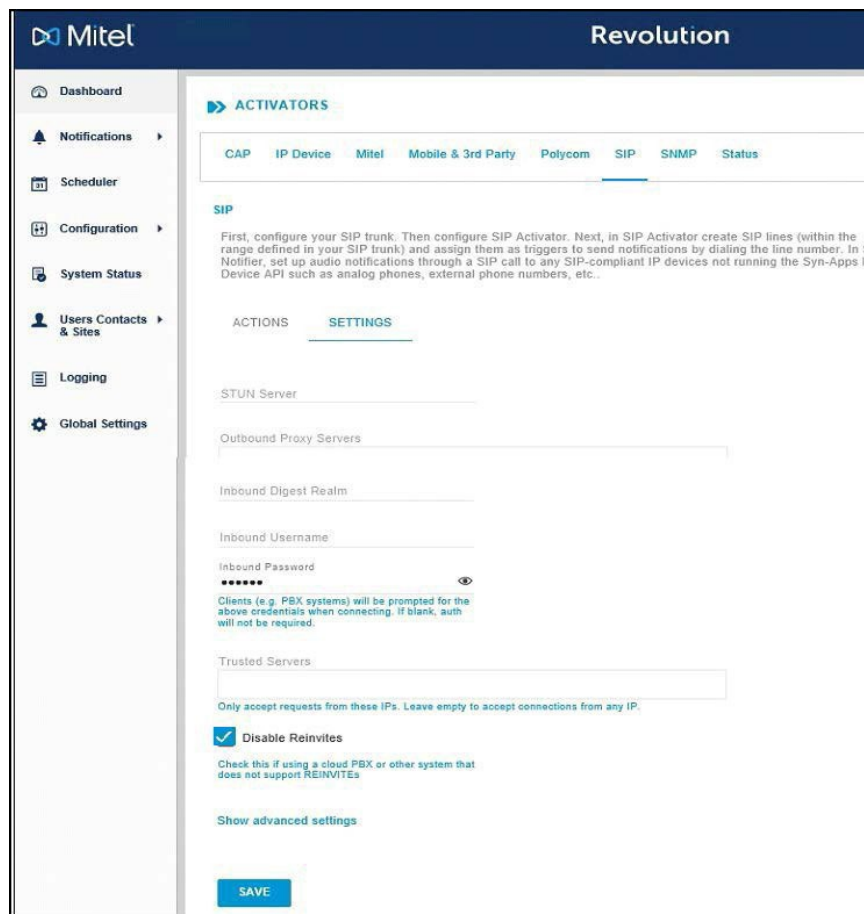
If you configured authentication when you created your SIP trunk in Mitel MiVoice Connect, configure Mitel Revolution with those credentials.

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.

<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>
---------------------------------	--

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



The screenshot shows the Mitel Revolution web interface. On the left is a navigation menu with options: Dashboard, Notifications, Scheduler, Configuration, System Status, Users Contacts & Sites, Logging, and Global Settings. The main content area is titled 'ACTIVATORS' and has tabs for CAP, IP Device, Mitel, Mobile & 3rd Party, Polycom, SIP, SNMP, and Status. The 'SIP' tab is selected. Below the tabs, there is a 'SIP' section with instructions: 'First, configure your SIP trunk. Then configure SIP Activator. Next, in SIP Activator create SIP lines (within the range defined in your SIP trunk) and assign them as triggers to send notifications by dialing the line number. In S Notifier, set up audio notifications through a SIP call to any SIP-compliant IP devices not running the Syn-Apps IP Device API such as analog phones, external phone numbers, etc..'. Below this are 'ACTIONS' and 'SETTINGS' tabs, with 'SETTINGS' selected. The settings include fields for STUN Server, Outbound Proxy Servers, Inbound Digest Realm, Inbound Username, and Inbound Password (masked with dots). A note states: 'Clients (e.g. PBX systems) will be prompted for the above credentials when connecting. If blank, auth will not be required.' There is also a 'Trusted Servers' field and a note: 'Only accept requests from these IPs. Leave empty to accept connections from any IP.' At the bottom, the 'Disable Reinvites' checkbox is checked, with a note: 'Check this if using a cloud PBX or other system that does not support REINVITES'. Below this is a 'Show advanced settings' link and a 'SAVE' button.

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 ContactSelection** 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**.

**GENERAL**  
Notification level settings

Notification Name \*  
Fire Drill

Notification Type  
Stored Audio

Activation Type  
Iteration

Iterations  
3

Repeat Interval (seconds)  
60

Priority  
5

Dashboard Icon  
fire.png

**QUICK NOTIFICATIONS**  
Send a quick one off notification

**Fire Drill**  
Fire Drill

[view all notifications](#)

4. Click the **TRIGGERS** settings and enter the following values:

- a. From the **Activator** drop-down list, select **SIP**.
- b. You can create a new trigger or select an existing trigger.

Follow the steps to create a new trigger:

- From the **Trigger** drop-down list, select **New Trigger**.
- Enter a descriptive **Name** for the SIP line.
- Enter the **Extension** number.
- Enter the remaining informations if required.
- Click **SAVE** to save the changes.

Follow the steps to select an existing trigger:

- From the **Trigger** drop-down list, select the trigger that you want.
- From the **Select Trigger Behavior** drop-down list, select **Activate**.
- Click **ADD**.

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

Caller ID  
Show

Select Audio  
FV\_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	Action
All Sites	33	➔
billy test	9	➔
Building 101	3	➔
Building 102	3	➔
Building 103	3	➔

Unselect

**SELECTED ENDPOINTS & CONTACTS**

AtlasSound - 192.168.10.68	🗑️
AtlasSound - 192.168.11.76	🗑️
Building 101	🗑️

CLOSE SAVE

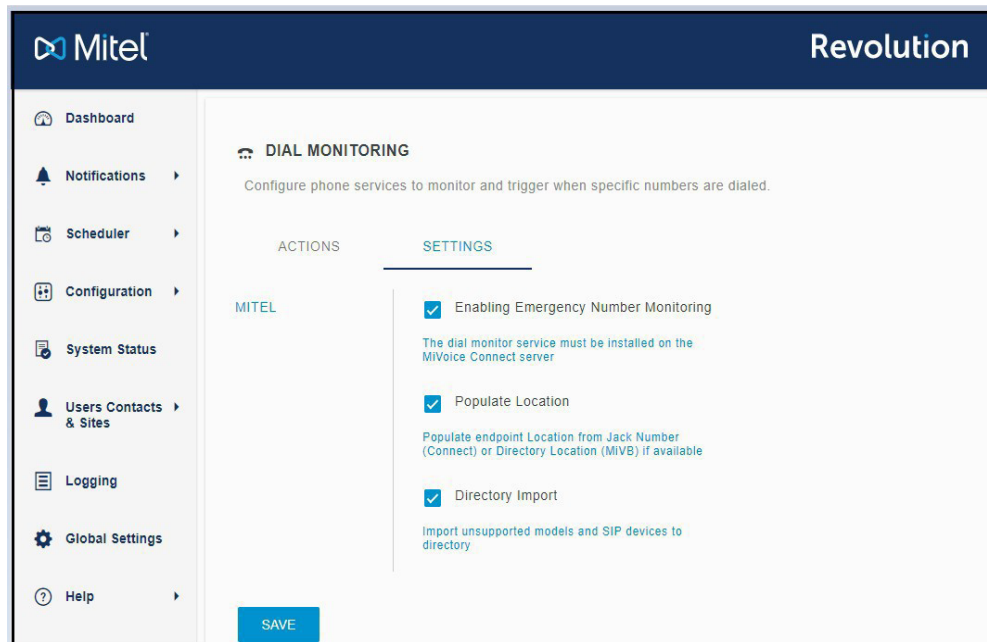
7. Click **Save**.



## Configuring Emergency Number

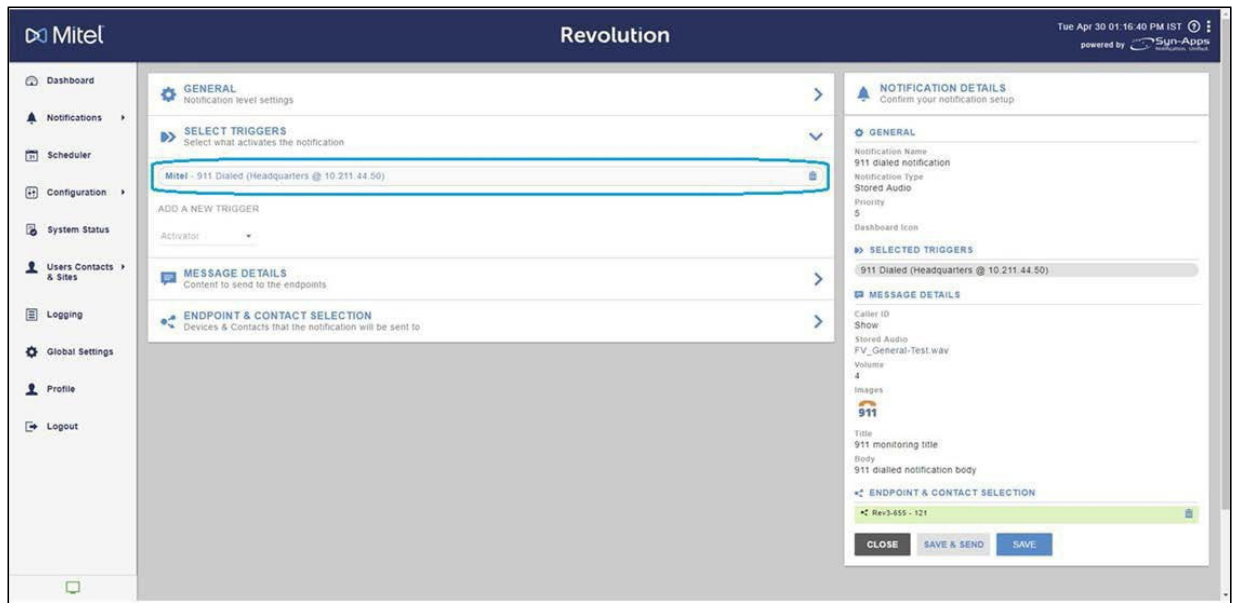
There is no configuration required in the Mitel Revolution interface. The numbers to be monitored are configured in the Mitel communications manager, which is pulled into the Mitel Revolution interface, and displayed in the **Dial Monitor** section. The numbers are available as triggers to assign to 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.

**GENERAL**  
Notification level settings

Notification Name \*  
911 Dialed

Notification Type  
Text And Images

Activation Type  
Iteration

Iterations  
1

Repeat Interval (seco...  
60

Priority  
8

Dashboard Icon  
911-monitoring.svg

☒ Available in All Sites

911

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>ActivatingEndpoint 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-monitoring.svg

Font Color

Devices without font color support will use their default color

☒ Clear notification from display on completion

Delay before clearing (seconds)

0

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

Search

Unselect

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.

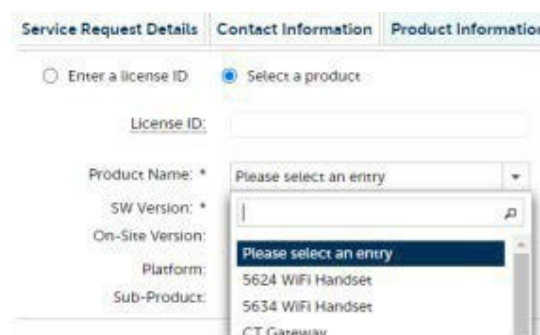
**Note:** To know the version number of your product, log in to TechCentral Tracker to find the list of versions in the drop-down menu.

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) > **TechCentralTracker**.
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 TechCentralTracker interface. It features a form with fields for 'License ID', 'Product Name', 'SW Version', 'On-Site Version', 'Platform', and 'Sub-Product'. The 'Select a product' radio button is selected. A dropdown menu is open for the 'Product Name' field, displaying a list of products: '5624 WiFi Handset', '5634 WiFi Handset', and 'CT Gateway'. The 'Please select an entry' text is visible at the top of the dropdown list.

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
<p>Select Site: * <input type="text" value="Company Name"/></p> <p>Site Name: <input type="text" value="Company Name"/></p> <p>Address: <input type="text" value="Street"/></p> <p>City: <input type="text" value="City"/></p> <p>Zip Code: <input type="text" value="Unknown"/></p> <p>State/Province: <input type="text" value="STATE OR PROVINCE"/></p> <p>Country: <input type="text" value="Country"/></p> <p>Phone Number: <input type="text" value="Unknown"/></p>			

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
<p>Symptoms/Details: * <input type="text"/></p> <p>Value is required</p>				
<p>Navigation</p> <p><input type="button" value="BACK"/> <input type="button" value="CANCEL"/> <input type="button" value="SUBMIT"/></p>				



# 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 foreach 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 foreach 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, 69xx, and 69xxw.
XML Text Display	MiNET	Not applicable
	SIP	4xx, 69xx, and 69xxw support XML text
XML Audio	MiNET	display. Not applicable
	SIP	4xx, 69xx, and 69xxw supports two-way XML audio.
Multicast	MiNET	Not applicable
	SIP	4xx, 69xx, and 69xxw support Multicast
Location details		streams. 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
XML Notification (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.
XML Notification (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

