Mitel Revolution

Configuration Guide for Mitel MiVoice

Connect

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March 2022



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Mitel Revolution Configuration Guide for Mitel MiVoice Connect March 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 <u>Mitel Revolution Web Help</u> 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 <u>MiVoice Connect Planning and Installation Guide</u>.
- 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 <u>Mitel MiVoice Connect System Administration Guide</u>.
- 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 <u>Mitel</u> <u>Revolution Web Help</u>.

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.

Δ	Mitel		Revo	Mon Apr 15 02:15:47 AM PDT () : powered by Sun-Apps	
ß	Dashboard		5		0
	Notifications	•	QUICK NOTIFICATIONS Send a quick one-off notification	LAST SENT NOTIFICATION Last sent notification details	
31	Scheduler		view all notifications	view all sent notification	ins
••	Configuration	×	SCHEDULED NOTIFICATIONS Summary of this week's upcoming events	RECENTLY SENT NOTIFICATIONS	
	System Status		view all events	recently sent numberonia	
1	Users Contacts & Sites	•		Sent Date Name Sent	ns
	Logging				
0	Global Settings				
1	Profile				

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
Name	Enter a descriptive Name for the profile.
User agent	Used to identify devices covered by this profile. This field is not used for SIP servers.
Priority	Leave at default of 100.
Enable	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 Direc	otor				⑦ Help ∣ & adm	iin 🔻
Search	SIP Profiles			NEW COPY DELE	TE BULK DELETE	
🔑 🗘 🗽 🏢 🔤 🖨	NAME	¢	ENABLED \$	USER AGENT	PRIORITY	¢
	Microsoft Exchange			*	50	
Users	Mitel Revolution SIP Profile	ć.	 ✓ 	Mitel Revolution Agent	100	
Trunks						
Telephones						
Appliances/Servers						
Platform Equipment						
Spare Equipment						
▲ Integrated Servers	4					•
SIP Servers	Q		ia <a 1="" is<="" of="" page="" td=""><td>Nows / page: 50 ▼</td><td>View 1</td><td>- 2 of 2</td>	Nows / page: 50 ▼	View 1	- 2 of 2
SIP Profiles	infeit.					
Options	Mitel Revolution SIP Prof	file		SAVE	RESET CANCEL	
> Features	GENERAL					
> System		G				
	Name:	1	litel Revolution SIP Profile			
	User agent:	I	litel Revolution Agent			- 1
	Priority:	1	00			- 1
	Enable					- 1
	System parameters:	la	cceptMWI=notify			
	oyotom parametere.	A	ccept302=sip			
		H	loldSupport=no ddrSupport=diversion			
		E	nableSymmetricDtmf=yes			
		L	seSipProxyOut=yes			
		A	llowedCodecs=PCMU/8000			
		C	ptionsPing=1			
t 🔰 🕨						

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.
- I. Username Leave the field blank.
- m. **Password** Leave the field blank.

치 Mit	elc	onneo	ct Di	ector	4								⑦ Help	Å adn	nin 🗸
Search				S	IP Servers					NEV	V СОРУ	DELETE	BULK DEI	ETE	
	Îш, RATION		M 🗄		NAME	EXTENS	ION¢ SITE	\$	HOST \$	OVERRIDE DEFAULT	PROFILE NAME \$	PROTOCOL		FAX	\$
Users					Mital Bayak	1 200	Sito1		10 211 20 111	PORT \$	Mitol Boyolu	TOP			
Trunks					Willer Revolu	1 200	Sile I		10.211.20.111		Willel Revolu	ICF			
> Telepho	nes														
 Applian Platfo Spare Integri SIF 	ces/Ser rm Equi Equipn rated Se Serve	vers pment nent ervers rs													
SIF	Profile	S		4											•
Option	ns			2)			14. <	Page 1	of 1 🕞 🖬 Rov	vs / page: 50 🔻			View 1	- 1 of 1
> Feature	s											-			
> system				MI	Mitel Revolution SAVE RESET CANCEL										
					lame:		Mitel	Revol	ution						
				5	Site:		Site1	li i	•						- 1
				F	Protocol:		TCP	•							- 1
				F	lost (name / a	ddress / doma	ain): 10.21	1.20.1	11						- 1
				0	Override defau	It port:									- 1
				6	Allow exter	nal voice mail	for Extension-	Only us	ser						- 1
				0	Allow fax re	edirect to this	server								- 1
				E	Extension:		200				SHOW	REFERENCE	S		- 1
				F	Assigned user	group:	IP Te	lepho	nes	•					- 1
				5	SIP profile:		Mitel	Revol	lution SIP Pro	file 🔻					- 1
					Digest authent	ication:	-Non	e-	•						- 1
					Username										
					Password						(6 - 26 0	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.

🕅 Mitel Connect Director 🔹 Connections 🗧 Trunk Groups 🛎 Bandwidth 🔍 Voice Quality 🛕 Appliances 🌑 Servers 🕐 Help 🖄 admin 🗸								
Search	Trunk Groups	NEW COPY DELETE						
🖌 O 🗽 🏢 🖾 🛱	NAME	OSE ACCESS CODE						

- 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 v	
Trunk type:	SIP V	
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 PINBOUND	OUTBOUND	
Number of digits from CO:	2 @	
DNIS Edit DNIS		
DID Edit DID Range		
Extension		
Translation table:	<none> ▼</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

litel Revolution Trunk Grou	IP	SAVE RESET CANCEL
GENERAL INBOUND	OUTBOUND	
Outgoing:		
Network call routing:		
Access code:	9	
Local area code:	91	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:		
Cocal		
Long distance		
National mobile		
International		
Enable original caller information	on	
Caller ID not blocked by defaul	It	
Enable caller ID name (Please	confirm with the carrier(s) or the serv	rice provider(s) on how the end-to-end caller name is delivered)
When Site Name is used for the Caller ID, overwrite it with:	Mitel	
Emergency		
Frunk digit manipulation:		
Dial local numbers in national f	form	
Dial in E.164 format		
Prepend dial out prefix:		
Translation table:	<none> Edit OSE</none>	

6. Configure OSE:

Emergency	
Trunk digit manipulation:	
Dial local numbers in natio	nal form
Dial in E.164 format	
Prepend dial out prefix:	
Translation table:	<none> Edit OSE</none>

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.

& GENERAL		SAVE RESET CANCEL
Trunk group:	Mitel Revolution Trunk Group 🔻 🖋	
From:	201	5 ⁰
To:	210	8

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.

🕅 Mitel Connect Direc	ctor 😑 Connections	🔵 Trunk Groups 🧲) Bandwidth 🔵 Void	ce Quality 🥼 Applia	ances 🔵 Servers	(⑦ Help
Search	Trunks				NEW COPY	DELETE	ULK DELETE
🥕 🗘 🛄 🔤 🖻	NAME \$	GROUP \$	TYPE ‡	SITE	SWITCH \$	PORT/CHANNEL \$	IP/FQDN
ADMINISTRATION +'T							
Users							
⊿ Trunks							
Trunks							

- 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.

Syn-apps (1)		SAVE RESET CANCEL
GENERAL		
Site:	Headquarters •	
Trunk group:	Revolution Trunk Group (SIP) *	
Name:	Syn-apps (1)	
Switch:	SG90_HQ V	
IP address or FQDN:	10.211.46.72	

Configuring Switch Settings

Perform the following steps to configure a switch:

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

🔀 Mitel Connect Dir	ecto	r	Connections	Trunk Groups	😑 Bai	ndwidth 🔵 Voice	e Quality 🧥 Appli	ance	s 🔵 Servers					@ H	lelp & admin ▼
Search		Pla	tform Equipment								NEW	COPY	D	ELETE BULI	K DELETE
× o 🗽 🏼 🖾 🖻			NAME	DESCRIPTIO	4	SITES	SERVER	\$	DATABASE	\$	TYPE \$	IP ADDRESS	\$	SECONDARY ADDRESS \$	MAC ADDRESS
ADMINISTRATION +3	F	1	collab			Site1	Headquarters		Headquarters	v	Collab	10.211.18.68			00-50-56-93-F7-AF
⊳ Users ⊳ Trunks	(Headquarters site	SoftSwitch SoftSwitch		Headquarters Site1	Headquarters Headquarters		Headquarters	V	WinHQ /Phone	10.211.18.55 10.211.18.69			00-50-56-93-06-19
 Telephones Appliances/Servers 			Site1	Softswitch		Site1	Site1		Headquarters	V	WinDVS	10.211.18.57			00-50-56-93-EB-34
Platform Equipment Spare Equipment	18		ONOL	0102		one i	ONDE		i roudquillers			10.211.10.00			00.00 00-00-EB-0A

- 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					SAV	/E RESET	CANCEL
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 tr	unks						
Port Port Type	Trunk Group	Description	Jack Number	Tx Gain (dB)	Rx Gain (dB)	Location	
1 100 SIP Proxy 🔻)						FILL DOWN
Trunk	P01			0	0		
2 Available	P02			0	0		
3 Conference	P03			0	0		
4 5 SIP Trunks	P04			0	0		
5 SIP Trunk with Media Proxy	P05			0	0		

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.

690	: SG90_HQ - 10.211.45.70						SA	VE RESET	CANCEL
G	ENERAL SWITCH								
IP pho	one + SIP trunks = Total								
	15 10 25 of 30 (*	100 SIP proxy ports)							
🔲 Ei	nable Jack based Music on hold								
Ji	ack based Music on hold gain:	0 dB (-49 to	o 13)						
🔲 U:	se analog extension port as DID tru	unks							
Port	Port Type	Trunk Group	Description	Ja	ck Number	Tx Gain (dB)	Rx Gain (dB)	Location	
1	5 IP Phones 🔹	Analog trur	k						FILL DOWN
· `	Ø	Ø				0	0		
2	100 SIP Proxy								
2	8	P02				0	0		
2	5 SIP Trunks								
° .	Ø	P03				0	0		
4	5 IP Phones 🔹	P04				0	0		
5	Trunk	P05		ī —			0		
	Available	. co							
0	5 IP Phones	P06				0	0		
7	Conterence	P07				0	0		
-	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.

Extension 122: admin	tion Profile View Prog	rammable Buttons		SAVE RESET	CANCEL
GENERAL & TELEPHONY	VOICE MAIL	ROUTING	MEMBERSHIP	APPLICATIONS	DNIS
	iuelooni neausel				
Enable handsfree mode					
Enable call waiting tone					
Trunk access code: 9 🔻)				
Mailbox for recorded calls:					
Fax support:	User - Redire	ct 🔻			
Enable video calls	Standard *				
Enable telephony presence					
Enable shared call appearances					
Enable use of soft phone					
Enable phone API (PAPI)					

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 <u>not</u> 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:

🧊 s6ccustom.txt - Notepad	x
File Edit Format View Help	
<pre># Please consult ShoreTel support before editing or deleting this file Trusted Servers 123.123.12.123</pre>	
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:\Inetpub\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 <u>Revolution WebHelp</u> 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
- <u>Configure Your Mitel Phone System</u>
- <u>Mitel SIP Trunk</u>

Network Requirements

I IIEwali Negulielilellis/Full Usage	Firewall	Req	uiren	nents/I	Port	Usage
--------------------------------------	----------	-----	-------	---------	------	-------

Port	Description
Mitel Revolution to Mitel Connect Director	Protocol Description
5060 3306, 4308	LIDP_SIP 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 Paging Relays	
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.

X) Mitel		Revolution
G	Dashboard	COMMUNICATIONS MANAGER GENERAL SETTIN	GS
	Notifications	Name * MiVoice Connect 44.50	
31	Scheduler	IP Address * 10.211.44.50	
÷	Configuration	A hostname or FQDN may also be used	
٦	System Status	Advanced Settings Warning: Editing advanced settings may make Revolution stop funct If you are unsure of your changes please copy down the settings be	ioning properly. fore editing.
1	Users Contacts & Sites	• Port* 4308	
Ξ	Logging	Username * st_configread	
٥	Global Settings	Password *	
1	Profile		
•	Logout	Hide advanced settings CANCEL 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.

🕅 Mitel		Revolution
Dashboard	SIP LINE GENERAL SETTINGS	
A Notifications	Name * SIP Trigger 1	
Scheduler	Available in All Sites	
Configuration	Extension * 850	
System Status	If your SIP Trunk requires a prefix, include it in the Extension	
Users Contacts + & Sites	Security Code 0 Enter 0 for no security code	
E Logging	Activator Text Title SIP Trigger#1 Title	
Global Settings	Activator Text Body SIP Trigger#1 Text Body	
Profile		
[→ Logout	CANCEL SAVE	

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

st, configure yo is here, which where on their	ur SIP trunk and define a are made available to assi IP phone	range of SIP lines in yor gn to notifications to alle	ur phone system o ow end users to se	communications manager. Then add SIP and those notifications by dialing extension	
ACTIONS	SETTINGS				
SIP Lines		Extension	Security Code	Notification(s)	-
Line 5100 - 0	Campus A	5100	321	All Sites - All Hands Meeting, DailyAnnouncements	/8
Line 5101 - 0	Campus A	5101	321	Site 1 - Network Outage, Prison Yard Carnage	/8
Line 5102 - 0	Campus A	5102	321	Building 102 - Maintenance	/8
Line 5103 - 0	Campus A	5103	321	Campus A - Weather Closure, Gen Pop Melee	/8
Line 5104 - 0	Campus A	5104	321	Campus A - Lockdown	/8
Line 5105 - 0	Campus A	5105	321	Campus A - Remote Gate Lock	/0
Line 5105 - 0	Campus A	5106	321	Campus C - Fire Drill	/0
Line 5107 - 0	Campus A	5107	321	Code Blue	/0
Line 5108 - 0	Campus A	5108	321		/8
Line 5109 - 0	amous A	5109	321		18

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
Pin Timeout Seconds	This is the length of time you want to allow a user to enter a security code before the system times out and ends the call. When the time limit is met, an audio message is played letting the user know that the system has timed out and the call will end.
STUN Server and Outbound Proxy Servers	Leave these fields blank. They do not apply to Mitel system setup.
SIP Port	You only need to update this field if your Mitel server is not using the default port.
Trusted Servers	Leave this field blank to accept connections from any IP. Your company security policies dictate whether you need to list specific servers.

Transport Layer Security	Your company security policies dictate whether you need to enable TLS for transferring data over your network. (TLS is the successor to SSL.)
	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.

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

🕅 Mitel	Revolution
Dashboard	> ACTIVATORS
A Notifications	CAP IP Device Mitel Mobile & 3rd Party Polycom SIP SNMP Status
Scheduler	
E Configuration	SIP First, configure your SIP trunk: Then configure SIP Activator. Next, in SIP Activator create SIP lines (within the
System Status	range cerned in your site runk) and assign them as ingers to seen normcanone by claiming the line number, in Notifier, set up audio notifications through a SIP call to any SIP-compliant IP devices not running the Syn-Apps Device API such as analog phones, external phone numbers, etc
Users Contacts > & Sites	ACTIONS SETTINGS
Logging	STUN Server
Global Settings	Outbound Proxy Servers
	Inbound Digest Realm
	Inbound Username
	Inbound Password
	Clients (e.g. PEX systems) will be prompted for the above credentials when connecting. If blank, auth will not be required.
	Trusted Servers
	Only accept requests from these IPs. Leave empty to accept connections from any IP.
	Jisable Reinvites
	Check this if using a cloud PBX or other system that does not support REINVITEs
	Show advanced settings
	SAVE

8. Click Save.

Creating Notifications

To create and send notifications, read through the Mitel Revolution <u>WebHelp</u> 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.

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		0
0		Fire Drill Fire Drill		1
		view all no	tifications	

- 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.

Select what activates	the notification		
ADD A NEW TRIGGER Activator SIP Activator	Manufacturer Avaya SIP 8280 Manufacturer Çisco SIP 11080	ACTIVATION Select what activates the notification	~
Content that is send	KU Manufacturer Shoretel SIP 6280	SIP Activator - Manufacturer Cisco SIP 11080 ADD A NEW TRIGGER Activator	•

- 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).

RESPONSE OPTIONS Response 1 Short text "	0	Long Test *	0	
Body for Notification#1			()-	
htte - Title for Notification#1			()=	
O idea_full.png idea_full.png #2222E7 Oeveew without fund color support support without fund color support supp	X I use ther			
South Prage				
Volume	7	Use device default		
FV General-Test.mp3	Θx			
Edect Audio;				

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	Unselect	✓ SELECTED ENDPOINTS & CO	NTACTS
All Sites	33 🕥 💼	AtlasSound - 192.168.10.68	â
S billy test	9 🕥	AtlasSound - 192.168.11.78	â
Suilding 101	3 🕥	Building 101	ŵ
Suilding 102	3 🕥		
Suilding 103	3 🕥	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.

Notification Name * 911 Dialed		Notification Type Text And Images	? •	
Activation Type ⑦ Iteration ▼	Iterations 1	Repeat Interva 60	l (seco	
Priority		0		8
Dashboard Icon 911-monitoring.svg	? ×	🗸 Available in All Sites		

- 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}.

	0		
Show	(?)		
Select Audio			
Air-Raid-Siren.mp3	⊛ ×		
Volume		Use device default	
-0	- 2		
Select Image			
911-monitoring.svg	×		
311			
Font Color			
Font Color	e their		
Font Color Devices without font color support will use default color	e their		
Font Color Devices without font color support will use default color	e their	Delay before clearing (seconds)	
Font Color Devices without font color support will use default color Clear notification from display of completion	e their on	Delay before clearing (seconds) 0	
Font Color Devices without font color support will use default color Clear notification from display of completion Title *	e their	Delay before clearing (seconds) 0	

- 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	✓ SELECTED ENDPOINTS & COL	NTACTS
S All Sites	33 🔊 🔒	AtlasSound - 192 168 10.68	â
S billy test	9 🔘	AtlasSound - 192.168.11.78	â
Suilding 101	3 🕥	Building 101	â
Suilding 102	3 🗿		
Building 103	3 0	CLOSE	

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 > $\underline{Logging}$ topic for more information.

In addition, refer to the Mitel Revolution Web Help > <u>Troubleshooting</u> 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.

Service Request Details	Contact Information	Product Information
O Enter a license ID	Select a product	
License ID:		
Product Name: *	Please select an eritr	y -
SW Version: *	1	P
On-Site Version: Platform: Sub-Product:	Please select an ent 5624 WiFi Handset	ry 👘
	5634 WiFi Handset	

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



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

ervice Request Details	Contact Information	Product Information	Site Information	Troubleshooting Notes	
Symptoms/Decals: *				Value is r	equire

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		
Activators			
SIPActivator	Supported through SIP trunks.		
Emergency Call Activator	DialMonitoring		
SIPActivator (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.		
SIPActivator (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.		
Notifications			
SIP Paging Notification	MiNET	Notapplicable	
	SIP	Supports 4XX and 69XX.	
XML Text Display	MiNET	Notapplicable	
	SIP	4XX and 69XX support XML text display.	
	MiNET	Notapplicable	
XMLAudio	SIP	4XX and 69XX supports two-way XML audio.	
Multicast	MiNET	Notapplicable	
	SIP	4XX and 69XX support Multicast streams.	
Locationdetails	Location details (Jack number) are sent as part of the notification.		

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



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