MITEL MiVB Software Version: 13.2.0.17 Fusion SIP Trunking NOVEMBER 2015





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Mitel Technical Configuration Notes: Configure the Mitel Voice Business for use with Fusion SIP trunk November 2015, 15-4940-00412

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OVERVIEW

This document provides a reference to Mitel Authorized Solutions providers for configuring the Mitel Voice Business to connect to Fusion SIP trunk. The different devices can be configured in various configurations depending on your VoIP solution. This document covers a basic setup with required option setup.

INTEROP HISTORY

Version	Date	Reason
1	November, 2015	Initial Interop with Mitel Mitel Voice Business and Fusion SIP trunk

INTEROP STATUS

The Interop of Fusion has been given a Certification status. This service provider or trunking device will be included in the SIP CoE Reference Guide. The status Fusion achieved is:

COMPATIBLE The most common certification which means Fusion has be validated by the Mitel SIP CoE team. Product support will perform the support related to the interop, but issues unique or specific be referred to the 3rd party as appropriate.
--

SOFTWARE & HARDWARE SETUP

This was the test setup to generate a basic SIP call between Fusion and the Mitel Voice Business.

Manufacturer	Variant	Software Version
Mitel	Mitel Voice Business	13.2.0.17
Mitel	5300 Series IP Sets	06.03.01.05
Mitel	6800 Series SIP Sets	4.0.0.1096
Fusion		As of November 2015

TESTED FEATURES

This is an overview of the features tested during the Interop test cycle and not a detailed view of the test cases. Please see the SIP Trunk Side Interoperability Test Pans (08-4940-00034) for detailed test cases.

Feature	Feature Description	Issues
Basic Call	Making and receiving a call to and from the Fusion, call holding, transferring, conferencing, busy calls, long calls durations, variable codec.	
Automatic Call Distribution	Making calls to an ACD environment with RAD treatments, Interflow and Overflow call scenarios and DTMF detection.	
NuPoint Voicemail	Terminating calls to a NuPoint voicemail boxes and DTMF detection.	
Packetization	Forcing the Mitel Voice Business to stream RTP packets different intervals, of 20ms and 30ms.	Δ
Personal Ring Groups	Receiving calls from Fusion to a personal ring group. Also moving calls to/from the prime member and group members.	
Video	Video Calls inbound and outbound	X
Fax	T.38 and G711 Fax Calls	Δ

Mo issues found

X Issues found, cannot recommend to use

▲ Issues found

DEVICE LIMITATIONS AND KNOWN ISSUES

This is a list of problems or not supported features when Fusion is connected to the Mitel Voice Business.

Feature	Problem Description
Video	Video is not supported.
	An issue was found during T.38 FAX calls where if a re-invite occurs due to session timer expiry during the FAX call the call will drop.
T.38 FAX	Recommendation : Set the session timer in the SIP peer profile to a value which will prevent the timer form expiring during a T.38 FAX call. Reference defect MN00607790 when contacting Mitel Product Support.
Paketization	P-times of other than 20ms are not honored by Fusion. Recommendation : Use the default 20ms P-time
Outbound Private Calls	Private outbound calls are not supported as Fusion requires the main account number to be present in the "From" SIP header. Mitel removes this number when a call is marked as private.

NETWORK TOPOLOGY

This diagram shows how the testing network is configured for reference.

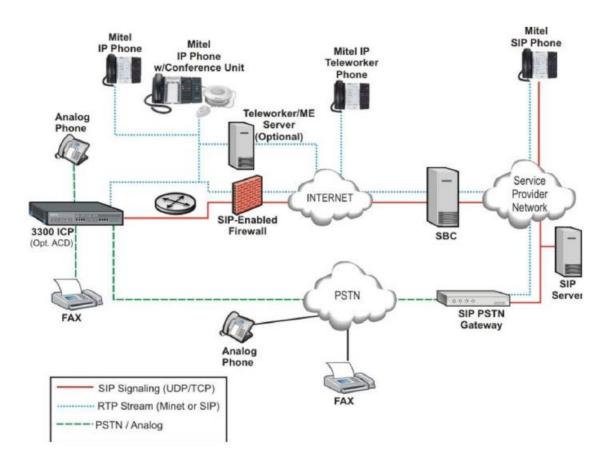


Figure 1 – Network Typology

CONFIGURATION NOTES

This section is a description of how the SIP Interop was configured. These notes should give a guideline how a device can be configured in a customer environment and how the MiVb programming was configured in our test environment.

Disclaimer: Although Mitel has attempted to setup the interop testing facility as closely as possible to a customer premise environment, implementation setup could be different onsite. YOU MUST EXERCISE YOUR OWN DUE DILIGENCE IN REVIEWING, planning, implementing, and testing a customer configuration.

MiVB CONFIGURATION NOTES

The following steps show how to program a Mitel Voice Business to interconnect with Fusion SIP trunking.

Configuration Template

A configuration template can be found in the same MOL Knowledge Base article as this document. The template is a Microsoft Excel spreadsheet (.csv format) solely consisting of the SIP Peer profile option settings used during Interop testing. All other forms should be programmed as indicated below. Importing the template can save you considerable configuration time and reduce the likelihood of data-entry errors. Refer to the ICP documentation on how the Import functionality is used.

Network Requirements

- There must be adequate bandwidth to support the voice over IP. As a guide, the Ethernet bandwidth is approx 85 Kb/s per G.711 voice session and 29 Kb/s per G.729 voice session (assumes 20ms packetization). As an example, for 20 simultaneous SIP sessions, the Ethernet bandwidth consumption will be approx 1.7 Mb/s for G.711 and 0.6Mb/s for G.729. Almost all Enterprise LAN networks can support this level of traffic without any special engineering. Please refer to the MiVb Engineering guidelines for further information.
- For high quality voice, the network connectivity must support a voice-quality grade of service (packet loss <1%, jitter < 30ms, one-way delay < 80ms).

Assumptions for the MiVb Programming

• The SIP signaling connection uses UDP on Port 5060.

Licensing and Option Selection - SIP Licensing

- Ensure that the MiVb is equipped with enough SIP trunking licenses for the connection to the Fusion SIP trunk. This can be verified within the License and Option Selection form.
- Enter the total number of licenses in the SIP Trunk Licences field. This is the maximum number of SIP trunk
 sessions that can be configured in the MiVb to be used with all service providers, applications and SIP trunking
 devices.

MITEL Node 'Sipint2' Alarm 5	tatus: 😲 M	ajor 2012-30F19 14585	61 -				message Boa	rd About	neth I rod
pint2		d Option Selection on		IN to search	<u>.</u>	Sh	ow form on E	caeded Max No	dar v Go
ew Alphabetically 👽 🦨 SDS Share	Sipint2								
ISDN Outgoing Numbers	Chang	e				Print	Import	Export	Data Refrest
ISDN Pretocol	Construction of the					Approximate provide	Internet state of the second	Aproved surface state	
Key Templates 🥔	License	and Option Selecti	on						
L2 to CESID Mapping	-	10 HC 146200							
LAN Policy (DoS)		Application Record	ID 3579803	0					
Layer 2 Switch	-								
	Prostant Trees	e License Sharing	Hardware	Advent Barr					
License and Option Selection	system typ	e License snanng	Hardware	identifier					
Line Qualify Measurement	Enterprise	No	00000026	1001					
Linked Suites 🥔	Chiefphoo							Local Limits	
Local-only Directory Number List 🧉								Elocal Ennies	
Location Specification 🥔	paceto contractoria de la contra	Name and Address of Ad				Available		-	Can be
Locations 🧀	Licensed Op	otions		Locally	Locally	for		Licenses	Over
Logs - All Maintenance/Software				Consumed	Allocated	Allocation	Purchased	Allowed	Allocated
Loudspeaker Paging	Users								
Maintenance Commands		IP Users		44	2000	100	2100	Unrestricted	Yes
Maintenance Logs - All		External Hot Desk U	Jaera	2	20		100	Unrestricted	Yes
Maintenance Loos - Error	1	ACD Active Agents		1	100		100	Unrestricted	Yes
		HTML Applications		0	100		500	Unrestricted	Yes
Maintenance Logs - Info		Analog Lines		0	10		10	Unrestricted	Yes
Maintenance Logs - Warning		IP Console Active O	perators	0	0	2 . TT	0	Unrestricted	Yes
MDXML Applications		Multi-device Users		0	0	20 te	D	Unrestricted	Yes
Multi-device Sultes		Multi-device Suites		0	0	20 👾	0	Unrestricted	Yes
Multi-device User Groups 🧬	Messagir	ng							
Multiline Advisory Messages		Embedded Voice M		18	100		100	Unrestricted	Yes
Multiline Appearance Groups		Embedded Voice M	ail PMS	1	Yes	0	1	Unrestricted	Yes
Multiline DNI Sets	Trunking	Networking							
Multiline IP Sets 🥔		Digital Links		0	2	14	16	Unrestricted	Yes
Multiline Set Keys 🧬		Compression			16		128	Unrestricted	Yes
Network Elements 🥔		FAX Over IP (T.38) SIP Trunks		146	16	48	64 1000	Unrestricted	Yes Yes

Figure 2 – License and Option Selection Form

Class of Service Assignment

The Class of Service Options Assignment form is used to create or edit a Class of Service and specify its options. Classes of Service, identified by Class of Service numbers, are referenced in the Trunk Attributes form for SIP trunks.

Many different options may be required for your site deployment, but ensure that "Public Network Access via DPNSS" Class of Service Option is configured for all devices that make outgoing calls through the SIP trunks in the MiVb.

Also, under General tab, ensure that the following options are enabled (see Figure 3):

- Busy Override Security (in Busy Override section) set to Yes
- Campon Tone Security (in Fax section) set to Yes
- Public Network Access via DPNSS (in Trunk section) set to Yes
- Fax Capable if a Fax device is connected to this port or uses this trunk YES

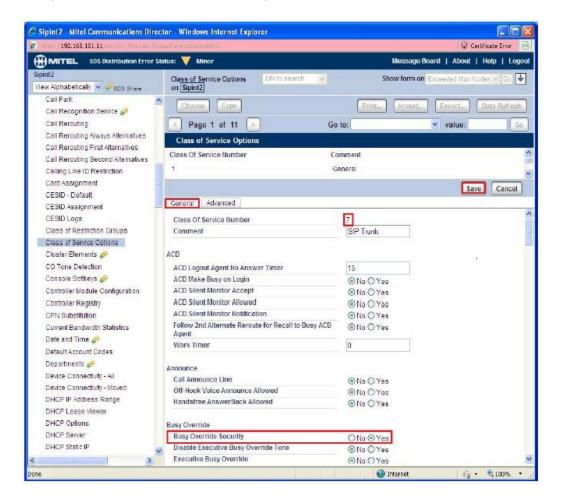


Figure 3 – Class of Service Form

Network Elements

Create a network element for a SIP Peer "Fusion" as shown in Figure 4.

If you want to use compression set the Zone to be a different value than that of the ICP. If no compression is required you can set the zone to that of the ICP, 1 by default.

In our setup the SIP trunks do register so the registration address needs to be filled in.

Set the transport to Default or UDP and port to 5060.

Network Elements	
Name	Fusion
Туре	Other 🗸
FQDN or IP Address	216.86.41.69
Local Version	False
Zone ARID	2
SIP Peer	
SIP Peer Specific	
SIP Peer Transport	UDP 🗸
SIP Peer Port	5060
External SIP Proxy FQDN or IP Address	
External SIP Proxy Transport	default 🗸
External SIP Proxy Port	0
SIP Registrar FQDN or IP Address	216.86.41.69
SIP Registrar Transport	UDP 🔽
SIP Registrar Port	5060
SIP Peer Status	Auto-Detect/Normal
	Save Cancel

Figure 4 – Network Element Form

Network Element Assignment (Proxy)

In addition, depending on your configuration, a Proxy may need to be configured to route SIP data to the service provider. If you have a Proxy server installed in your network, the MIVB will require knowledge of this by programming the Proxy as a network element then referencing this proxy in the SIP Peer profile assignment (later in this document).

https://192.168.101.21/uwi/uwi_Main.aspi	logoutParentSessionId=0				Certificate er
	ırm Status: 🚺 Major 2013-Oct-21 17:48:4	IT	Me	ssage Board About	Help Logout
pint5 iew by Category 🔽 🛹 SDS Share	Network Elements on Sipint5	DN to search	Show f	orm on Exceeded Max N	ode: 🔽 Go 🚽
Licenses	Add Change Delete Start S	haring Sync	Print	Import Export	Data Refresh
LAN/WAN Configuration	Network Elements				
Voice Network	+ Lynk Owier		63.169.160.222	NO	
Network Elements 🎺	ABG2 Outbound Prexy		192,169,101,196	NO	
Cluster Elements 🞺	ABGTrunk Outbound Prexy		192,168,101,205	NO	
Admin Groups 🎺	■		192,168,101,221	NO	
Fax Service Profiles					
Fax Advanced Settings	e dirix12 Other		192.169.101.161	NO	
Network Zones	🔲 🛹 midcon 🛛 Other		24.220.228.16	NO	
Network Zone Topology 🧬	C		100 100 101 77	100	>
Bandwidth Management 🧬					
Codec Settings 🧬	Name	Ν	MBGTrunk		
System Properties	Type FQDN or IP Address		Outbound Proxy		
Hardware	Data Sharing		192.168.101.205 NO		
Trunks	Local		False		
Users and Devices	Version				
Voice Mail	ARID	1	1		
Call Routing	Outbound Proxy Specific				
Music On Hold	Outbound Proxy Transport Type	l	JDP		
Emergency Services Management	Outbound Proxy Port		5060		
Property Management					
Maintenance and Diagnostics					

Figure 5 – Network Element Assignment (Proxy)

Trunk Attributes (trunk service number)

The Trunk Attributes is defined for Trunk Service Number (16), which will be used to direct incoming calls to an answer point in the MiVb.

Set the number of Class of Service that was configured in the section above.

Program the Non-dial In Trunks Answer Point according to the site requirements and what type of service was ordered from your service provider.

The figure below shows configuration for incoming DID calls. The MiVb will absorb the first 3 digits of the DID number received from the Fusion SIP trunk leaving 6 digits for the MiVb to translate and route the call.

For example, the Fusion SIP trunk delivers number 613-592-5660 to the MiVb. The MiVb will absorb the first 3 digits (613) leaving the Mitel MiVb 5925660 to routre the call. The digits 5925660 must be programmed as a valid dialable number in the MiVb. As an alternative way, you can create a System Speed Call number to associate number 5925660 with the real telephone extension on MiVb. Please refer to the MiVb System Administration documentation for further programming information.

Trunk Attributes	
Trunk Service Number	16
Release Link Trunk	No
Call Recognition Service	Off
Direct Inward Dialing Service	● Off ○ On
Class of Service	1
Class of Restriction	1
Baud Rate	300 💌
Intercept Number	1
Non-dial In Trunks Answer Point - Day	
Non-dial In Trunks Answer Point - Night 1	
Non-dial In Trunks Answer Point - Night 2	
Dial In Trunks Incoming Digit Modification - Absorb	3
Dial In Trunks Incoming Digit Modification - Insert	
Dial In Trunks Answer Point	
Dial In Trunks Insert Forwarding Information	● No ○ Yes
Trunk Label	Fusion
	Save Cancel

Figure 6 - Trunk Attributes (trunk service number)

SIP Peer Profile

The recommended connectivity via SIP Trunking does not require additional physical interfaces. IP/Ethernet connectivity is the part of the MiVb platform. The SIP Peer Profile should be configured as shown in **Figures 7 through 12**.

Basic (Figure 7):

Network Element: The selected SIP Peer Profile needs to be associated with previously created "Fusion" Network Element.

Registration User Name: Leave this field blank.

Address Type: Select the IP Address of your Mitel MiVb.

Maximum Simultaneous Calls: This entry should be configured to maximum number of SIP trunks provided by Fusion.

Outbound Proxy Server: Not required in our test setup.

SMDR Tag: If Call Detail Records are required for SIP Trunking, the SMDR Tag should be configured (by default there is no SMDR and this field is left blank).

Trunk Service: Enter the trunk attributes number that was previously configured (16) in this configuration.

Authentication Options: User name and password as supplied by Fusion.

Fusion Fusion MBGTrunk Yes	16	90	2			^
	40	400	5			~
Basic Call Routing Calling Line ID	SDP Option	ns !	Signalir	ng and Header Manipulation	Timers	
Key Press Event Outgoing DID Ranges	Profile In	formati	on			
SIP Peer Profile Label	Fusion					
Network Element	Fusion					
Local Account Information						
Registration User Name	2164164495	5				
Address Type	IP Address:					
	192.168.101	1.10				
Administration Options						
Interconnect Restriction	1					
Maximum Simultaneous Calls	4					
Minimum Reserved Call Licenses	0					
Administration Options						
Outbound Proxy Server	MBGTrunk					
SMDR Tag	0					
Trunk Service	16					
Zone	2					
User Name	2164164495	5				
Password	******					
Confirm Password	*****					
Authentication Option for Incoming Calls	No Authenticati	on				
Subscription User Name						
Subscription Password	******					
Subscription Confirm Password	******					



Call Routing (Figure 8):

Leave the default settings intact, as shown.

Sun	000			110	14	100						
Fusion	Fusion	M	BGTrunk	Yes	16	90	2					1
+	D location?			A1	40	400	2					-
Basic	Call Rout	ing	Calling	Line ID	SDP Op	tions	Signa	aling a	d Header Ma	nipulation	Timers	
Key Pre	ss Event	Out	oing DID	Pandos	Profile	Informa	tion					
	e Destinati e Destinati	ion Do	omain En	abled	11	No						
Alternat Enable S Only All	e Destinati Special Re ow Outgoi	ion Do ion Do invite	omain En omain FC Collisio	abled DN or IP	Address	No No No	10011					
Alternat Enable S Only All Private S	e Destinati Special Re-	ion Do ion Do invite ng Ca	omain En omain FG e Collisio Ils	abled DN or IP n Handlir	Address	No No	10011					
Alternat Enable S Only All Private S Reject In Route C	e Destinati Special Re- ow Outgoi SIP Trunk	ion Do ion Do invite ng Ca nonyi P-Calle	omain En omain FC e Collisio Ils mous Cal ed-Party-	abled DN or IP n Handlir	Address	No No No No	001					



Calling Line ID (Figure 9):

The **Default CPN** (Calling Party Number) is applied to all outgoing calls. You can use the one of DID numbers assigned on the trunk by the provider.

CPN Restriction: By default, this parameter is set to "**No**" to not hide the caller's number. You can enable it if required.

SIP Pe	er Profile								
000	000	114	14	100					
Fusion	Fusion	MBGTrunk Yes	16	90	2		1		
1	or	NDOT-USI- NS	40	400	2		<u> </u>		
Basic	Call Routin	g Calling Line ID	SDP Optio	ns	Signaling	and Header Manipulation Timers	1		
Key Pres	ss Event	Outgoing DID Ranges	Profile Ir	nforma	ation				
	CPN Name				4164495				
CPN Res				Yes					
Public C	alling Party	Number Passthrough		No					
Strip PN				No					
Use Diverting Party Number as Calling Party Number				No					
Use Original Calling Party Number If Available									
-		-							

Figure 9 – SIP Peer Profile Form (continues)

SDP Options (Figure 10):

Set the options as depicted below unless there is a specific reason to change them.

oux	004		i su	14	100		1				~
Fusion	Fusion		unk Yes	16	90		2				V
Basic	Call Rout	ting Call	ing Line ID	SDP Opt	ions	Sign	aling a	nd Heade	r Manipulation	Timers	1
Key Pre	ess Event	Outgoing	DID Ranges	Profile	Inform	ation]				
Allow P	eer To Use	Multiple A	ctive M-Line	5	N	0					
		And address in the second state of the second state	ly Media Ren		I Y	es					
Avoid S	Signaling H	old to the F	Peer		Y	es					
AVP Or	nly Peer				Y	es					
Enable	Mitel Propr	rietary SDP	N.		N	0					
Force s	ending SD	P in initial	nvite messag	ge	N	0					
Force s	ending SD	P in initial	nvite - Early	Answer	N	0					
Ignore	SDP Answe	ers in Provi	sional Respo	onses	N	0					
Limit to	one Offer/	Answer pe	r INVITE		Y	es					
NAT Ke	epalive				Y	es					
Prevent	t the Use of	IP Addres	s 0.0.0.0 in S	DP Messa	ges Y	es					
Renego	tiate SDP 1	To Enforce	Symmetric C	odec	N	0					
Repeat	SDP Answ	er If Duplic	ate Offer Is F	Received	N	0					
Restrict Audio Codec				NR	o estrict	tion					
RTP Packetization Rate Override				N	0						
RTP Pa	cketization	Rate			2	Oms					
Special	handling o	of Offers in	2XX respons	es (INVITI	E) N	0					
Sunnre	ss Use of S	DP Inactiv	e Media Strea	ams	N	0					

Figure 10 – SIP Peer Profile Form (continues)

Signaling and Header Manipulation (Figure 11):

Figure 11 depicts how the test environment was configured.

00/ 00/ 110 12 100	
Fusion Fusion MBGTrunk Yes 16 90	2
	Signaling and Header Manipulation Timers
Key Press Event Outgoing DID Ranges Profile Informat	
Trunk Group Label Allow Display Update	No
Build Contact Using Request URI Address	No
De-register Using Contact Address not *	Yes
Disable Reliable Provisional Responses	Yes
Disable Use of User-Agent and Server Headers	No
Domain for Trunk Context	
E.164: Enable sending '+'	No
E.164: Add '+' if digit length > N digits	0
E.164: Do not add '+' to Emergency Called Party	No
E.164: Do not add '+' to Called Party	No
Force Max-Forward: 70 on Outgoing Calls	No
If TLS use 'sips:' Scheme	No
Ignore Incoming Loose Routing Indication	No
Multilingual Name Display	No
Only use SDP to decide 180 or 183	Yes
Override Diversion Header with External Calling Number	No
Prefer From Header for Caller ID	No
Require Reliable Provisional Responses on Outgoing Calls	No
Signal Privacy (if enabled) on Emergency Calls	No
Suppress Redirection Headers	No
Use Fixed Retry Time for 491	No
Use Privacy: none	No
Use P-Asserted Identity Header	Yes
Use P-Asserted Identity for Billing	No
Use P-Call-Leg-ID Header	No
Use P-Preferred Identity Header	No
Use Restricted Character Set For Authentication	No
Use To Address in From Header on Outgoing Calls	No
Use user=phone	No
Use user=phone for Diversion Header	No

Figure 11 - SIP Peer Profile form

Timers (Figure 12):

Session Timers: Figure 12 is how the timers were set for our test environment. The session timer was increased from the default to accommodate T.38 FAX calls as stated in Device Limitations and Know Issues section.

50A 00A	140	14	100			
Fusion Fusion MBGTrur	nk Yes	16	900	2		
rontonCP IrontonCP MPCTrur	No.	10	100	2		
Basic Call Routing Callin	g Line ID	SDP Op	tions	Signaling	and Header Manipulation Timer	S
Key Press Event Outgoing D	ID Ranges	Profile	Informat	ion		
Kann Alive (OBTIONS) Bariad	400					
Keep-Alive (OPTIONS) Period	120					
Registration Period	3600					
Registration Period Refresh (9						
-						
-	nt 90 900					
Session Timer	900					
Session Timer Session Timer: Local as Refre	900					
Session Timer Session Timer: Local as Refre Subscription Period	900 sher No 3600					
Registration Maximum Timeou Session Timer Session Timer: Local as Refre Subscription Period Subscription Period Minimum Subscription Period Refresh (900 sher No 3600 300					

Figure 12 – SIP Peer Profile form (continues)

For Key Press Event and Profile Information tabs, leave the default settings intact.

SIP Peer Profile Assignment by Incoming DID

In some situations calls from anonymous PSTN callers may be rejected at MiVb with Not Found message. To deliver such calls to Mitel's extensions, make sure to associate Fusion's DID number(s) with the SIP Peer Profile we configured earlier.

ARS Digit Modification Plan

Ensure that Digit Modification for outgoing calls to Fusion SIP trunk absorbs or inject additional digits according to your dialling plan. In our test environment, we will be absorbing 1 digit and will not inject any digits, as shown in Figure 13. As per our test environment, we need to dial 952 to access Fusion SIP trunk; thus, digit 952 will be absorbed and no digits will be preceding the dialled number. For instance, if caller dials 9526135555660, MiVb will send to the SIP trunk the following: 6135555660.

ARS Digit Modification Plans		
Digit Modification Number	3	
Number of Digits to Absorb	3	
Digits to be Inserted		
Final Tone Plan/Information Marker		



ARS Routes

Create a route to Fusion SIP trunk. In this test environment, the SIP trunk is assigned to Route Number 9. Choose **SIP Trunk** as a routing medium and choose the SIP Peer Profile and ARS Digit Modification entry created earlier.

ARS Routes	
Route Number Routing Medium	9 SIP Trunk
Trunk Group Number	
SIP Peer Profile	Fusion 🔽
PBX Number / Cluster Element ID	
COR Group Number	1
Digit Modification Number	3
Digits Before Outpulsing	\checkmark
Route Type	
Compression	Off 🔽
	Save Cancel

Figure 14 - ARS Route Form

ARS Digits Dialed

ARS initiates the routing of trunk calls when certain digits are dialed from an extension. In this test environment, when user dials 952, the call will be routed to Fusion SIP trunk (i.e. to Route 9). For outbound calling, MiVb expects 11 digits to be dialed after dialing of 957. See Figure 15 for details.

Change Range Programming - ARS Digits Dialed This form allows you to change one or more records, starting at the following record: Digits Dialed Number of Digits to Follow Termination Type Termination Number							
952 11	Ro	ute 9					
Enter the number of records to change: Define the Change Range Programming Pattern:							
Field Name	Change action	Value to change	Increment by				
Digits Dialed	Change to 🗸	952					
Number of Digits to Follow	Change to 🗸	11 🔽	-				
Termination Type	Change to 🗸	Route 🔽					
Termination Number	Change to 🗸	9					

Figure 15 – ARS Digit Dialed form

I

Fax Service Profiles

This form allows you to define the settings for FAX communication over the IP network. You can modify the default settings for the:

Inter-zone FAX profile: defines the FAX settings between different zones in the network. There is only one Inter-zone FAX profile; it applies to all inter-zone FAX communication. It defaults to V.29, 7200bps. It defines the settings for FAX Relay (T.38) FAX communication.

Intra-zone FAX profile: defines the FAX settings within each zone in the network.

- Profile 1 defines the settings for G.711 pass through communication.
- Profile 2 to 64 define the settings for FAX Relay (T.38) FAX communication.
- All zones default to G.711 pass through communication (Profile 1).

MITEL Node 'sipint3' Alarm	' 🚺 Ma	jor 2009-Dec-03 06:26:06				L	ogout Ab	out Help	
ection: (sipint3) orms (alphabetical)	Fax Conf	iguration on sipint3		DN to search 🤟	s	how form on No	of Accessible	~ 60	
DHCP Options	Change	1			rint Impor	t Export		a Refresh	
DHCP Server	Change	J			mpor	Export		a Kellesi	
BHCP Static IP	B								
DHCP Subnet	Painter-2	one Fax Profile							
DID Ranges for CPN Sut									
Digit Modification Assign		Fax Rate:			14400 (V.17, 14400bp	s)		
🖃 Digital Link Assignment		ed Redundancy:		0					
Digital Trunk Assignment		ed Redundancy:	3						
Dimension Selection	Error Co	rrection Mode (ECM):		Disabled					
Distribution List Configure	Override	Non-Standard Facilities	(NSF)	Disabled					
BNI Console Configuratio			(,	Distort					
E DTS Service Assignment	Label:			Inter-zone					
Dual T1/E1 Framer Confi									
📲 E and M Trunk Assignme 🗧									
Embedded Media Source									
External FTP Server	- Dece	1 of 7 >		Go to:		y valu		Go	
Fax Configuration	Page	1 OF / 🕗		GO 10:					
E Fax Detection Assignmer					Change	Change Page	Change A	ll Clear	
📲 Feature Access Code A:	Bintra-Z	one Fax Profiles							
 Firewall Control 					-		NSF	NSF	
E Form Comparison	Profile	Maximum Fax Rate	High Speed	Low Speed	Error Correction	NSF	Vendor	Count	
- 🖹 Greetings Assignment	Profile	Maximum Fax Rate	Redundancy	Redundancy	Mode	Override	Code	Code	
					moure		Value	Value	
Greetings Definition								-	
- · ·	1	-	-	-	-	-	-		
Greetings Definition	1 2	- 14400 (V.17, 14400bps)	-	-	- Disabled	- Disabled	-		
Greetings Definition		- 14400 (V.17, 14400bps) 7200 (V.29, 7200bps)	- 0 0	- 3 3	- Disabled Disabled	- Disabled Disabled	- -		
Greetings Definition Guest Room Assignmen High Layer Compatibility	2			-			-	-	
Greetings Definition Guest Room Assignmen High Layer Compatibility Hotel Options Assignmen	2 3 4	7200 (V.29, 7200bps)		-			- - -	-	
Greetings Definition Guest Room Assignmen High Layer Compatibility Hotel Options Assignmen Hourly Historical Bandwid Hint Group Assignment ICP/PBX Assignment	2 3 4 5	7200 (V.29, 7200bps)		-			-	-	
Greetings Definition Guest Room Assignmen High Layer Compatibility Hotel Options Assignmen Hourly Historical Bandwic Hunt Group Assignment OP/PBX Assignment Glop/Bax	2 3 4 5 6	7200 (V.29, 7200bps)		-			•	•	
Greetings Definition Guest Room Assignmen High Layer Compatibility Hotel Options Assignmen Hourly Historical Bandwic Hunt Group Assignment ICP/PBX Assignment Ide Softkey Assignment Ide pendent Account Co	2 3 4 5 6 7	7200 (V.29, 7200bps)		-			-	• • • •	
Greetings Definition Guest Room Assignmen High Layer Compatibility Hotel Options Assignmen Hourly Historical Bandwic Hunt Group Assignment ICP/PBX Assignment Idle Softkey Assignment Idependent Account Co Intercept Handling Assign	2 3 4 5 6	7200 (V.29, 7200bps)		-			• • • • •	•	
Greetings Definition Guest Room Assignmen High Layer Compatibility Hotel Options Assignmen Hourly Historical Bandwic Hunt Group Assignment ICP/PBX Assignment Ide Softkey Assignment Ide pendent Account Co	2 3 4 5 6 7	7200 (V.29, 7200bps)		-			- - - - - - -	• • • • •	



Zone Assignment

By default, all zones are set to Intra-zone FAX Profile 1.

Based on your network diagram, assign the Intra-zone FAX Profiles to the Zone IDs of the zones. If audio compression is required within the same zone, set Intra-Zone Compression to "Yes". Fusion uses the Inter-zone FAX Profile.

😻 Sipint2 - Mitel Communications Director - Mozilla Firefox								X		
🚔 https://192.168.101.11/Lovi/Lovi_Main.asp	?logoutP	arentSessionId=0								☆
	Error Sta	itus: 💙 Minor				Message	Board A	lbout He	ip Logo	ut
Sipint2 View by Category 💌 🛩 SDS Share	Net Zon	work DN to seam	ch 🗹		Shov	w form on	Exceeded	Max Nodes	Go Go	₽
💽 Licenses	-	Change Chan	ge Page	Clear	Print	Import	. Ехро	ort D	ata Refres	sh
 LAN/WAN Configuration Voice Network 	<	Page 1 of 50	>	Go to:			💌 valu	ie:		Go
Network Elements 🥔	= N	letwork Zones								
Cluster Elements 🥔 Admin Groups 🥔	Zor ID	ne Intra-zone Compression	Intra-zone Fax Profile	Label	SMDR 1 Tag Z		Zone ix CESID	Default Billing Number	Default CPN	^
Fax Service Profiles Fax Advanced Settings	1	No	1							-
Network Zones Network Zone Topology 🥔	2	Yes	2	T.38 faxing						
Bandwidth Management 🧈	3	Yes No	1							
Codec Settings 🧬	5	No	2							
 System Properties Hardware 	6	No	1							
Trunks Urors and Davisos	7	No	1							*

Figure 17 – Zone Assignment

MITEL BORDER GATEWAY SETUP

MiVB SETUP

- 1. To program an MIVB into the MBG, click on Service Configuration -> ICP's -> +.
- 2. Enter a name for the MIVB.
- 3. Enter the IP address of the MIVB and select the Type as Mitel Voice Business.

🕅 Mitel 🛛	Mitel Standard Linux admin@mbg90.sipcoe.mitel.com Alarm Status: Clear	Logout
Applications Milities Serier Galeway Remote pracy services	System status + Service configuration + System configuration + Administration +	1
ServiceLink Discles Status	Page updated: Mon May 04 2015 13:37:50 GMT-0400 (Eastern Standard Time) The following is a form for modifying an icp entry. You may edit this information as you wish, and click on the "Save" button below when you are done.	
Administration Web services Beckup	Manage JCP Name Sipinti Hostname or JP address 192.168.101.10	
Vew log files Event viewer System information	Type Mr/valce Burineer Installer password	
System monitoring System users Shutdown or reconfigure Virtualization	SIP capabilities UDP, TCP, TLS	
Security Remote excess Port forwarding Web Sover Certificate	Save	
Certificate Management Configuration Networks	Someone biswa: their noze and you want to keep it? Detabase pid: 23116	

Figure 18 – ICP setup

SIP TRUNKS SETUP

- 1. Under the Services Configuration tab, click on SIP trunking and then click on the + sign to add a SIP trunk". Enter the SIP trunk's details for the as provided by Fusion.
 - a. Name is the name of the trunk.
 - b. **Remote trunk endpoint address** the public IP address/FQDN address of the provider's switch or gateway (this address should be given to you by the provider, e.g. Fusion).
 - Local/Remote RTP framesize (ms) is the packetization rate you want to set on this trunk, Auto or 20ms in this case.
 - d. **PRACK** Use master setting.
 - e. Routing rule one it allows routing of any digits to the selected MiVb's
- 2. The rest of the settings are optional and could be configured if required. Click **Save** button.

Manage SIP trunk					
Name	Fusion	Remote trunk	endpoint address	216.86.41.69	
Remote trunk endpoint port	5060	Accept tra	ffic from any port		
Options keepalives	Alwaya	•	Options interval	60	
Rewrite host in PAL	¥.	Remote RT	IP framesize (ms)	Auto	
Idle timeout (s)	3600	RTP	address override		
Local streaming			PRACK support	Use master setting	
Log verbosity	Use master setting	• Authent	lication username	admin	
Authentication password	•••••	Confirm authen	tication password		
Set-side RTP security	Allow	* Icp	side RTP security	Disable 👻	
Search routing rules		Next Previo	us.		
Note, if you modify your routing rules, you m	nust save them before changing pages	or navigating elsewhere, or those char	nges will be lost.		
Page	1 of 1		Jump to page	1 •	
Rules per page	10	-			
First Prev				Next Las	:
Match	Rule	Primary	Secondary		
1 Request URI	Ψ	MiVo250-51		Raise Prepend Delete	
				Lower Append	

Figure 19 - Services - SIP Trunking Setup



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FUS-SIPTRUNKING-MiVB-UG-20151207