



# **Amazon Chime Voice Connector**

## **SIPREC Configuration Guide:**

### **Genesys Engage and AudioCodes Mediant Virtual Edition (VE) SBC**

**May 2022**

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# 1 Audience

This document is intended for technical staff and Value Added Resellers (VAR) with installation and operational responsibilities. This configuration guide provides steps for configuring **SIPREC** using **Genesys Engage** and **Audiocodes Mediant VE SBC** to connect to **Amazon Chime Voice Connector** for streaming audio to Amazon Kinesis Video Streams (KVS).

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## 1.1 Amazon Chime Voice Connector

Amazon Chime Voice Connector is a pay-as-you-go service that enables companies to make or receive secure phone calls over the internet or AWS Direct Connect using their existing telephone system or session border controller (SBC). The service has no upfront fees, elastically scales based on demand, supports calling both landline and mobile phone numbers in over 100 countries, and gives customers the option to enable inbound calling, outbound calling, or both.

Amazon Chime Voice Connector uses the industry-standard Session Initiation Protocol (SIP). Amazon Chime Voice Connector does not require dedicated data circuits. A company can use their existing Internet connection or AWS Direct Connect public virtual interface for SIP connectivity to AWS. Voice connectors can be configured in minutes using the AWS Management Console or Amazon Chime API. Amazon Chime Voice Connector offers cost-effective rates for inbound and outbound calls. Calls into Amazon Chime meetings, as well as calls to other Amazon Chime Voice Connector customers are at no additional cost. With Amazon Chime Voice Connector, companies can reduce their voice calling costs without having to replace their on-premises phone system.

## 2 SIP Trunking Network Components

The network for the SIP trunk reference configuration is illustrated below and is representative of **Genesys Engage** and **AudioCodes Mediant VE SBC** with **Amazon Chime Voice Connector**

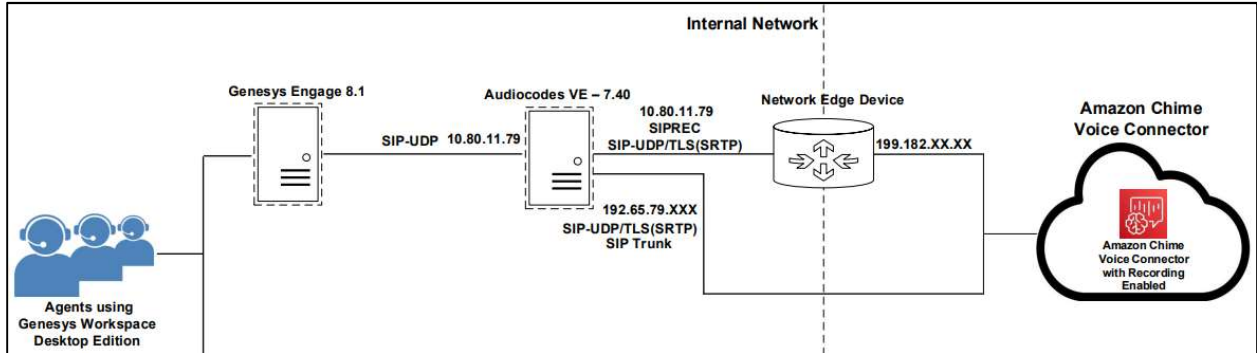


Figure 1 Network Topology

## **2.1 Hardware Components**

- Audiocodes Mediant VE SBC running on UCS VMware ESXi 6.5 server
- Genesys Engage running on UCS VMware ESXi 6.5 server

## **2.2 Software Requirements**

- Genesys Engage version 8.1.103.02
- Audiocodes Mediant VE SBC version 7.40A.250.004

# **3 Features**

## **3.1 Features Supported**

- SIPREC

## **3.2 Features Not Supported**

- None

## **3.3 Features Not Tested**

- None

## **3.4 Caveats and Limitations**

- None

## 4 Configuration

The specific values listed in this guide are used in the lab configuration described in this document and are for illustrative purposes only. You must obtain and use the appropriate values for your deployment. Encryption is always recommended if supported.

### 4.1 Configuration Checklist

This section presents an overview of the steps that are required to configure **Genesys Engage** and **AudioCodes Mediant VE SBC** for SIPREC with **Amazon Chime Voice Connector**

*Table 1 –Configuration Steps*

<b>Steps</b>	<b>Description</b>	<b>Reference</b>
Step 1	Genesys Engage Configuration	<a href="#">Section 4.2</a>
Step 2	AudioCodes Mediant VE SBC configuration	<a href="#">Section 4.3</a>
Step 3	Amazon Chime Voice Connector Configuration	<a href="#">Amazon Chime Voice Connector</a>

## 4.2 Genesys Engage Configuration

This section with screen shots taken from Genesys Engage are used for the interoperability testing gives a general overview of the Genesys Engage configuration

### 4.2.1 Login to Genesys GAX

- Open an instance of a web browser and connect to GAX
- Log in using an appropriate user ID and password.

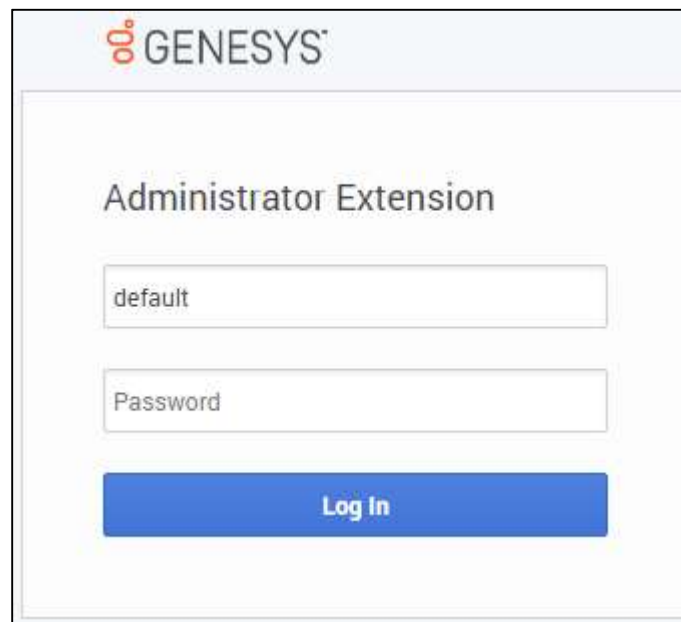


Figure 2: GAX Login

### 4.2.2 Agent

#### 4.2.2.1 Accounts

In GAX, navigate to the location **Configuration > Accounts > Persons** > Click on **New** and create account for an agent with the following values

- In the **General** tab, Enter the **Username**
- Enter the **First Name, Last Name, Employee ID** and **Password**
- Check the **State Enabled**
- Leave the rest of the fields to default values

GAX System Dashboard **Configuration** Routing Parameters Administration Centralized Logs

Home > Persons > Persons > **agent1 Properties**

**General**

Member Of

Ranks

Skills

Agent Logins

Options

Permissions

Dependencies

Accessible Objects

**Username \***  
agent1

Agent

**First Name** Agent1 **Last Name** genesys

**E-mail Address**

**Employee ID \*** 1

**Password** ..... **Confirm Password** .....

Force Password Reset on Next Login

**External ID**

**Default Place**  **Capacity Rule**

Figure 3: Accounts

**Default Place**

**Capacity Rule**

**Cost Contract**

**Site**

**Tenant**  
Environment

**State Enabled**

Figure 4: Accounts Contd.,

- In the **Skills** tab, Assign the Skills to the agent as per the requirement

Home > Persons > Persons > agent1 Properties

General	<b>Skills</b> <table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>Skill</th> <th>Level</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>Skill1</td> <td>0</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Skill2</td> <td>0</td> </tr> </tbody> </table>	<input type="checkbox"/>	Skill	Level	<input type="checkbox"/>	Skill1	0	<input type="checkbox"/>	Skill2	0
<input type="checkbox"/>		Skill	Level							
<input type="checkbox"/>		Skill1	0							
<input type="checkbox"/>		Skill2	0							
Member Of										
Ranks										
<b>Skills</b>										
Agent Logins										

Figure 5: Accounts Contd.,

- Set the values in the **Permissions** and **Dependencies** tab as per the requirement of the environment

#### 4.2.2.2 Extensions

In GAX, navigate to the location **Configuration > Switching > DNs > SIPSwitch > DNs > Extensions** > Click on **New** and create an Extension with the following values

- In the **General** tab, Enter the **Number/Name** for the Extension
- Choose the values for the fields as below,
  - **Type** : Extension
  - **Switch** : SIPSwitch
  - **Register** : True
  - **Route type** : Default
  - Enter the **Alias**
  - Check the box **State Enabled**
- Leave the rest of the fields to default values

GAX System Dashboard **Configuration** Routing Parameters Administration Centralized Logs

Home > DNS > Switches > SIPSwitch > DNS > Extensions > 4001 Properties

**General**

Options

Permissions

Dependencies

Number \* 4001 Type \* Extension

Switch \* SIPSwitch

Association

Register \* True

Alias 4001 Route Type \* Default

DN Group

Use Override

Override

Figure 6: Extensions

Login ID

Switch-specific Type 1

Number Of Trunks 0

Tenant Environment

State Enabled

Figure 7: Extensions Contd.,

- In the **Dependencies** tab, associate the place created for this extension as below



Figure 8: Extensions Contd.,

- Set the values in the **Permissions** and **Options** tab as per the requirement of the environment

### 4.2.2.3 Places

In GAX, navigate to the location **Configuration > Switching > Places** > Click on **New** and create Place with the following values

- In the **General** tab, Enter the **Name** for the Place
- Leave the rest of the fields to default values

The screenshot shows the GAX Configuration page for a new Place. The breadcrumb trail is "Home > Places > Places > P\_4001 Properties". The "General" tab is selected in the left sidebar. The main form contains the following fields:

- Name\***: P\_4001
- Capacity Rule**: (empty)
- Cost Contract**: (empty)
- Site**: (empty)
- Tenant**: Environment
- State Enabled**:

Figure 9: Places

- In the **DNs** tab, associate the Extension to the Place as below

The screenshot shows the GAX Configuration page for a Place, with the "DNs" tab selected. The breadcrumb trail is "Home > Places > Places > P\_4001 Properties". The left sidebar shows "DNs" as the active tab. The main area displays a table of associated DNs:

<input type="checkbox"/>	Number / Name	Type	Switch	Alias
<input type="checkbox"/>	4001	Extension	SIPSwitch	4001

Figure 10: Places Contd.,

- Set the values in the **Options, Permissions** and **Dependencies** tab as per the requirement of the environment

#### 4.2.2.4 Skills

In GAX, navigate to the location **Configuration > Accounts > Skills** > Click on **New** and create Skills with the following values

- In the **General** tab, Enter a Name for the **Skill**

Figure 11: Skills,

- Set the values in the **Permissions** and **Dependencies** tab as per the requirement of the environment

#### 4.2.3 Route Point

In GAX, navigate to the location **Configuration > Switching > DNs > SIPSwitch > DNs > Route Points** > Click on **New** and create the route point with the following values

- In the **General** tab, Enter the **Number/Name** for the Route Point
- Choose the values for the fields as below,
  - **Type** : Routing Point
  - **Switch** : SIPSwitch
  - **Register** : True
  - **Route type** : Default
  - **Alias**: Set to the created Alias
  - Check the box **State Enabled**
- Leave the rest of the fields to default values

GAX System Dashboard **Configuration** Routing Parameters Administration Centralized Logs

Home > DNs > Switches > SIPSwitch > DNs > Route Points > +1919 Properties

**General**

Default DNs

Options

Permissions

Dependencies

Number\* +1919 Type\* Routing Point

Switch\* SIPSwitch

Association Register\* True

Alias +1919 \_SIPSwitch Route Type\* Default

DN Group

Use Override Override

Figure 12: Route Point

Login ID

Switch-specific Type 1

Number Of Trunks 0

Cost Contract Site

Tenant Environment  State Enabled

Figure 13: Route Point Contd.,

- In the **Options** tab, associate the Routing Strategy defined in IRD (Refer to section 4.2.4) is associated

Home > DNS > Switches > SIPSwitch > DNS > Route Points > +19192149177 Properties

Delete DN Clone Move To

General		Options				
Default DNs		Quick Filter				
Options		<input type="checkbox"/>	Name	Section	Key	Value
Permissions		<input type="checkbox"/>	▼ Universal_Routing_Server			
Dependencies		<input type="checkbox"/>	Universal_Routing_Server \ Loaded	Universal_Routing_Server	Loaded	PM
		<input type="checkbox"/>	Universal_Routing_Server \ Loaded by	Universal_Routing_Server	Loaded by	default
		<input type="checkbox"/>	Universal_Routing_Server \ strategy	Universal_Routing_Server	strategy	IVR_test_01
		<input type="checkbox"/>	Universal_Routing_Server \ strategy0x1	Universal_Routing_Server	strategy0x1	IVR_test_01

Figure 14: Route Point Contd.,

## 4.2.4 Routing Strategy

In IRD, navigate to **Routing Design > Strategies > Right Click on Scripts**, select **New** and create a script as shown below

Routing Strategy is created to route the calls to available agent based on the skill selected

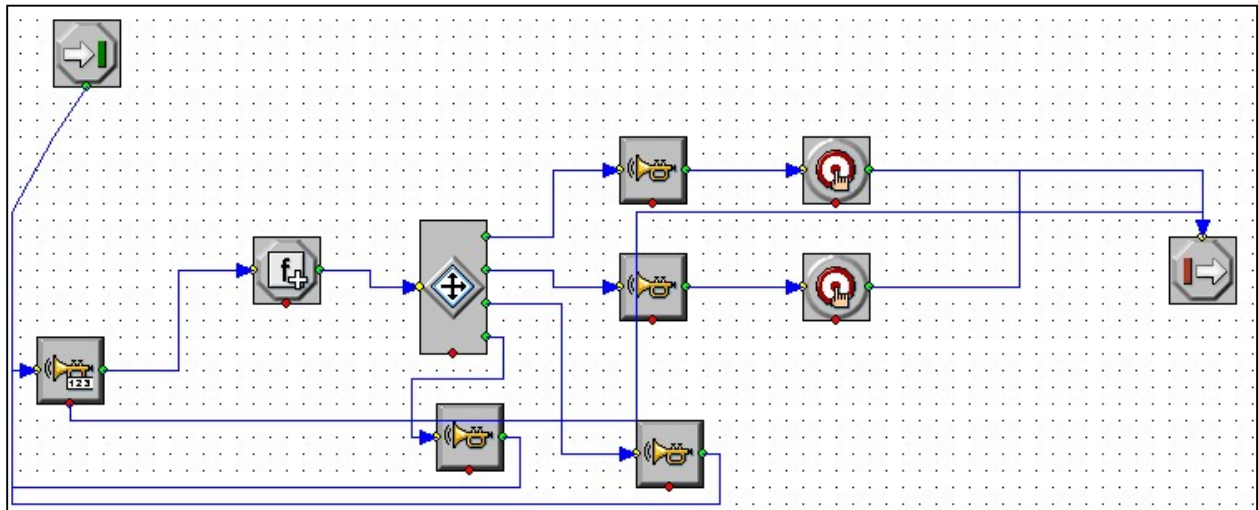


Figure 15: Route Strategy

- **Variable Declaration**

Variable	Type	Scope
displayname	STRING	LOCAL
cuid	STRING	LOCAL
dtmf	STRING	LOCAL

Figure 16: Route Strategy – Variable Declaration

- In the **Play Announcement and Collect Digits** block define the following as below,

Parameter	Value
1 LANGUAGE	English(US)
2 MAX_DIGITS	1
3 ABORT_DIGITS	
4 IGNORE_DIGITS	
5 BACKSPACE_DIGITS	
6 TERM_DIGITS	
7 RESET_DIGITS	
8 CLEAR_DIGITS	
9 START_TIMEOUT	5
10 DIGIT_TIMEOUT	5
11 TOTAL_TIMEOUT	120
12 MSGID	
13 MSGTXT	

Figure 17: Route Strategy – Announcement & Collect Digits

- In the **Multi-Function** block define as below to display the Caller Details to the Agent

The screenshot shows a software interface with a 'Multi Function properties' dialog box open. The dialog has a 'General' tab and a 'Function' section. The 'Function' section contains a table with 8 rows, each defining a variable and its corresponding function. The table is highlighted with a red border.

	Variable	Function
1	dtmf	CED[]
2	displayname	UData['From']
3	displayname	StrAsciiTok[displayname, "", 1]
4	cuuid	CallUUID[]
5		ExtensionAttach['DisplayName', displayname]
6		Update['displayname', displayname]
7		UpdateBusinessData['calluuid', cuuid]
8		UpdateBusinessData['CallQuality', '0']

Figure 18: Route Strategy – Multi-function

- In the **Segmentation** block define as below to define the DTMF digits based on the Skill and to route the calls accordingly based on the PSTN user selection to an available Agent in the Skill

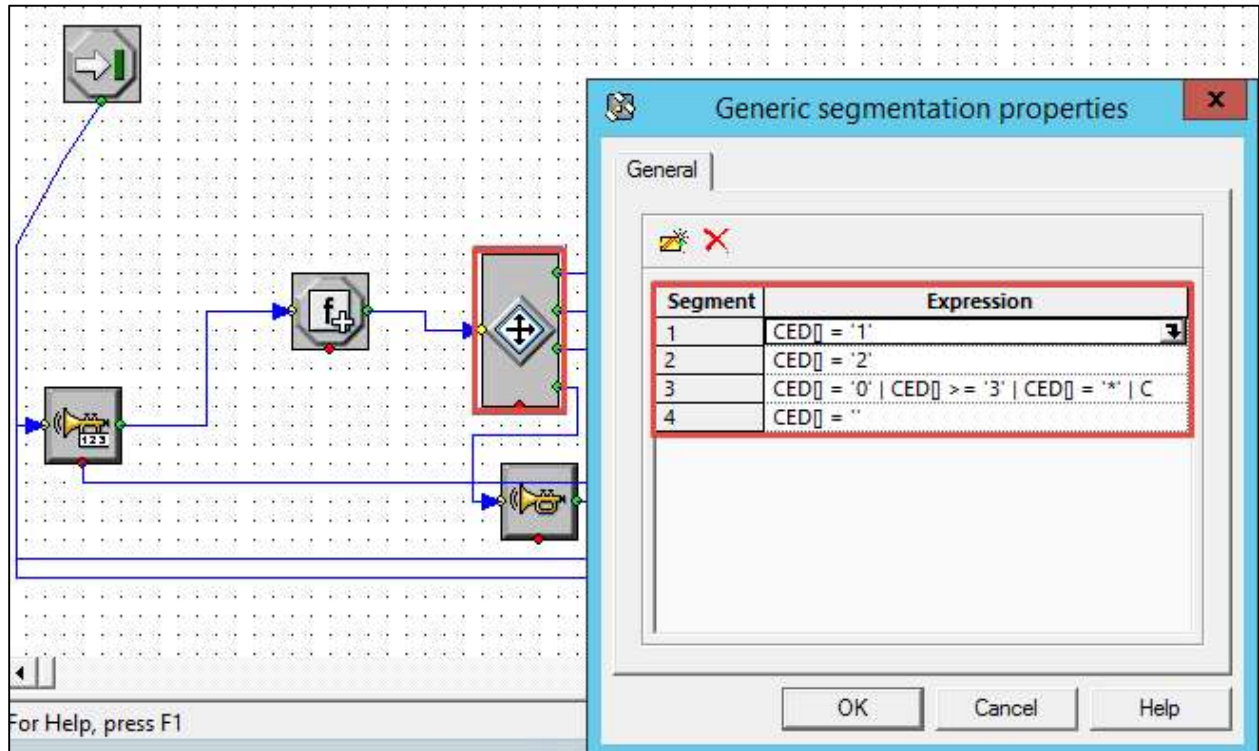


Figure 19: Route Strategy – Segmentation

- In the **Play Announcement** block define as below for different call announcements based on the user selection

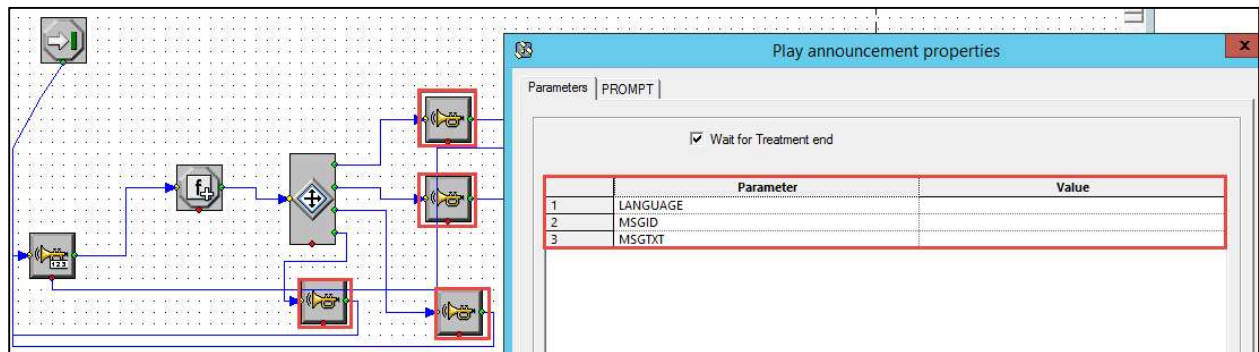


Figure 20: Route Strategy – Play Announcement

- In the **Selection** block, define as below to route the call to different Skill defined in the system and to the available agents in the Skill

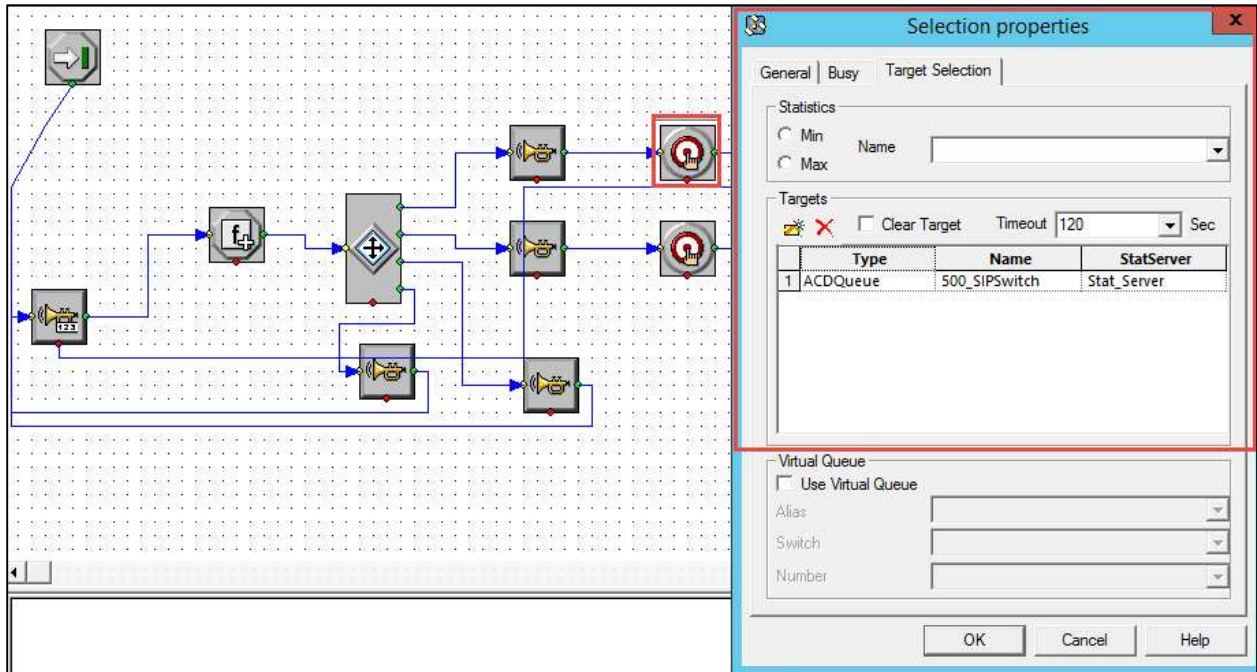


Figure 21: Route Strategy – Selection

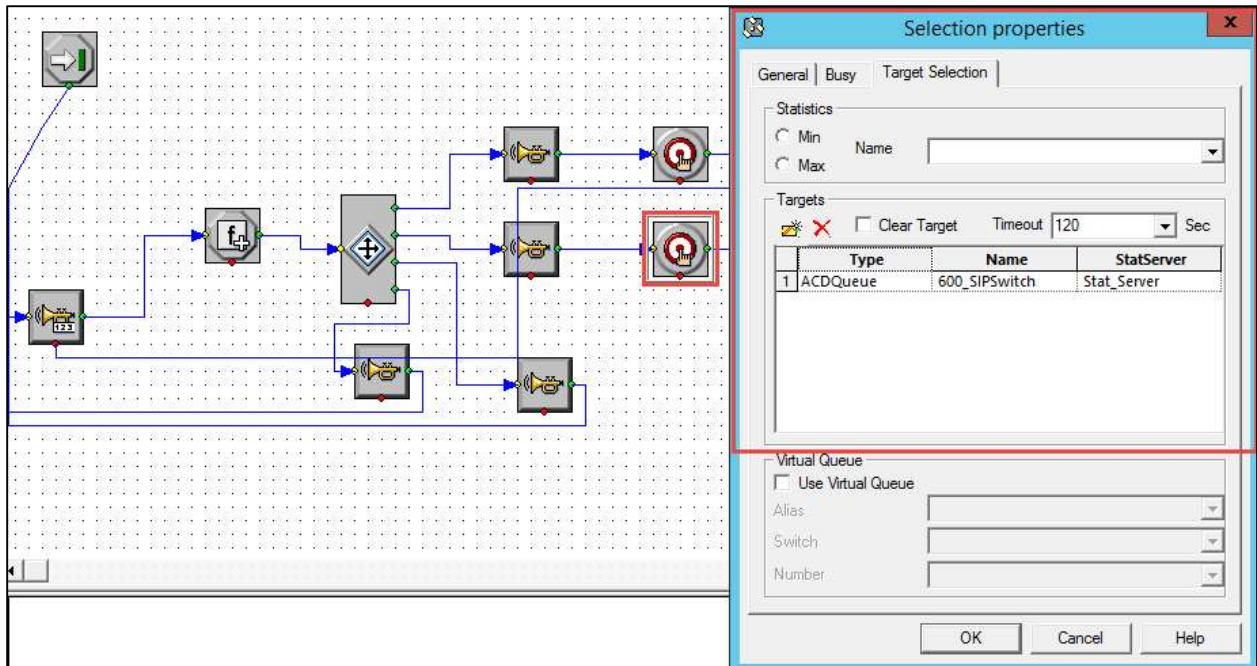


Figure 22: Route Strategy – Selection

## 4.2.5 SIP Trunk

In GAX, navigate to the location **Configuration > Switching > DNS > SIPSwitch > DNS > Trunks > Click on New** and create the trunk towards Audiocodes Mediant VE SBC with the following values

- In the **General** tab, Enter the **Number/Name** for the trunk
- Choose the values for the fields as below,
  - **Type** : Trunk
  - **Switch** : SIPSwitch
  - **Register** : True
  - **Route type** : Default
  - Check the box **State Enabled**
- Leave the rest of the fields to default values

The screenshot shows the GAX Configuration page for creating a SIP Trunk. The breadcrumb path is "Home > DNS > Switches > SIPSwitch > DNS > Trunks > AWS\_test Properties". The "General" tab is active. The following fields are filled with the specified values:

- Number \***: AWS\_test
- Type \***: Trunk
- Switch \***: SIPSwitch
- Association**: (empty)
- Register \***: True
- Alias**: (empty)
- Route Type \***: Default
- DN Group**: (empty)
- Use Override**:
- Override**: (empty)

Figure 23: SIP Trunk

Login ID:   
 Switch-specific Type:   
 Number Of Trunks:   
 Tenant:   
 State Enabled

Figure 24: SIP Trunk Contd.,

- In the **Options** tab, Add the below mentioned fields with appropriate values as below
  - **TServer\Contact** : Enter the IP of the Audiocodes Mediant VE SBC
  - **TServer\Prefix**: Enter a desired prefix
  - **TServer\replace-prefix**: Set to +1
  - **TServer\refer-enabled**: Set to False
  - **TServer\cpn**: Enter the Contact Center Main number to be displayed to the end user

Name	Section	Key	Value
▼ TServer			
TServer \ contact	TServer	contact	10.80.11.79:5060;transport=udp
TServer \ cpn	TServer	cpn	+1919
TServer \ prefix	TServer	prefix	81
TServer \ refer-enabled	TServer	refer-enabled	false
TServer \ replace-prefix	TServer	replace-prefix	+1

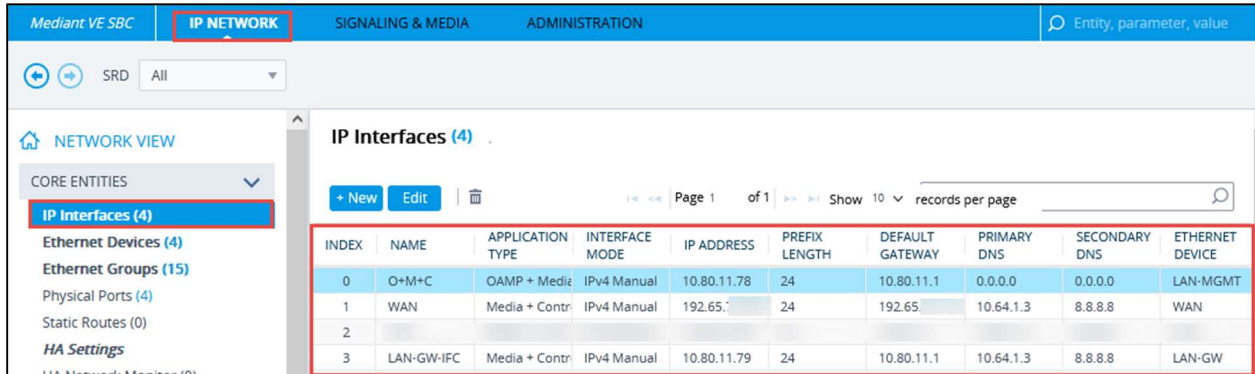
Figure 25: SIP Trunk Contd.,

- Set the values in the **Permissions** and **Dependencies** tab as per the requirement of the environment

## 4.3 AudioCodes SBC configuration

### 4.3.1 Network IP Interface configuration

Navigate to **SETUP, IP NETWORK** and expand **CORE ENTITIES**. Click **IP Interfaces** and the below figure shows the interfaces that are been used.



INDEX	NAME	APPLICATION TYPE	INTERFACE MODE	IP ADDRESS	PREFIX LENGTH	DEFAULT GATEWAY	PRIMARY DNS	SECONDARY DNS	ETHERNET DEVICE
0	O+M+C	OAMP + Media	IPv4 Manual	10.80.11.78	24	10.80.11.1	0.0.0.0	0.0.0.0	LAN-MGMT
1	WAN	Media + Control	IPv4 Manual	192.65.1.1	24	192.65.1.1	10.64.1.3	8.8.8.8	WAN
2									
3	LAN-GW-IFC	Media + Control	IPv4 Manual	10.80.11.79	24	10.80.11.1	10.64.1.3	8.8.8.8	LAN-GW

Figure 26: IP Interfaces

### 4.3.2 Media Realm configuration

Two media realms are created, one is associated to Genesys Engage & Amazon Chime Voice Connector for SIPREC(Voice Recording). Another is associated with Amazon Chime Voice Connector for SIP Trunk. To configure media realm, navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CORE ENTITIES** and select **Media Realms**.



INDEX	NAME	IPV4 INTERFACE NAME	UDP PORT RANGE START	NUMBER OF MEDIA SESSION LEGS	UDP PORT RANGE END	DEFAULT MEDIA REALM
0	MR_Genesys	LAN-GW-IFC	6000	14883	65531	No
1	MR_ACVC	WAN	6000	14883	65531	No

Figure 27: Media Realms Table

Click **+New** button to add new media realms. Enter the **name** of the Media Realm, **Port Range Start value** and **Number of Media Session Legs**. Select the appropriate **IPv4 Interface Name** for Genesys Engage & Amazon Chime Voice Connector(SIPREC)

Media Realms [MR\_Genesys]

GENERAL	QUALITY OF EXPERIENCE
Index: 0	QoE Profile: -- <a href="#">View</a>
Name: MR_Genesys	Bandwidth Profile: -- <a href="#">View</a>
Topology Location: Down	
IPv4 Interface Name: #3 [LAN-GW-IFC] <a href="#">View</a>	
UDP Port Range Start: 6000	
Number Of Media Session Legs: 14883	
UDP Port Range End: 65531	
TCP Port Range Start: 0	
TCP Port Range End: 0	
Default Media Realm: No	
Used By Routing Server: Not Used	

Cancel **APPLY**

Figure 28: Media Realm for Genesys

Enter the **name** of the Media Realm, **Port Range Start value** and **Number of Media Session Legs**. Select the appropriate **IPv4 Interface Name** for Amazon Chime Voice Connector

Media Realms [MR\_ACVC]

GENERAL		QUALITY OF EXPERIENCE	
Index	1	QoE Profile	-- <a href="#">View</a>
Name	MR_ACVC	Bandwidth Profile	-- <a href="#">View</a>
Topology Location	Down		
IPv4 Interface Name	#1 [WAN] <a href="#">View</a>		
UDP Port Range Start	6000		
Number Of Media Session Legs	14883		
UDP Port Range End	65531		
TCP Port Range Start	0		
TCP Port Range End	0		
Default Media Realm	No		
Used By Routing Server	Not Used		

Cancel [APPLY](#)

Figure 29: Media Realm for Amazon Chime Voice Connector(SIP Trunk)

### 4.3.3 SRD Configuration

To configure SRD, navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CORE ENTITIES** and select **SRDs**.

INDEX	NAME	SHARING POLICY	SBC OPERATION MODE	SBC ROUTING POLICY	MAX. NUMBER OF REGISTERED USERS	USER SECURITY MODE
0	DefaultSRD (#0)	Shared	B2BUA	Default_SBCRoutingPi	-1	Accept All

Figure 30: Default SRD

The default SRD configuration is used

**GENERAL**

Index: 0

Name: DefaultSRD

Sharing Policy: Shared

SBC Operation Mode: B2BUA

SBC Routing Policy: #0 [Default\_SBCRoutingPolicy] [View](#)

Used By Routing Server: Not Used

Dial Plan: .. [View](#)

CAC Profile: .. [View](#)

**REGISTRATION**

Max. Number of Registered Users: -1

User Security Mode: Accept All

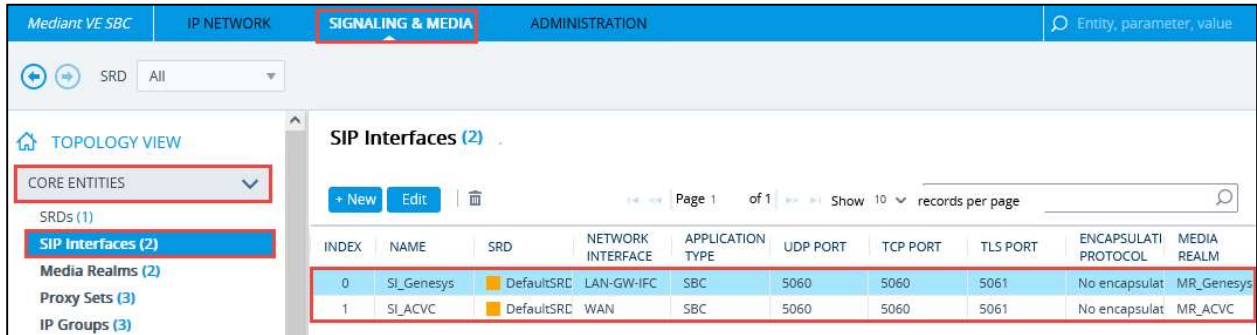
Enable Un-Authenticated Registrations: Enable

[Cancel](#) [APPLY](#)

Figure 31: Default SRD table details

### 4.3.4 SIP Interface configuration

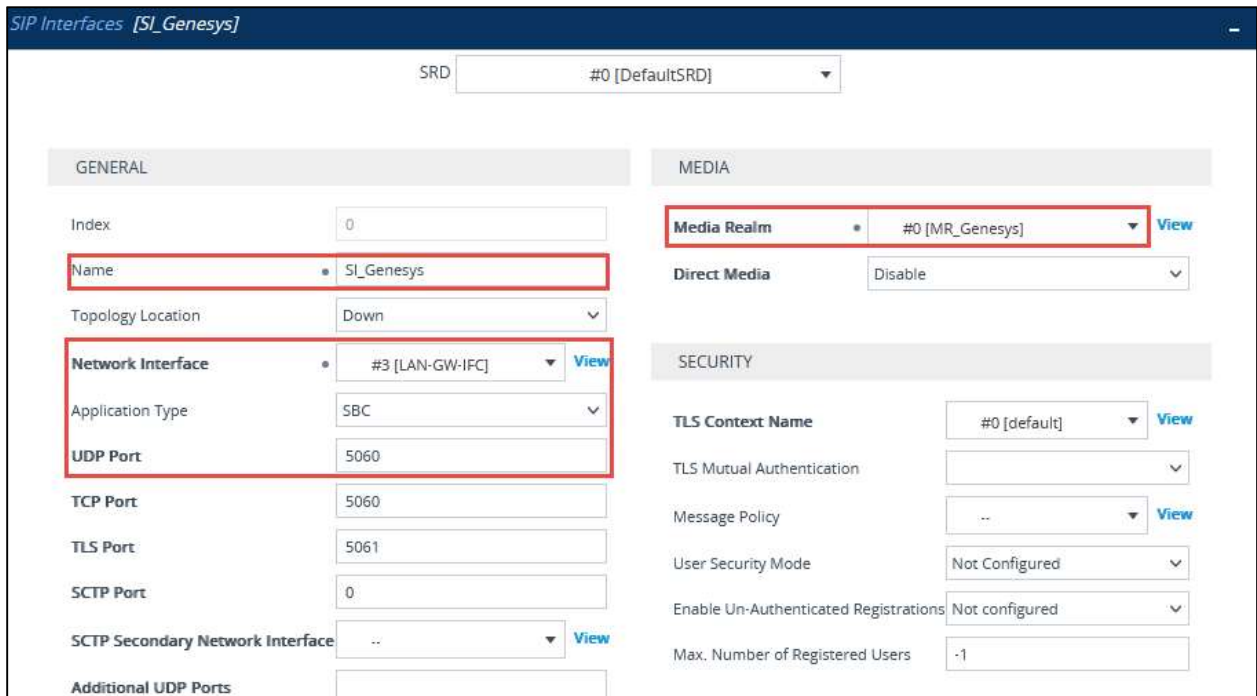
Navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CORE ENTITIES** and select **SIP Interfaces**. Two SIP Interfaces are created, one is for Genesys Engage & Amazon Chime Voice Connector(SIPREC) and the other is for Amazon Chime Voice Connector(SIP Trunk)



INDEX	NAME	SRD	NETWORK INTERFACE	APPLICATION TYPE	UDP PORT	TCP PORT	TLS PORT	ENCAPSULATION PROTOCOL	MEDIA REALM
0	SI_Genesys	DefaultSRD	LAN-GW-IFC	SBC	5060	5060	5061	No encapsulat	MR_Genesys
1	SI_ACVC	DefaultSRD	WAN	SBC	5060	5060	5061	No encapsulat	MR_ACVC

Figure 32: SIP Interfaces

**Network Interface, Media Realm, Application Type, SRD** and **Port numbers** are associated to Genesys Engage & Amazon Chime Voice Connector(SIPREC) Interface and the remaining parameters are set to default.



SRD: #0 [DefaultSRD]

**GENERAL**

Index: 0

Name: SI\_Genesys

Topology Location: Down

Network Interface: #3 [LAN-GW-IFC]

Application Type: SBC

UDP Port: 5060

TCP Port: 5060

TLS Port: 5061

SCTP Port: 0

SCTP Secondary Network Interface: ..

Additional UDP Ports: ..

**MEDIA**

Media Realm: #0 [MR\_Genesys]

Direct Media: Disable

**SECURITY**

TLS Context Name: #0 [default]

TLS Mutual Authentication: ..

Message Policy: ..

User Security Mode: Not Configured

Enable Un-Authenticated Registrations: Not configured

Max. Number of Registered Users: -1

Figure 33: SIP Interface for Genesys Engage

**SIP Interfaces [SI\_Genesys]**

**SCTP Secondary Network Interface**  [View](#)

**Additional UDP Ports**

**Additional UDP Ports Mode**

Encapsulating Protocol

Enable TCP Keepalive

Used By Routing Server

Pre-Parsing Manipulation Set  [View](#)

CAC Profile  [View](#)

---

**CLASSIFICATION**

Classification Failure Response Type

Pre-classification Manipulation Set ID

Call Setup Rules Set ID

[Cancel](#) [APPLY](#)

Figure 34: SIP Interface for Genesys Engage Contd.,

**Network Interface, Media Realm, Application Type, SRD** and **Port numbers** are associated for Amazon Chime Voice Connector(SIP Trunk) SIP Interface and the remaining parameters are set to default.

SIP Interfaces [SL\_ACVC]

SRD #0 [DefaultSRD]

**GENERAL**

Index: 1

Name: SL\_ACVC

Topology Location: Down

Network Interface: #1 [WAN]

Application Type: SBC

UDP Port: 5060

TCP Port: 5060

TLS Port: 5061

SCTP Port: 0

SCTP Secondary Network Interface: ..

Additional UDP Ports:

**MEDIA**

Media Realm: #1 [MR\_ACVC]

Direct Media: Disable

**SECURITY**

TLS Context Name: #0 [default]

TLS Mutual Authentication:

Message Policy: ..

User Security Mode: Not Configured

Enable Un-Authenticated Registrations: Not configured

Max. Number of Registered Users: -1

Figure 35: SIP Interface for Amazon Chime Voice Connector(SIP Trunk)

**SIP Interfaces [SLACVC]**

Enable Un-Authenticated Registrations: Not configured

Max. Number of Registered Users: -1

SCTP Secondary Network Interface: ... [View](#)

Additional UDP Ports: ...

Additional UDP Ports Mode: Always Open

Encapsulating Protocol: No encapsulation

Enable TCP Keepalive: Disable

Used By Routing Server: Not Used

Pre-Parsing Manipulation Set: ... [View](#)

CAC Profile: ... [View](#)

**CLASSIFICATION**

Classification Failure Response Type: 500

Pre-classification Manipulation Set ID: -1

Call Setup Rules Set ID: -1

Cancel [APPLY](#)

Figure 36: SIP Interface for Amazon Chime Voice Connector(SIP Trunk) Contd.,

### 4.3.5 Proxy Sets configuration

Navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CORE ENTITIES** and select **Proxy Sets**. Destination address or FQDN is configured in Proxy Sets. Three Proxy Sets are created- Genesys Engage, Amazon Chime Voice Connector(SIPREC) & Amazon Chime Voice Connector(SIP Trunk)

Mediant VE SBC | IP NETWORK | **SIGNALING & MEDIA** | ADMINISTRATION

Entity, parameter, value

SRD: All

TOPOLOGY VIEW

CORE ENTITIES

SRDs (1)

SIP Interfaces (2)

Media Realms (2)

**Proxy Sets (3)**

IP Groups (3)

CODERS & PROFILES

**Proxy Sets (3)**

+ New Edit

Page 1 of 1 Show 10 records per page

INDEX	NAME	SRD	SBC IPV4 SIP INTERFACE	PROXY KEEP-ALIVE TIME [SEC]	REDUNDANCY MODE	PROXY HOT SWAP
0	PS_Genesis	DefaultSRD (#0)	SI_Genesis	60		Disable
1	PS_ACVC	DefaultSRD (#0)	SI_ACVC	60		Disable
2	PS_AWS_SIPREC	DefaultSRD (#0)	SI_Genesis	60		Disable

Figure 37: Proxy Sets table

Select **SRD**, **Name**, **SBC IPv4 SIP Interface** and leave the rest to default for Genesys Engage Proxy Set.

Proxy Sets [PS\_Genesys]

SRD #0 [DefaultSRD]

**GENERAL**

Index 0

Name PS\_Genesys

SBC IPv4 SIP Interface #0 [SI\_Genesys] View

TLS Context Name ... View

**REDUNDANCY**

Redundancy Mode

Proxy Hot Swap Disable

Proxy Load Balancing Method Disable

Min. Active Servers for Load Balancing 1

**KEEP ALIVE**

Proxy Keep-Alive Disable

Proxy Keep-Alive Time [sec] 60

Keep-Alive Failure Responses

Success Detection Retries 1

Success Detection Interval 10

**ADVANCED**

Classification Input IP Address only

DNS Resolve Method

Accept DHCP Proxy List Disable

Cancel APPLY

Figure 38: Proxy Set table for Genesys Engage

Click on **Proxy Address 0 items** link in bottom to add **Proxy Address** and **Transport Type**.

Proxy Address

**GENERAL**

Index 0

Proxy Address 10.64.1.155

Transport Type UDP

Proxy Priority 0

Proxy Random Weight 0

Figure 39: Proxy Address for Genesys Engage

Select **SRD, Name. SBC IPv4 SIP Interface** and leave the rest to default for Amazon Chime Voice Connector(SIP Trunk) Proxy Set.

Proxy Sets [PS\_ACVC]

SRD #0 [DefaultSRD]

**GENERAL**

Index: 1

Name: PS\_ACVC

**SBC IPv4 SIP Interface**: #1 [SI\_ACVC] [View](#)

TLS Context Name: .. [View](#)

**REDUNDANCY**

Redundancy Mode: [ ]

Proxy Hot Swap: Disable

Proxy Load Balancing Method: Disable

Min. Active Servers for Load Balancing: 1

**KEEP ALIVE**

Proxy Keep-Alive: Disable

Proxy Keep-Alive Time [sec]: 60

Keep-Alive Failure Responses: [ ]

Success Detection Retries: 1

Success Detection Interval: 10

**ADVANCED**

Classification Input: IP Address only

DNS Resolve Method: [ ]

Accept DHCP Proxy List: Disable

Cancel APPLY

Figure 40: Proxy Set Table for Amazon Chime Voice Connector(SIP Trunk)

Click on **Proxy Address 0 items** link in bottom to add **Proxy Address** and **Transport Type**.

Proxy Address

**GENERAL**

Index: 0

**Proxy Address**: dtndx onconnector.chime.a

**Transport Type**: UDP

Proxy Priority: 0

Proxy Random Weight: 0

Figure 41: Proxy Address for Amazon Chime Voice Connector(SIP Trunk) Contd.,

Select **SRD**, **Name**. **SBC IPv4 SIP Interface** and leave the rest to default for Amazon Chime Voice Connector(SIPREC) Proxy Set.

Proxy Sets [PS\_AWS\_SIPREC]

SRD #0 [DefaultSRD]

**GENERAL**

Index: 2

Name: PS\_AWS\_SIPREC

**SBC IPv4 SIP Interface**: #0 [SI\_Genesis] [View](#)

TLS Context Name: -- [View](#)

**REDUNDANCY**

Redundancy Mode: [ ]

Proxy Hot Swap: Disable

Proxy Load Balancing Method: Disable

Min. Active Servers for Load Balancing: 1

**KEEP ALIVE**

Proxy Keep-Alive: Disable

Proxy Keep-Alive Time [sec]: 60

Keep-Alive Failure Responses: [ ]

Success Detection Retries: 1

Success Detection Interval: 10

**ADVANCED**

Classification Input: IP Address only

DNS Resolve Method: [ ]

Accept DHCP Proxy List: Disable

Cancel APPLY

Figure 42: Proxy Set Table for Amazon Chime Voice Connector(SIPREC)

Click on **Proxy Address 0 items** link in bottom to add **Proxy Address** and **Transport Type**.

Proxy Address

**GENERAL**

Index: 0

**Proxy Address**: dtndx... onconnector.chime.a

**Transport Type**: UDP

Proxy Priority: 0

Proxy Random Weight: 0

Figure 43: Proxy Address for Amazon Chime Voice Connector(SIPREC) Contd.,

### 4.3.6 IP Group Table Configuration

Navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CORE ENTITIES** and select **IP Groups**. IP Groups are configured for denoting source and destination in IP-to-IP routing rules. IP Groups created for Genesys Engage, Amazon Chime Voice Connector(SIPREC) and Amazon Chime Voice Connector(SIP Trunk)

INDEX	NAME	SRD	TYPE	SBC OPERATION MODE	PROXY SET	IP PROFILE	MEDIA REALM	SIP GROUP NAME	CLASSIFY BY PROXY SET	INBOUND MESSAGE MANIPULAT SET	OUTBOUND MESSAGE MANIPULA SET
0	IPG_Genesys	DefaultSI	Server	Not Configu	PS_Genesys	IPProf_Gene	MR_Genesys		Enable	-1	9
1	IPG_ACVC	DefaultSI	Server	Not Configu	PS_ACVC	IPProf_ACVC	MR_ACVC		Enable	-1	7
2	IPG_AWS_SII	DefaultSI	Server	Not Configu	PS_AWS_SIP	IPProf_AWS	MR_Genesys		Enable	-1	8

Figure 44: IP Group Table

Enter the **name** of the IP Group for Genesys Engage and associate **Proxy Set, IP Profile, Media Realm, SRD** and the remaining parameters are set to default.

**IP Groups [IPG\_Genesys]**

SRD: #0 [DefaultSRD]

**GENERAL**

Index: 0

Name: IPG\_Genesys

Topology Location: Down

Type: Server

Proxy Set: #0 [PS\_Genesys]

IP Profile: #1 [IPProf\_Genesys]

Media Realm: #0 [MR\_Genesys]

Internal Media Realm: ...

Contact User:

SIP Group Name:

**QUALITY OF EXPERIENCE**

QoE Profile: -- View

Bandwidth Profile: -- View

User Voice Quality Report: Disable

**MESSAGE MANIPULATION**

Inbound Message Manipulation Set: -1

Outbound Message Manipulation Set: 9

Message Manipulation User-Defined String 1:

Message Manipulation User-Defined String 2:

Proxy Keep-Alive using IP Group settings: Disable

Figure 45: IP Group Table for Genesys Engage

**IP Groups [IPG\_Genesys]**

Created By Routing Server: No  
 Used By Routing Server: Not Used  
 Proxy Set Connectivity: NA

**SBC GENERAL**

Classify By Proxy Set: Enable  
**Validate Source IP**: Disable  
 SBC Operation Mode: Not Configured  
 SBC Client Forking Mode: Sequential  
 CAC Profile: ... [View](#)  
 SIP Source Host Name:

**SBC REGISTRATION AND AUTHENTICATION**

Max. Number of Registered Users: -1  
 Registration Mode: User Initiates Registration  
 User Stickiness: Disable  
 User UDP Port Assignment: Disable  
 Authentication Mode: User Authenticates  
 Authentication Method List:   
 SBC Server Authentication Type: According to Global Parameter  
 OAuth HTTP Service: ... [View](#)  
 Username As Client: Admin  
 Password As Client: \*

Figure 46: IP Group table for Genesys Engage Contd.,

**IP Groups [IPG\_Genesys]**

**ADVANCED**

Local Host Name:   
 UUI Format: Disable  
 Always Use Src Address: No

**SBC ADVANCED**

Source URI Input:   
 Destination URI Input:   
 SIP Connect: No  
 SBC PSAP Mode: Disable  
 Route Using Request URI Port: Disable  
 Media TLS Context: #0 [default] [View](#)

Username As Server:   
 Password As Server:

**GW GROUP STATUS**

**GW Group Registered IP Address**:   
**GW Group Registered Status**: Not Registered

Figure 47: IP Group Table for Genesys Engage Contd.,

**IP Groups [IPG\_Genesys]**

Destination URI Input	<input type="text"/>	<input type="button" value="v"/>
SIP Connect	No	<input type="button" value="v"/>
SBC PSAP Mode	Disable	<input type="button" value="v"/>
Route Using Request URI Port	Disable	<input type="button" value="v"/>
Media TLS Context	#0 [default]	<input type="button" value="v"/> <a href="#">View</a>
<b>Keep Original Call-ID</b>	No	<input type="button" value="v"/>
<b>Dial Plan</b>	--	<input type="button" value="v"/> <a href="#">View</a>
Call Setup Rules Set ID	-1	<input type="text"/>
Tags	<input type="text"/>	
<b>SBC Alternative Routing Reasons Set</b>	--	<input type="button" value="v"/> <a href="#">View</a>
Teams Local Media Optimization Handling	None	<input type="button" value="v"/>
Teams Local Media Optimization Initial Behavior	DirectMedia	<input type="button" value="v"/>
Teams Local Media Optimization Site	<input type="text"/>	
Teams Direct Routing Mode	Disable	<input type="button" value="v"/>

Figure 48: IP Group Table for Genesys Engage Contd.,

Enter the name of the IP Groups for Amazon Chime Voice Connector(SIP Trunk) and associate **SRD, Proxy Set, IP Profile, Media Realm** and the remaining parameters are set to default.

Figure 49: IP Group Table for Amazon Chime Voice Connector(SIP Trunk)

Figure 50: IP Group Table for Amazon Chime Voice Connector Continuation(SIP Trunk) Contd.,

*IP Groups [IPG\_ACVC]*

**ADVANCED**

Local Host Name

UUl Format Disable

Always Use Src Address No

Username As Server

Password As Server

**SBC ADVANCED**

Source URI Input

Destination URI Input

SIP Connect No

SBC PSAP Mode Disable

Route Using Request URI Port Disable

Media TLS Context #0 [default]  [View](#)

**GW GROUP STATUS**

**GW Group Registered IP Address**

**GW Group Registered Status** Not Registered

Figure 51: IP Group Table for Amazon Chime Voice Connector Continuation(SIP Trunk) Contd.,

**IP Groups [IPG\_ACVC]**

Destination URI Input	<input type="text"/>	▼
SIP Connect	No	▼
SBC PSAP Mode	Disable	▼
Route Using Request URI Port	Disable	▼
Media TLS Context	#0 [default]	▼ <a href="#">View</a>
<b>Keep Original Call-ID</b>	No	▼
<b>Dial Plan</b>	...	▼ <a href="#">View</a>
Call Setup Rules Set ID	-1	
<b>Tags</b>	<input type="text"/>	
<b>SBC Alternative Routing Reasons Set</b>	...	▼ <a href="#">View</a>
Teams Local Media Optimization Handling	None	▼
Teams Local Media Optimization Initial Behavior	DirectMedia	▼
Teams Local Media Optimization Site	<input type="text"/>	
Teams Direct Routing Mode	Disable	▼

[Cancel](#)
[APPLY](#)

Figure 52: IP Group Table for Amazon Chime Voice Connector(SIP Trunk) Contd.,

Enter the name of the IP Group for Amazon Chime Voice Connector(SIPREC) and associate **SRD**, **Proxy Set**, **IP Profile**, **Media Realm** and the remaining parameters are set to default.

The screenshot shows the configuration page for an IP Group named 'IPG\_AWS\_SIPREC'. At the top, there is a dropdown menu for 'SRD' with the value '#0 [DefaultSRD]'. Below this, the configuration is divided into three main sections:

- GENERAL:** Contains fields for Index (2), Name (IPG\_AWS\_SIPREC), Topology Location (Down), Type (Server), Proxy Set (#2 [PS\_AWS\_SIPREC]), IP Profile (#0 [IPProf\_AWS\_SIPREC]), Media Realm (#0 [MR\_Genesys]), Internal Media Realm (...), Contact User, and SIP Group Name.
- QUALITY OF EXPERIENCE:** Contains dropdowns for QoE Profile, Bandwidth Profile, and User Voice Quality Report (Disable).
- MESSAGE MANIPULATION:** Contains fields for Inbound Message Manipulation Set (-1), Outbound Message Manipulation Set (8), and two Message Manipulation User-Defined String fields.

Figure 53: IP Group Table for Amazon Chime Voice Connector(SIPREC)

The screenshot shows the configuration page for an IP Group named 'IPG\_AWS\_SIPREC', focusing on the SBC settings. The configuration is divided into two main sections:

- SBC GENERAL:** Contains fields for Created By Routing Server (No), Used By Routing Server (Not Used), Proxy Set Connectivity (NA), Classify By Proxy Set (Enable), Validate Source IP (Disable), SBC Operation Mode (Not Configured), SBC Client Forking Mode (Sequential), CAC Profile (...), and SIP Source Host Name.
- SBC REGISTRATION AND AUTHENTICATION:** Contains fields for Max. Number of Registered Users (-1), Registration Mode (User Initiates Registration), User Stickiness (Disable), User UDP Port Assignment (Disable), Authentication Mode (User Authenticates), Authentication Method List, SBC Server Authentication Type (According to Global Parameter), OAuth HTTP Service (...), Username As Client (Admin), and Password As Client.

Figure 54: IP Group Table for Amazon Chime Voice Connector(SIPREC) Contd.,

**IP Groups [IPG\_AWS\_SIPREC]**

**ADVANCED**

Local Host Name

UUI Format

Always Use Src Address

Username As Server

Password As Server

**GW GROUP STATUS**

**SBC ADVANCED**

Source URI Input

Destination URI Input

SIP Connect

SBC PSAP Mode

Route Using Request URI Port

Media TLS Context  [View](#)

**GW Group Registered IP Address**

**GW Group Registered Status**

Figure 55: IP Group Table for Amazon Chime Voice Connector(SIPREC) Contd.,

**IP Groups [IPG\_AWS\_SIPREC]**

Destination URI Input	<input type="text"/>	
SIP Connect	No	<input type="button" value="View"/>
SBC PSAP Mode	Disable	
Route Using Request URI Port	Disable	
Media TLS Context	#0 [default]	<input type="button" value="View"/>
<b>Keep Original Call-ID</b>	No	
<b>Dial Plan</b>	..	<input type="button" value="View"/>
Call Setup Rules Set ID	-1	
Tags	<input type="text"/>	
<b>SBC Alternative Routing Reasons Set</b>	..	<input type="button" value="View"/>
Teams Local Media Optimization Handling	None	
Teams Local Media Optimization Initial Behavior	DirectMedia	
Teams Local Media Optimization Site	<input type="text"/>	
Teams Direct Routing Mode	Disable	

Figure 56: IP Group Table for Amazon Chime Voice Connector(SIPREC) Contd.,

### 4.3.7 Coder Groups configuration

Navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CODERS & PROFILES** and select **Coder Groups**. G711 U-law is configured in Coder Groups.

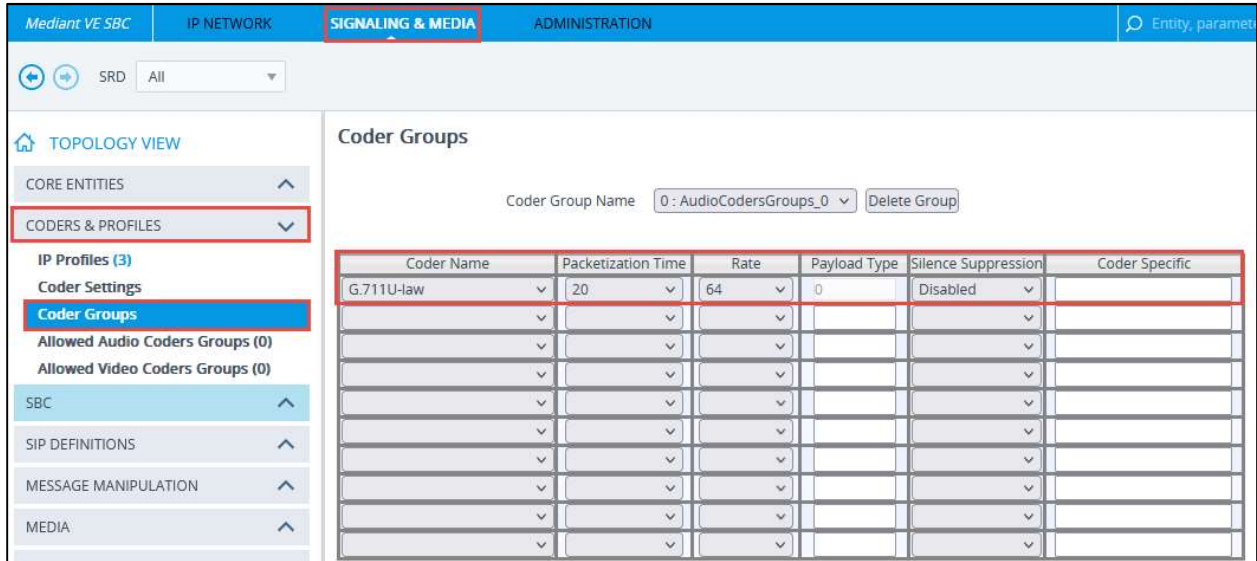


Figure 57: Coder Groups

### 4.3.8 IP Profile Configuration

Navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **CODERS & PROFILES** and select **IP Profiles**. Three IP Profiles are created- Genesys Engage, Amazon Chime Voice Connector(SIPREC) & Amazon Chime Voice Connector(SIP Trunk)

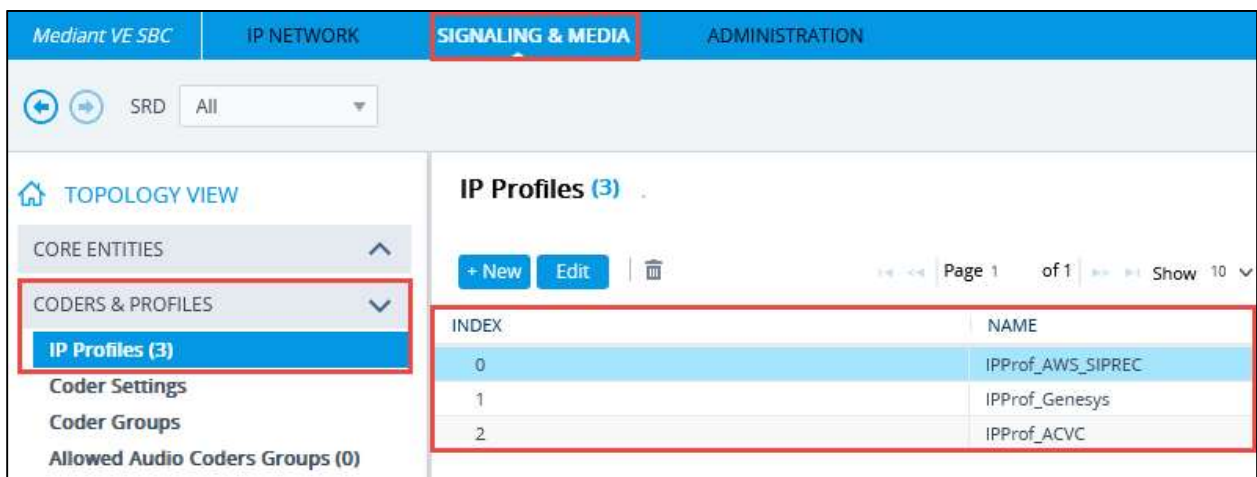


Figure 58: IP Profiles

In the IP Profile for Genesys Engage, enter the **Name**, select **Session Expire Mode** as *Supported*, **SBC Media Security Mode** as *Not Secured* and **Extension Coder Group** is associated appropriately

The screenshot shows the configuration page for the IP Profile 'IPProf\_Genesys'. It is divided into three main sections:

- GENERAL:**
  - Index: 1
  - Name: IPProf\_Genesys (highlighted with a red box)
  - Created by Routing Server: No
  - Used By Routing Server: Not Used
- MEDIA SECURITY:**
  - SBC Media Security Mode: Not Secured (highlighted with a red box)
  - Symmetric MKI: Disable
  - MKI Size: 0
  - SBC Enforce MKI Size: Don't enforce
  - SBC Media Security Method: SDES
  - Reset SRTP Upon Re-key: Disable
- SBC SIGNALING:**
  - PRACK Mode: Transparent
  - P-Asserted-Identity Header Mode: As Is
  - Diversion Header Mode: As Is
  - History-Info Header Mode: As Is
  - Session Expires Mode: Supported (highlighted with a red box)
  - SIP UPDATE Support: Supported
  - Remote re-INVITE: Supported
  - Remote Delayed Offer Support: Supported
  - MSRP re-INVITE/UPDATE: Supported
  - MSRP Offer Setup Role: ActPass
  - MSRP Empty Message Format: Default
  - Remote Representation Mode: According to Operation Mode

Figure 59: IP Profile for Genesys Engage

The screenshot continues the configuration page for the IP Profile 'IPProf\_Genesys', showing the SBC EARLY MEDIA and SBC REGISTRATION sections:

- SBC EARLY MEDIA:**
  - Generate SRTP Keys Mode: Only If Required
  - SBC Remove Crypto Lifetime in SDP: No
  - SBC Remove Unknown Crypto: No
  - Crypto Suites Group: .. (with a View link)
  - Encryption on RTCP Packets: As Is
  - Remote Early Media: Supported
  - Remote Multiple 18x: Supported
  - Remote Early Media Response Type: Transparent
  - Remote Multiple Early Dialogs: According to Operation Mode
  - Remote Multiple Answers Mode: Disable
- SBC REGISTRATION:**
  - Keep Incoming Via Headers: According to Operation Mode
  - Keep Incoming Routing Headers: According to Operation Mode
  - Keep User-Agent Header: According to Operation Mode
  - Handle X-Detect: No
  - ISUP Body Handling: Transparent
  - ISUP Variant: Itu92
  - Max Call Duration [min]: 0
  - User Registration Time: 0
  - NAT UDP Registration Time: -1
  - NAT TCP Registration Time: -1

Figure 60: IP Profile for Genesys Engage Contd.,

IP Profiles [IPProf\_Genesys]

Remote Early Media RTP Detection Mode	By Signaling	
Remote RFC 3960 Support	Not Supported	
Remote Can Play Ringback	Yes	
Generate RTP	None	

**SBC MEDIA**

Mediation Mode	RTP Mediation	
<b>Extension Coders Group</b>	#0 [AudioCodersGroups_0]	
Allowed Audio Coders	..	<a href="#">View</a>
Allowed Coders Mode	Restriction	
Allowed Video Coders	..	<a href="#">View</a>
Allowed Media Types		
Direct Media Tag		
RFC 2833 Mode	As Is	

**SBC FORWARD AND TRANSFER**

Remote REFER Mode	Regular	
Remote Replaces Mode	Standard	
Play RBT To Transferee	No	
Remote 3xx Mode	Transparent	

**SBC HOLD**

Remote Hold Format	Transparent	
Reliable Held Tone Source	Yes	
Play Held Tone	No	

**SBC FAX**

Fax Coders Group	..	
------------------	----	--

Figure 61: IP Profile for Genesys Engage Contd.,

IP Profiles [IPProf\_Genesys]

RFC 2833 DTMF Payload Type	0	Fax Mode	As Is
Alternative DTMF Method	As Is	Fax Offer Mode	All coders
Send Multiple DTMF Methods	Disable	Fax Answer Mode	Single coder
Receive Multiple DTMF Methods	Disable	Remote Renegotiate on Fax Detection	Transparent
Adapt RFC2833 BW to Voice coder BW	Disabled	Fax Rerouting Mode	Disable
SDP Ptime Answer	Remote Answer		
Preferred PTime	0	<b>MEDIA</b>	
Use Silence Suppression	Transparent	Broken Connection Mode	Disconnect
RTP Redundancy Mode	As Is	Media IP Version Preference	Only IPv4
RTCP Mode	Transparent	RTP Redundancy Depth	Disable
Jitter Compensation	Disable		
ICE Mode	Disable	<b>LOCAL TONES</b>	
SDP Handle RTCP	Don't Care	Local Ringback Tone Index	-1
RTCP Mux	Not Supported	Local Held Tone Index	-1

Figure 62: IP Profile for Genesys Engage Contd.,

*IP Profiles [IPProf\_Genesys]*

RTCP Feedback	Feedback Off
Re-number MID	Disable
Voice Quality Enhancement	Disable
Max Opus Bandwidth	0
Generate No-Op Packets	Disable
Enhanced PLC	Disable
SBC Multiple Coders	Not Supported
SBC Allow Only Negotiated PT	Disable

**QUALITY OF SERVICE**

RTP IP DiffServ	46
Signaling DiffServ	24
Data DiffServ	0

Figure 63: IP Profile for Genesys Engage Contd.,

*IP Profiles [IPProf\_Genesys]*

RTP IP DiffServ

Signaling DiffServ

Data DiffServ

**JITTER BUFFER**

Dynamic Jitter Buffer Minimum Delay [msec]

Dynamic Jitter Buffer Optimization Factor

Jitter Buffer Max Delay [msec]

**VOICE**

Echo Canceler

Input Gain (-32 to 31 dB)

Voice Volume (-32 to 31 dB)

Cancel

Figure 64: IP Profile for Genesys Engage Contd.,

In the IP profile for Amazon Chime Voice Connector(SIPREC) , enter the **Name**, select **Session Expire Mode** as *Supported*, **SBC Media Security Mode** as *Not Secured* and **Extension Coder Group** is associated appropriately

**IP Profiles [IPProf\_AWS\_SIPREC]**

GENERAL		SBC SIGNALING	
Index	0	<b>PRACK Mode</b>	Transparent
<b>Name</b>	IPProf_AWS_SIPREC	P-Asserted-Identity Header Mode	As Is
Created by Routing Server	No	Diversion Header Mode	As Is
Used By Routing Server	Not Used	History-Info Header Mode	As Is
<b>MEDIA SECURITY</b>		<b>Session Expires Mode</b>	Supported
<b>SBC Media Security Mode</b>	Not Secured	<b>SIP UPDATE Support</b>	Supported
Symmetric MKI	Disable	<b>Remote re-INVITE</b>	Supported
<b>MKI Size</b>	0	Remote Delayed Offer Support	Supported
<b>SBC Enforce MKI Size</b>	Don't enforce	<b>MSRP re-INVITE/UPDATE</b>	Supported
SBC Media Security Method	SDES	<b>MSRP Offer Setup Role</b>	ActPass
<b>Reset SRTP Upon Re-key</b>	Disable	<b>MSRP Empty Message Format</b>	Default
Generate SRTP Keys Mode	Only If Required	Remote Representation Mode	According to Operation Mode
		Keep Incoming Via Headers	According to Operation Mode

Figure 65: IP Profiles for Amazon Chime Voice Connector(SIPREC)

**IP Profiles [IPProf\_AWS\_SIPREC]**

SBC Remove Crypto Lifetime in SDP	No	Keep Incoming Routing Headers	According to Operation Mode
SBC Remove Unknown Crypto	No	Keep User-Agent Header	According to Operation Mode
Crypto Suites Group	.. <a href="#">View</a>	Handle X-Detect	No
Encryption on RTCP Packets	As Is	ISUP Body Handling	Transparent
<b>SBC EARLY MEDIA</b>		ISUP Variant	Itu92
<b>Remote Early Media</b>	Supported	Max Call Duration [min]	0
<b>Remote Multiple 18x</b>	Supported	<b>SBC REGISTRATION</b>	
Remote Early Media Response Type	Transparent	User Registration Time	0
Remote Multiple Early Dialogs	According to Operation Mode	NAT UDP Registration Time	-1
Remote Multiple Answers Mode	Disable	NAT TCP Registration Time	-1
<b>Remote Early Media RTP Detection Mode</b>	By Signaling	<b>SBC FORWARD AND TRANSFER</b>	
Remote RFC 3960 Support	Not Supported	<b>Remote REFER Mode</b>	Regular
Remote Can Play Ringback	Yes		

Figure 66: IP Profiles for Amazon Chime Voice Connector(SIPREC) Contd.,

IP Profiles [IPProf\_AWS\_SIPREC]

Generate RTP	None	Remote Replaces Mode	Standard
<b>SBC MEDIA</b>		Play RBT To Transferee	No
Mediation Mode	RTP Mediation	<b>Remote 3xx Mode</b>	Transparent
<b>Extension Coders Group</b>	#0 [AudioCodersGroups_0]	<b>SBC HOLD</b>	
<b>Allowed Audio Coders</b>	.. <a href="#">View</a>	<b>Remote Hold Format</b>	Transparent
<b>Allowed Coders Mode</b>	Restriction	Reliable Held Tone Source	Yes
<b>Allowed Video Coders</b>	.. <a href="#">View</a>	Play Held Tone	No
<b>Allowed Media Types</b>		<b>SBC FAX</b>	
<b>Direct Media Tag</b>		<b>Fax Coders Group</b>	..
<b>RFC 2833 Mode</b>	As Is	<b>Fax Mode</b>	As Is
<b>RFC 2833 DTMF Payload Type</b>	0	<b>Fax Offer Mode</b>	All coders
<b>Alternative DTMF Method</b>	As Is	<b>Fax Answer Mode</b>	Single coder
<b>Send Multiple DTMF Methods</b>	Disable		

Figure 67: IP Profile for Amazon Chime Voice Connector(SIPREC) Contd.,

IP Profiles [IPProf\_AWS\_SIPREC]

<b>Receive Multiple DTMF Methods</b>	Disable	<b>Remote Renegotiate on Fax Detection</b>	Transparent
<b>Adapt RFC2833 BW to Voice coder BW</b>	Disabled	<b>Fax Retouring Mode</b>	Disable
<b>SDP Ptime Answer</b>	Remote Answer	<b>MEDIA</b>	
<b>Preferred PTime</b>	0	<b>Broken Connection Mode</b>	Disconnect
<b>Use Silence Suppression</b>	Transparent	<b>Media IP Version Preference</b>	Only IPv4
<b>RTP Redundancy Mode</b>	As Is	<b>RTP Redundancy Depth</b>	Disable
<b>RTCP Mode</b>	Transparent	<b>LOCAL TONES</b>	
<b>Jitter Compensation</b>	Disable	<b>Local Ringback Tone Index</b>	-1
<b>ICE Mode</b>	Disable	<b>Local Held Tone Index</b>	-1
<b>SDP Handle RTCP</b>	Don't Care		
<b>RTCP Mux</b>	Not Supported		
<b>RTCP Feedback</b>	Feedback Off		
<b>Re-number MID</b>	Disable		
<b>Voice Quality Enhancement</b>	Disable		

Figure 68: IP Profile for Amazon Chime Voice Connector(SIPREC) Contd.,

*IP Profiles [IPProf\_AWS\_SIPREC]*

Max Opus Bandwidth	<input type="text" value="0"/>
Generate No-Op Packets	<input type="text" value="Disable"/> ▼
Enhanced PLC	<input type="text" value="Disable"/> ▼
SBC Multiple Coders	<input type="text" value="Not Supported"/> ▼
SBC Allow Only Negotiated PT	<input type="text" value="Disable"/> ▼

**QUALITY OF SERVICE**

RTP IP DiffServ	<input type="text" value="46"/>
Signaling DiffServ	<input type="text" value="24"/>
Data DiffServ	<input type="text" value="0"/>

**JITTER BUFFER**

Dynamic Jitter Buffer Minimum Delay [msec]	<input type="text" value="10"/>
Dynamic Jitter Buffer Optimization Factor	<input type="text" value="10"/>

Figure 69: IP Profiles for Amazon Chime Voice Connector(SIPREC) Contd.,

*IP Profiles [IPProf\_AWS\_SIPREC]*

RTP IP DiffServ	<input type="text" value="46"/>
Signaling DiffServ	<input type="text" value="24"/>
Data DiffServ	<input type="text" value="0"/>

**JITTER BUFFER**

Dynamic Jitter Buffer Minimum Delay [msec]	<input type="text" value="10"/>
Dynamic Jitter Buffer Optimization Factor	<input type="text" value="10"/>
Jitter Buffer Max Delay [msec]	<input type="text" value="300"/>

**VOICE**

Echo Canceler	<input type="text" value="Line"/>
Input Gain (-32 to 31 dB)	<input type="text" value="0"/>
Voice Volume (-32 to 31 dB)	<input type="text" value="0"/>

Cancel

Figure 70: IP Profiles for Amazon Chime Voice Connector(SIPREC) Contd.,

In the IP Profile for Amazon Chime Voice Connector(SIP Trunk), enter the **Name**, select **Session Expire Mode** as *Supported*, **SBC Media Security Mode** as *Not Secured* and **Extension Coder Group** is associated appropriately

The screenshot displays the configuration interface for an IP Profile named 'IPProf\_ACVC'. The interface is divided into several sections:

- GENERAL:**
  - Index: 2
  - Name: IPProf\_ACVC (highlighted with a red box)
  - Created by Routing Server: No
  - Used By Routing Server: Not Used
- MEDIA SECURITY:**
  - SBC Media Security Mode: Not Secured (highlighted with a red box)
  - Symmetric MKI: Disable
  - MKI Size: 0
  - SBC Enforce MKI Size: Don't enforce
  - SBC Media Security Method: SDES
  - Reset SRTP Upon Re-key: Disable
  - Generate SRTP Keys Mode: Only If Required
- SBC SIGNALING:**
  - PRACK Mode: Transparent
  - P-Asserted-Identity Header Mode: As Is
  - Diversion Header Mode: As Is
  - History-Info Header Mode: As Is
  - Session Expires Mode: Supported (highlighted with a red box)
  - SIP UPDATE Support: Supported
  - Remote re-INVITE: Supported
  - Remote Delayed Offer Support: Supported
  - MSRP re-INVITE/UPDATE: Supported
  - MSRP Offer Setup Role: ActPass
  - MSRP Empty Message Format: Default
  - Remote Representation Mode: According to Operation Mode
  - Keep Incoming Via Headers: According to Operation Mode

Figure 71: IP Profiles for Amazon Chime Voice Connector(SIP Trunk)

The screenshot continues the configuration interface for the IP Profile 'IPProf\_ACVC', showing the following sections:

- SBC EARLY MEDIA:**
  - SBC Remove Crypto Lifetime in SDP: No
  - SBC Remove Unknown Crypto: No
  - Crypto Suites Group: ... (with a 'View' link)
  - Encryption on RTCP Packets: As Is
  - Remote Early Media: Supported
  - Remote Multiple 18x: Supported
  - Remote Early Media Response Type: Transparent
  - Remote Multiple Early Dialogs: According to Operation Mode
  - Remote Multiple Answers Mode: Disable
  - Remote Early Media RTP Detection Mode: By Signaling
  - Remote RFC 3960 Support: Not Supported
  - Remote Can Play Ringback: Yes
- SBC REGISTRATION:**
  - Keep Incoming Routing Headers: According to Operation Mode
  - Keep User-Agent Header: According to Operation Mode
  - Handle X-Detect: No
  - ISUP Body Handling: Transparent
  - ISUP Variant: Itu92
  - Max Call Duration [min]: 0
  - User Registration Time: 0
  - NAT UDP Registration Time: -1
  - NAT TCP Registration Time: -1
- SBC FORWARD AND TRANSFER:**
  - Remote REFER Mode: Regular

Figure 72: IP Profiles for Amazon Chime Voice Connector(SIP Trunk) Contd.,

IP Profiles [IPProf\_ACVC]

Generate RTP: None

Remote Replaces Mode: Standard

Play RBT To Transferee: No

Remote 3xx Mode: Transparent

**SBC MEDIA**

Mediation Mode: RTP Mediation

**Extension Coders Group**: #0 [AudioCodersGroups\_0]

Allowed Audio Coders: .. View

Allowed Coders Mode: Restriction

Allowed Video Coders: .. View

Allowed Media Types:

Direct Media Tag:

RFC 2833 Mode: As Is

RFC 2833 DTMF Payload Type: 0

Alternative DTMF Method: As Is

Send Multiple DTMF Methods: Disable

**SBC HOLD**

Remote Hold Format: Transparent

Reliable Held Tone Source: Yes

Play Held Tone: No

**SBC FAX**

Fax Coders Group: ..

Fax Mode: As Is

Fax Offer Mode: All coders

Fax Answer Mode: Single coder

Figure 73: IP Profiles for Amazon Chime Voice Connector(SIP Trunk) Contd.,

IP Profiles [IPProf\_ACVC]

Receive Multiple DTMF Methods: Disable

Adapt RFC2833 BW to Voice coder BW: Disabled

SDP Ptime Answer: Remote Answer

Preferred PTime: 0

Use Silence Suppression: Transparent

RTP Redundancy Mode: As Is

RTCP Mode: Transparent

Jitter Compensation: Disable

ICE Mode: Disable

SDP Handle RTCP: Don't Care

RTCP Mux: Not Supported

RTCP Feedback: Feedback Off

Re-number MID: Disable

Voice Quality Enhancement: Disable

Remote Renegotiate on Fax Detection: Transparent

Fax Rerouting Mode: Disable

**MEDIA**

Broken Connection Mode: Disconnect

Media IP Version Preference: Only IPv4

RTP Redundancy Depth: Disable

**LOCAL TONES**

Local Ringback Tone Index: -1

Local Held Tone Index: -1

Figure 74: IP Profiles for Amazon Chime Voice Connector(SIP Trunk) Contd.,

*IP Profiles [IPProf\_ACVC]*

Max Opus Bandwidth	<input type="text" value="0"/>
Generate No-Op Packets	<input type="text" value="Disable"/>
Enhanced PLC	<input type="text" value="Disable"/>
SBC Multiple Coders	<input type="text" value="Not Supported"/>
SBC Allow Only Negotiated PT	<input type="text" value="Disable"/>

**QUALITY OF SERVICE**

RTP IP DiffServ	<input type="text" value="46"/>
Signaling DiffServ	<input type="text" value="24"/>
Data DiffServ	<input type="text" value="0"/>

*Figure 75: IP Profiles for Amazon Chime Voice Connector(SIP Trunk) Contd.,*

IP Profiles [IPProf\_ACVC]

RTP IP DiffServ	<input type="text" value="46"/>
Signaling DiffServ	<input type="text" value="24"/>
Data DiffServ	<input type="text" value="0"/>

**JITTER BUFFER**

Dynamic Jitter Buffer Minimum Delay [msec]	<input type="text" value="10"/>
Dynamic Jitter Buffer Optimization Factor	<input type="text" value="10"/>
Jitter Buffer Max Delay [msec]	<input type="text" value="300"/>

**VOICE**

Echo Canceler	<input type="text" value="Line"/>
Input Gain (-32 to 31 dB)	<input type="text" value="0"/>
Voice Volume (-32 to 31 dB)	<input type="text" value="0"/>

Cancel

Figure 76: IP Profiles for Amazon Chime Voice Connector(SIP Trunk) Contd.,

### 4.3.9 IP-to-IP Routing

Navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **SBC** and select **IP-to-IP Routing** under **Routing**. Routing rules are defined for forwarding SIP messages based on IP Groups from source to destination.

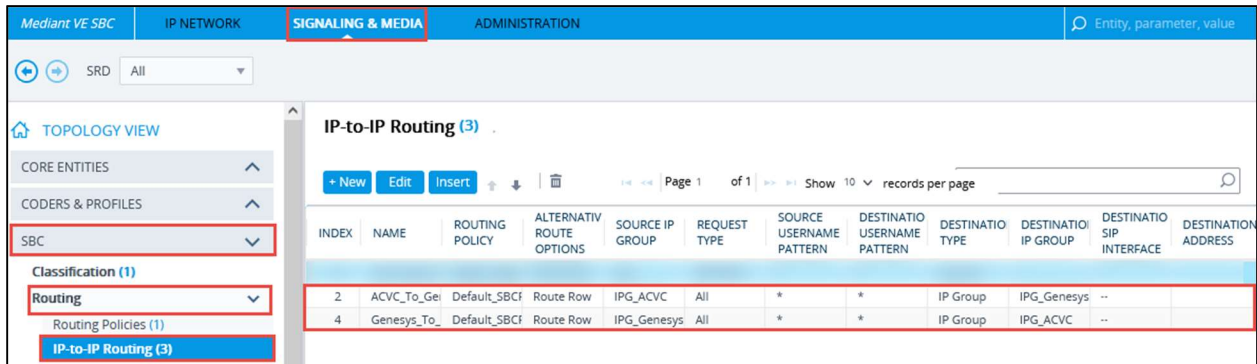


Figure 77: IP-to-IP Routing

In the IP to IP routing from Genesys Engage to Amazon Chime Voice Connector(SIP Trunk), enter the **Name**, select **Source IP Group**, **Destination Type**, **Destination IP Group** and **Source IP Group** is associated appropriately

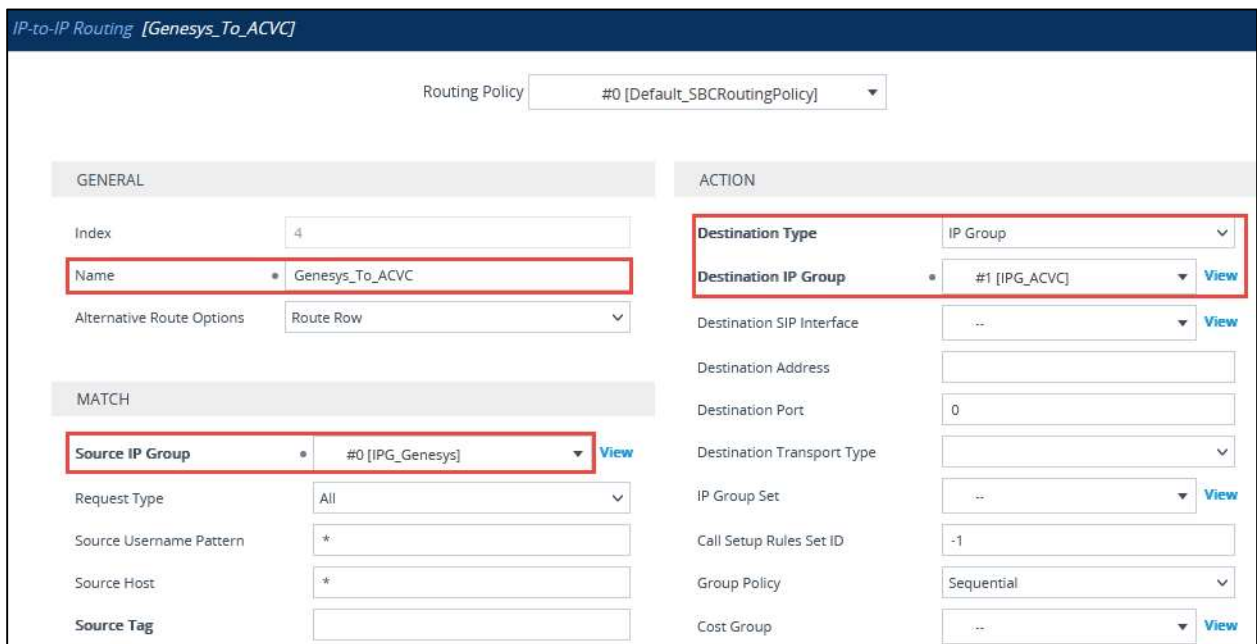


Figure 78: IP-to-IP Routing from Genesys Engage to Amazon Chime Voice Connector(SIP Trunk)

**IP-to-IP Routing [Genesys\_To\_ACVC]**

Alternative Route Options:

**MATCH**

**Source IP Group** • #0 [IPG\_Genesys] [View](#)

Request Type: All

Source Username Pattern: \*

Source Host: \*

Source Tag:

Destination Username Pattern: \*

Destination Host: \*

Destination Tag:

Message Condition: -- [View](#)

Call Trigger: Any

ReRoute IP Group: Any [View](#)

**ACTION**

Destination SIP Interface: -- [View](#)

Destination Address:

Destination Port: 0

Destination Transport Type: --

IP Group Set: -- [View](#)

Call Setup Rules Set ID: -1

Group Policy: Sequential

Cost Group: -- [View](#)

Routing Tag Name: default

Internal Action:  [Editor](#)

Modified Destination User Name:

[Cancel](#) [APPLY](#)

Figure 79: IP-to-IP Routing from Genesys Engage to Amazon Chime Voice Connector(SIP Trunk) Contd.,

In the IP to IP routing from Amazon Chime Voice Connector(SIP Trunk) to Genesys Engage, enter the **Name**, select **Source IP Group**, **Destination Type**, **Destination IP Group** and **Source IP Group** is associated appropriately

**IP-to-IP Routing [ACVC\_To\_Genesys]**

Routing Policy: #0 [Default\_SBCRoutingPolicy]

**GENERAL**

Index: 2

**Name** • ACVC\_To\_Genesys

Alternative Route Options: Route Row

**MATCH**

**Source IP Group** • #1 [IPG\_ACVC] [View](#)

Request Type: All

Source Username Pattern: \*

Source Host: \*

Source Tag:

**ACTION**

**Destination Type** IP Group

**Destination IP Group** • #0 [IPG\_Genesys] [View](#)

Destination SIP Interface: -- [View](#)

Destination Address:

Destination Port: 0

Destination Transport Type: --

IP Group Set: -- [View](#)

Call Setup Rules Set ID: -1

Group Policy: Sequential

Cost Group: -- [View](#)

[Cancel](#) [APPLY](#)

Figure 80: IP-to-IP Routing from Amazon Chime Voice Connector(SIP Trunk) to Genesys Engage

IP-to-IP Routing [ACVC\_To\_Genesys]

Alternative Route Options:  [View](#)

**MATCH**

**Source IP Group** \* #1 [IPG\_ACVC] [View](#)

Request Type: All [View](#)

Source Username Pattern: \*

Source Host: \*

Source Tag:

Destination Username Pattern: \*

Destination Host: \*

Destination Tag:

Message Condition: .. [View](#)

Call Trigger: Any [View](#)

ReRoute IP Group: Any [View](#)

Destination SIP Interface: .. [View](#)

Destination Address:

Destination Port: 0 [View](#)

Destination Transport Type:

IP Group Set: .. [View](#)

Call Setup Rules Set ID: -1 [View](#)

Group Policy: Sequential [View](#)

Cost Group: .. [View](#)

Routing Tag Name: default [View](#)

Internal Action:  [Editor](#)

Modified Destination User Name:

Cancel [APPLY](#)

Figure 81: IP-to-IP Routing from Amazon Chime Voice Connector(SIP Trunk) to Genesys Engage Contd.,

### 4.3.10 SIPREC Configuration

To configure SIP Recording, navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **SIP RECORDING** and select **SIP Recording Settings**. Enter the FQDN of Amazon Chime Voice Connector in Recording Server(SRS) Destination Username

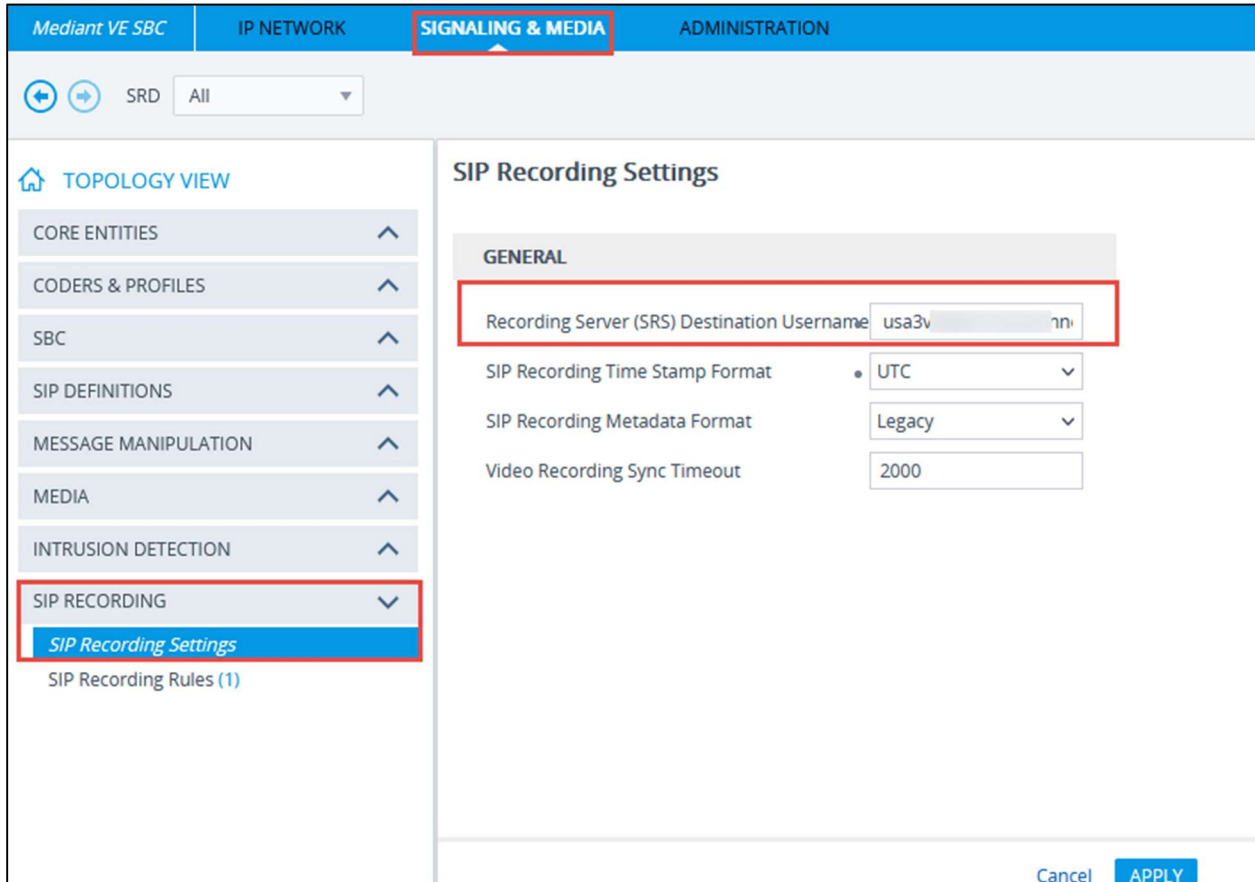


Figure 82: SIPREC Configuration

Navigate to **SIP Recording Rules** in the **SIP Recording** Section and create a new rule. Select **Recorded IP Group**- IP Group created for Genesys, **Peer IP Group**-IP Group created for Amazon Chime Voice Connector (SIP Trunk) and **Recording Server(SRS) IP Group**- IP Group created for Amazon Chime Voice Connector (SIPREC). Select **Caller** to Both and **Trigger** to Call Connect

*SIP Recording Rules*

**GENERAL**

Index:

Recorded IP Group: #0 [IPG\_Genesis] [View](#)

Recorded Source Pattern: \*

Recorded Destination Pattern: \*

Condition: .. [View](#)

Peer IP Group: #1 [IPG\_ACVC] [View](#)

Caller: Both

Trigger: Call Connect

Recording Server Role:

**RECORDING SERVER**

Recording Server (SRS) IP Group: #2 [IPG\_AWS\_SIPREC] [View](#)

Redundant Recording Server (SRS) IP Group: ... [View](#)

Cancel [APPLY](#)

Figure 83: SIPREC Configuration Contd.,

### 4.3.11 TLS Configuration

TLS(SRTP) is configured between,

- Audiocodes SBC and Amazon Chime Voice Connector(SIP Trunk)
- Audiocodes SBC and Amazon Chime Voice Connector(SIPREC)

Navigate to **SETUP** and select **IP NETWORK**. Expand **SECURITY** and click on **TLS Contexts**.

Mediant VE SBC | **IP NETWORK** | SIGNALING & MEDIA | ADMINISTRATION | Entity, parameter, value

SRD All

**NETWORK VIEW**

CORE ENTITIES

SECURITY

**TLS Contexts (2)**

SNI-to-TLS Context Mapping (0)

Firewall (2)

**TLS Contexts (2)**

+ New Edit

Page 1 of 1 Show 10 records per page

INDEX	NAME	TLS VERSION	DTLS VERSION	CIPHER SERVER
1	ACVC	TLSv1.1 and TLSv1.2	DTLSv1.0 and DTLSv1.2	DEFAULT

Figure 84: TLS Contexts

In the **TLS Context**, Enter the **Name**, select the **TLS Version** and leave the rest of the values to default

Figure 85: TLS Context for Amazon Chime Voice Connector(SIP Trunk & SIPREC)

Amazon Trust Root Certificate is to be installed in the Trusted Root Certificates list under TLS Context. Amazon Chime Voice Connector Root Certificate can be downloaded from Amazon Chime Voice Connector account. In the TLS Context page, select the **TLS Context** for Amazon Chime Voice Connector and click **Trusted Root Certificates** link located in the bottom. Click on **Import** button and select the certificate file.

INDEX	SUBJECT	ISSUER	EXPIRES
0	Go Daddy		5/03/2031
1	Go Daddy		5/30/2031
3	Amazon	Amazon	1/17/2038
4	Amazon	Amazon	5/26/2040
5	Amazon	Amazon	5/26/2040
6	Amazon	Amazon	5/26/2040
7	Cybertrust	Cybertrust	12/15/2021
8	DigiCert As	DigiCert As	11/10/2031
9	DigiCert As	DigiCert As	1/15/2038

Figure 86: Trusted Root Certificate Import option

Amazon Chime Voice Connector Root Certificate can be downloaded from Amazon Chime Voice Connector account. Generate Self-signed certificate for the created TLS context. To configure media security, navigate to **SETUP** and select **SIGNALING & MEDIA**. Expand **MEDIA** and click on **Media Security**. Under General section, set **Media Security** as Enable.

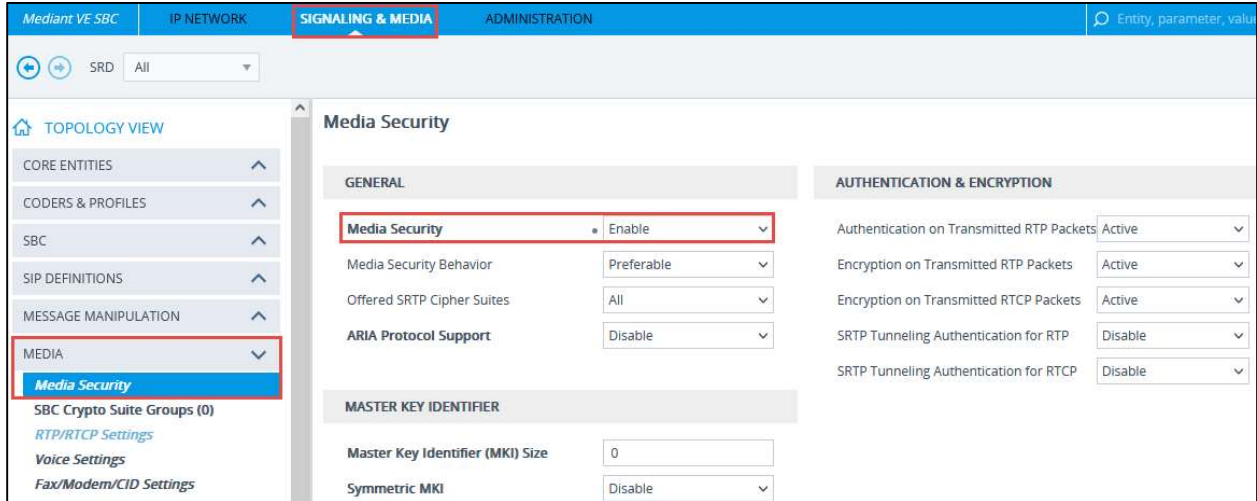


Figure 87: Media Security

In the **IP Profile** for Amazon Chime Voice Connector(SIP Trunk & SIPREC) **SBC Media Security Mode** must be set to Secured.

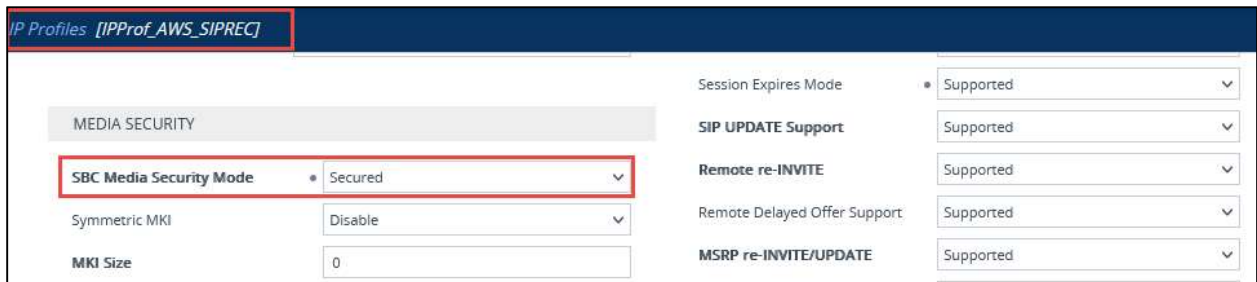


Figure 88: IP Profile- Amazon Chime Voice Connector(SIPREC)

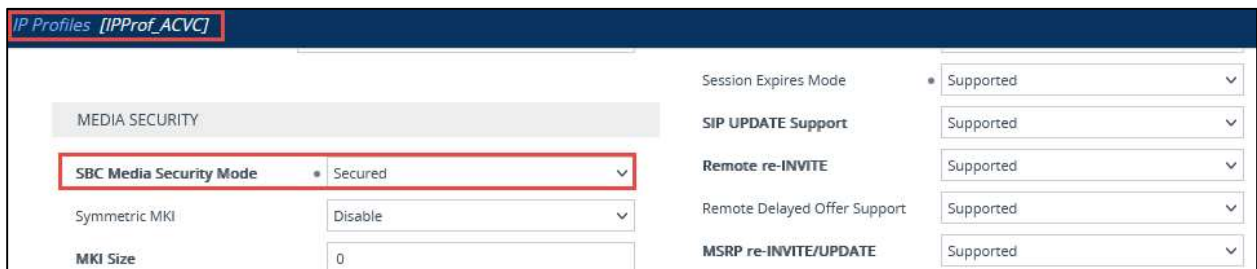


Figure 89: IP Profile- Amazon Chime Voice Connector(SIP Trunk)

In the **Proxy Sets**, **Proxy Address** for Amazon Chime Voice Connector(SIP Trunk & SIPREC) **Transport Type** must be set to TLS and **Proxy Address** with Port Number5061

The screenshot shows the configuration page for Proxy Sets. The 'Proxy Address' field is highlighted with a red box, showing the value 'xrmnj ime.aws:5061'. The 'Transport Type' dropdown is also highlighted with a red box, showing 'TLS'. Other fields include Index (0), Proxy Priority (0), and Proxy Random Weight (0).

GENERAL	
Index	0
Proxy Address	• xrmnj ime.aws:5061
Transport Type	• TLS ▼
Proxy Priority	0
Proxy Random Weight	0

Figure 90: Proxy Sets- Amazon Chime Voice Connector(SIP Trunk & SIPREC)

### 4.3.12 Message Manipulation configuration

SIP message manipulation rules are created to modify SIP headers for each IP entity based on manipulation sets enabled in IP Groups.

Following are the message manipulation created for interoperability between **Genesys Engage and Audiocodes VE**.

Note, the configurations are taken from the CLI of Audiocodes SBC.

```
message message-manipulations 3
  manipulation-name "GenesysACKHdr"
  manipulation-set-id 9
  message-type "Ack.Request"
  condition ""
  action-subject "Header.From.URL.Host"
  action-type modify
  action-value "'10.80.11.79'"
  row-role use-current-condition
  activate
exit
message message-manipulations 4
  manipulation-name "GenesysBYEFROMHdr"
  manipulation-set-id 9
  message-type "BYE.Request"
  condition ""
  action-subject "Header.From.URL.Host"
  action-type modify
  action-value "'10.80.11.79'"
  row-role use-current-condition
  activate
exit
message message-manipulations 5
  manipulation-name "GenesysUPDATEFromHdr"
  manipulation-set-id 9
  message-type "Update"
  condition ""
```

```
action-subject "Header.From.URL.Host"  
action-type modify  
action-value "'10.80.11.79'"  
row-role use-current-condition  
activate  
exit
```

```
message message-manipulations 63  
manipulation-name "GenesysFROMHdr"  
manipulation-set-id 9  
message-type "Invite.Request"  
condition ""  
action-subject "Header.From.URL.Host"  
action-type modify  
action-value "'10.80.11.79'"  
row-role use-current-condition  
activate  
exit
```

```
message message-manipulations 64  
manipulation-name "GenesysTOHdr"  
manipulation-set-id 9  
message-type "Invite.Request"  
condition ""  
action-subject "Header.To.URL.Host"  
action-type modify  
action-value "'10.64.1.155'"  
row-role use-current-condition  
activate  
exit
```

```
message message-manipulations 65  
manipulation-name "GenesysREQURI"  
manipulation-set-id 9  
message-type "Invite.Request"  
condition ""
```

```
action-subject "Header.Request-URI.URL.Host"  
action-type modify  
action-value "'10.64.1.155'"  
row-role use-current-condition  
activate  
exit
```

Following are the message manipulations created for interoperability between **Audiocodes VE** and **Amazon Chime Voice Connector (SIP Trunk)**

```
message message-manipulations 6  
manipulation-name "ACVCBYE200OKToHdr"  
manipulation-set-id 7  
message-type "Bye.Response"  
condition ""  
action-subject "Header.To.URL.Host"  
action-type modify  
action-value "'dtndxrmmXXXXX.XXXxonnecto.r.chime.aws'"  
row-role use-current-condition  
activate  
exit
```

```
message message-manipulations 46  
manipulation-name "FromHdrACVC"  
manipulation-set-id 7  
message-type "Any.Request"  
condition ""  
action-subject "Header.From.URL.Host"  
action-type modify  
action-value "'dtndxrmmXXXXX.XXXxonnecto.r.chime.aws'"  
row-role use-current-condition  
activate  
exit
```

```
message message-manipulations 47  
manipulation-name "ACVCToHdrHost"  
manipulation-set-id 7
```

```
message-type "Any.Request"
condition ""
action-subject "Header.To.URL.Host"
action-type modify
action-value "'dtndxrmmXXXXX.XXXxconnector.chime.aws'"
row-role use-current-condition
activate
exit
```

```
message message-manipulations 50
manipulation-name "REQUIACVCHost"
manipulation-set-id 7
message-type "Invite.Request"
condition ""
action-subject "Header.Request-URI.URL.Host"
action-type modify
action-value "'dtndxrmmXXXXX.XXXxconnector.chime.aws'"
row-role use-current-condition
activate
exit
```

Following are the message manipulation created for interoperability between **Audiocodes VE** and **Amazon Chime Voice Connector (SIPREC)**

```
message message-manipulations 0
manipulation-name "ACVCHdrToReINVITESIPREC"
manipulation-set-id 8
message-type "Reinvite.Request"
condition 'Body.application/rs-metadata regex (.*)(<nameID
aor="*)(.*)(@)(.*)(<nameID aor="*)(.*)(@)(.*)'
action-subject "Header.To.URL.User"
action-type modify
action-value "$7"
row-role use-current-condition
activate
exit
```

```
message message-manipulations 1
  manipulation-name "ACVCREQUIHDrINVITESIPREC"
  manipulation-set-id 8
  message-type "Invite.Request"
  condition 'Body.application/rs-metadata regex (.*)(<nameID
aor="*)(.*)(@)(.*)(<nameID aor="*)(.*)(@)(.*)'
  action-subject "Header.Request-URI.URL.User"
  action-type modify
  action-value "$7"
  row-role use-current-condition
  activate
exit
```

```
message message-manipulations 2
  manipulation-name "ACVCREQUIHDrReINVITESIPREC"
  manipulation-set-id 8
  message-type "Reinvite.Request"
  condition 'Body.application/rs-metadata regex (.*)(<nameID
aor="*)(.*)(@)(.*)(<nameID aor="*)(.*)(@)(.*)'
  action-subject "Header.Request-URI.URL.User"
  action-type modify
  action-value "$7"
  row-role use-current-condition
  activate
exit
```

```
message message-manipulations 49
  manipulation-name "ACVCHDrToINVITESIPREC"
  manipulation-set-id 8
  message-type "Invite.Request"
  condition 'Body.application/rs-metadata regex (.*)(<nameID
aor="*)(.*)(@)(.*)(<nameID aor="*)(.*)(@)(.*)'
  action-subject "Header.To.URL.User"
  action-type modify
  action-value "$7"
  row-role use-current-condition
```

activate  
exit

```
message message-manipulations 52
  manipulation-name "REQURIACVCRmvUserPhone"
  manipulation-set-id 8
  message-type "Any.Request"
  condition ""
  action-subject "Header.Request-URI.URL.UserPhone"
  action-type remove
  action-value ""
  row-role use-current-condition
  activate
exit
```

```
message message-manipulations 53
  manipulation-name "ACVCToRmvUserPhone"
  manipulation-set-id 8
  message-type "Any.Request"
  condition ""
  action-subject "Header.To.URL.UserPhone"
  action-type remove
  action-value ""
  row-role use-current-condition
  activate
exit
```

```
message message-manipulations 54
  manipulation-name "ACVCFrmRmvUserPhone"
  manipulation-set-id 8
  message-type "Any.Request"
  condition ""
  action-subject "Header.From.URL.UserPhone"
  action-type remove
```

```
    action-value ""
    row-role use-current-condition
    activate
exit
message message-manipulations 57
  manipulation-name "REQURIACVCHostSIPREC"
  manipulation-set-id 8
  message-type "Invite.Request"
  condition ""
  action-subject "Header.Request-URI.URL.Host"
  action-type modify
  action-value "'dtndxrmmXXXXX.XXXxonnecto.r.chime.aws'+':5060'"
  row-role use-current-condition
  activate
exit
```

```
message message-manipulations 59
  manipulation-name "ACVCToHdrHostSIPREC"
  manipulation-set-id 8
  message-type "Any.Request"
  condition ""
  action-subject "Header.To.URL.Host"
  action-type modify
  action-value "'dtndxrmmXXXXX.XXXxonnecto.r.chime.aws'"
  row-role use-current-condition
  activate
exit
```

```
message message-manipulations 60
  manipulation-name "ACVCFromHdrHostSIPREC"
  manipulation-set-id 8
  message-type "Any.Request"
  condition ""
  action-subject "Header.From.URL.Host"
```

```
action-type modify
action-value "'dtndxrmXXXXX.XXXconnector.chime.aws'"
row-role use-current-condition
activate
exit
```

```
message message-manipulations 61
manipulation-name "ACVCContactSIPREC"
manipulation-set-id 8
message-type "Invite.Request"
condition "Header.Contact regex (.*)(>)(.*)"
action-subject "Header.Contact"
action-type modify
action-value "$1+$2+'sip.src'"
row-role use-current-condition
activate
exit
```

```
message message-manipulations 62
manipulation-name "ACVCHdrFromSIPREC"
manipulation-set-id 8
message-type "Invite.Request"
condition 'Body.application/rs-metadata regex (.*)(<nameID
aor=")(.*)((@)(.*)((<nameID aor=")(.*)"
action-subject "Header.From.URL.User"
action-type modify
action-value "$3"
row-role use-current-condition
activate
exit
```

```
message message-manipulations 69
manipulation-name "ACVCHdrFromReINVITESIPREC"
manipulation-set-id 8
message-type "Reinvite.Request"
```

```
condition 'Body.application/rs-metadata regex (.*)(<nameID
aor="*)(.*)(@)(.*)(<nameID aor="*)(.*)'
action-subject "Header.From.URL.User"
action-type modify
action-value "$3"
row-role use-current-condition
activate
exit
```