



# **Amazon Chime SDK Voice Connector**

## **Fax Configuration Guide:**

### **OpenText RightFax and Cisco Unified Border Element (CUBE)**

**December 2022**

## Document History

<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>
1.0	Oct-14-2020	Initial Draft Fax Configuration Guide
1.1	Nov-19-2020	Updated the document based on feedback
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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 Fax (G711 Passthrough & T.38) using **OpenText RightFax (RightFax)** and **Cisco Unified Border Element (CUBE)** to connect to **Amazon Chime SDK Voice Connector** for inbound and/or outbound fax capabilities.

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## 1.1 Amazon Chime SDK Voice Connector

Amazon Chime SDK 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 SDK Voice Connector uses the industry-standard Session Initiation Protocol (SIP). Amazon Chime SDK 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 SDK Voice Connector offers cost-effective rates for inbound and outbound calls. Calls into Amazon Chime meetings, as well as calls to other Amazon Chime SDK Voice Connector customers are at no additional cost. With Amazon Chime SDK 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 Fax configuration is illustrated below and is representative of RightFax with CUBE configuration.

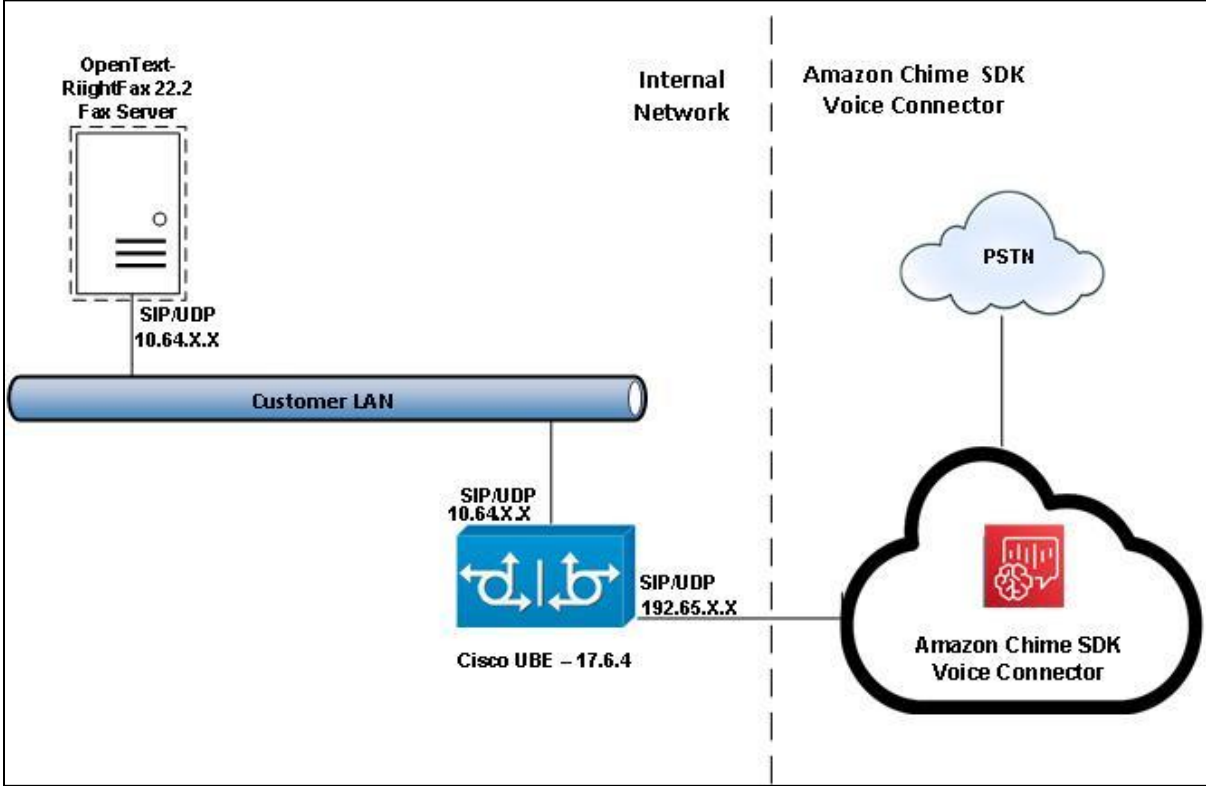


Figure 1 Network Topology

## 2.1 Hardware Components

- UCS-C240 VMWare server running ESXi 5.5 or later used for the following virtual machines
  - OpenText RightFax Server
- Cisco UBE (CUBE) on Cisco ISR 4331 router

## 2.2 Software Requirements

- OpenText RightFax – 22.2
- Cisco UBE: 17.6.4 running on IOS-XE 16.12.2r(isr4300-universalk9.17.06.04.SPA.bin)

## 3 Features

### 3.1 Features Supported

- T.38 Fax – Inbound and Outbound
- G711 Passthrough - Inbound and Outbound

### 3.2 Features Not Supported

- None

### 3.3 Features Not Tested

- None

### 3.4 Caveats and Limitations

- In T.38 fax call with SG3 speeds, T.38 version was changed from 3 to 0 when 200 OK response was received from Amazon Chime SDK Voice Connector so the fax transmission was on G3 Speeds.

## 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

In this section we present an overview of the steps that are required to configure **RightFax** and **CUBE** for sending Fax using **Amazon Chime SDK Voice Connector**.

*Table 1 – PBX Configuration Steps*

Steps	Description	Reference
Step 1	RightFax Configuration	<a href="#">Section 4.3</a>
Step 2	CUBE Configuration	<a href="#">Section 4.4</a>

## 4.2 RightFax Server Configuration

This section with screen shots taken from RightFax Server used for the interoperability testing gives a general overview of the RightFax Server configuration.

### 4.2.1 RightFax Login and Version

1. Open the application RightFax, browse to **File > Open Server >** Choose the **Server Name**, set the **Protocol** to **Automatic selection** and click on **OK**

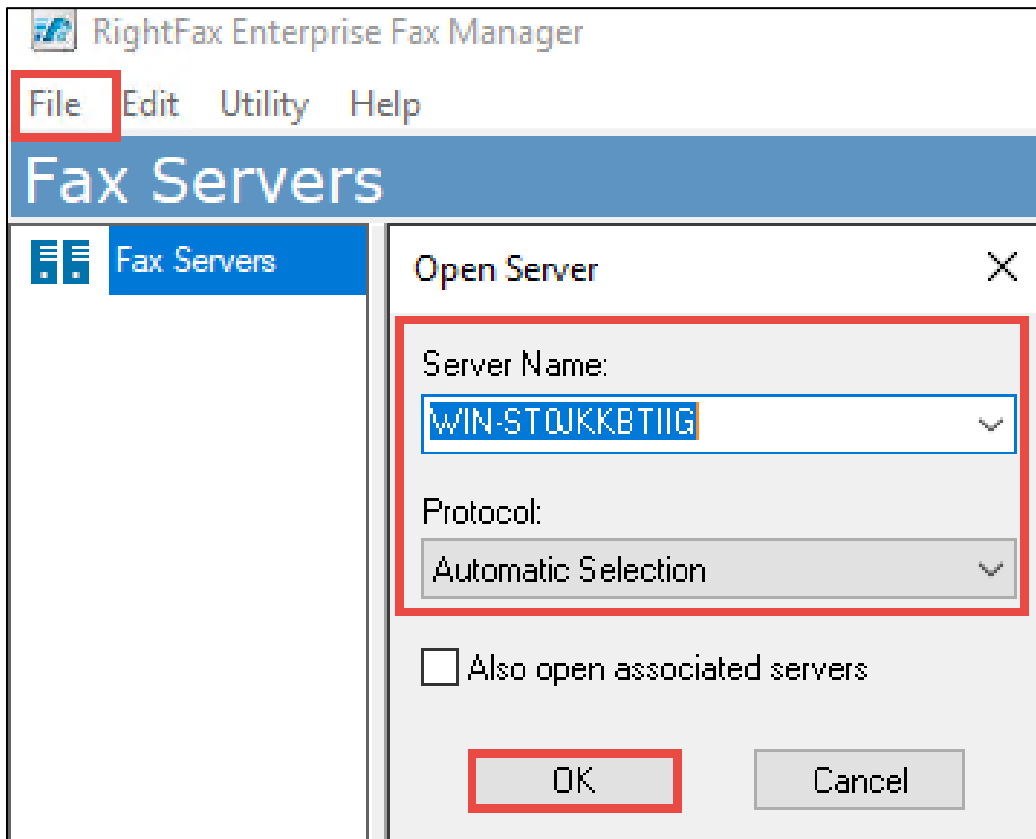


Figure 2: RightFax Login

2. To verify the system version being tested, browse to **Help** and select **About Enterprise Fax Manager** to find the version of **Right Fax**

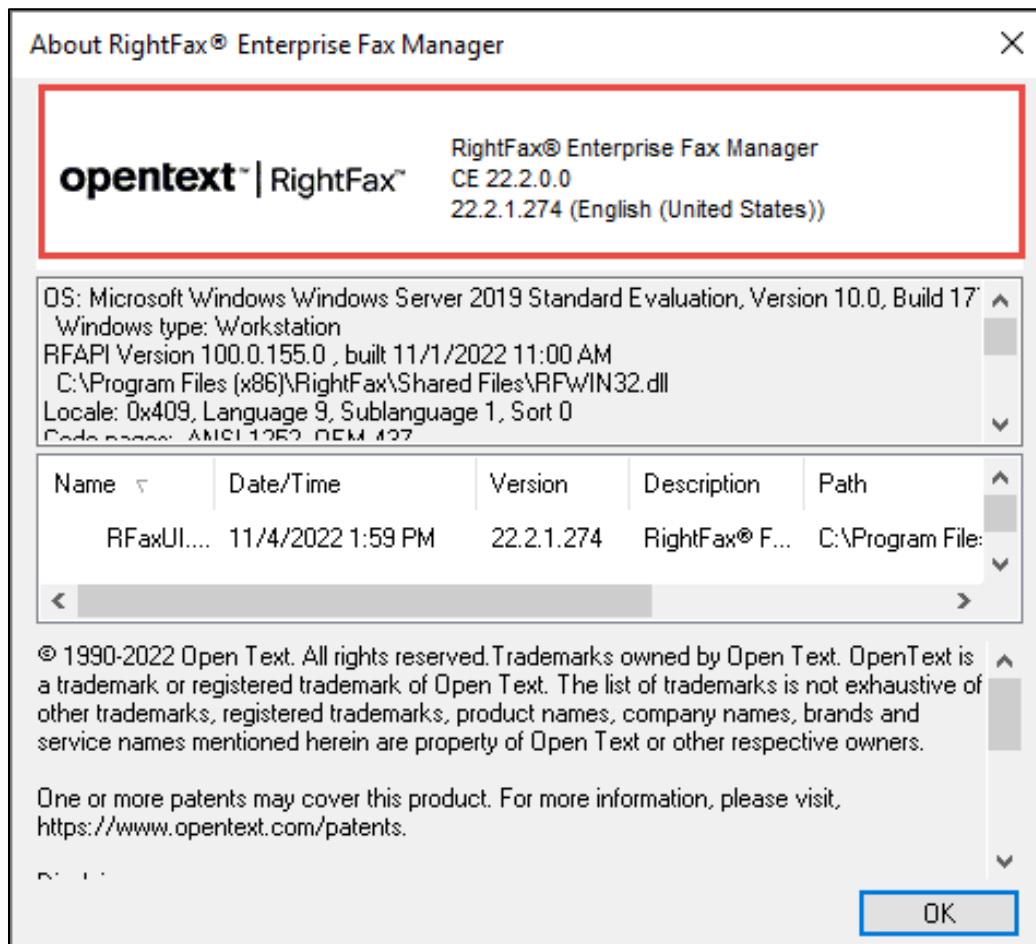
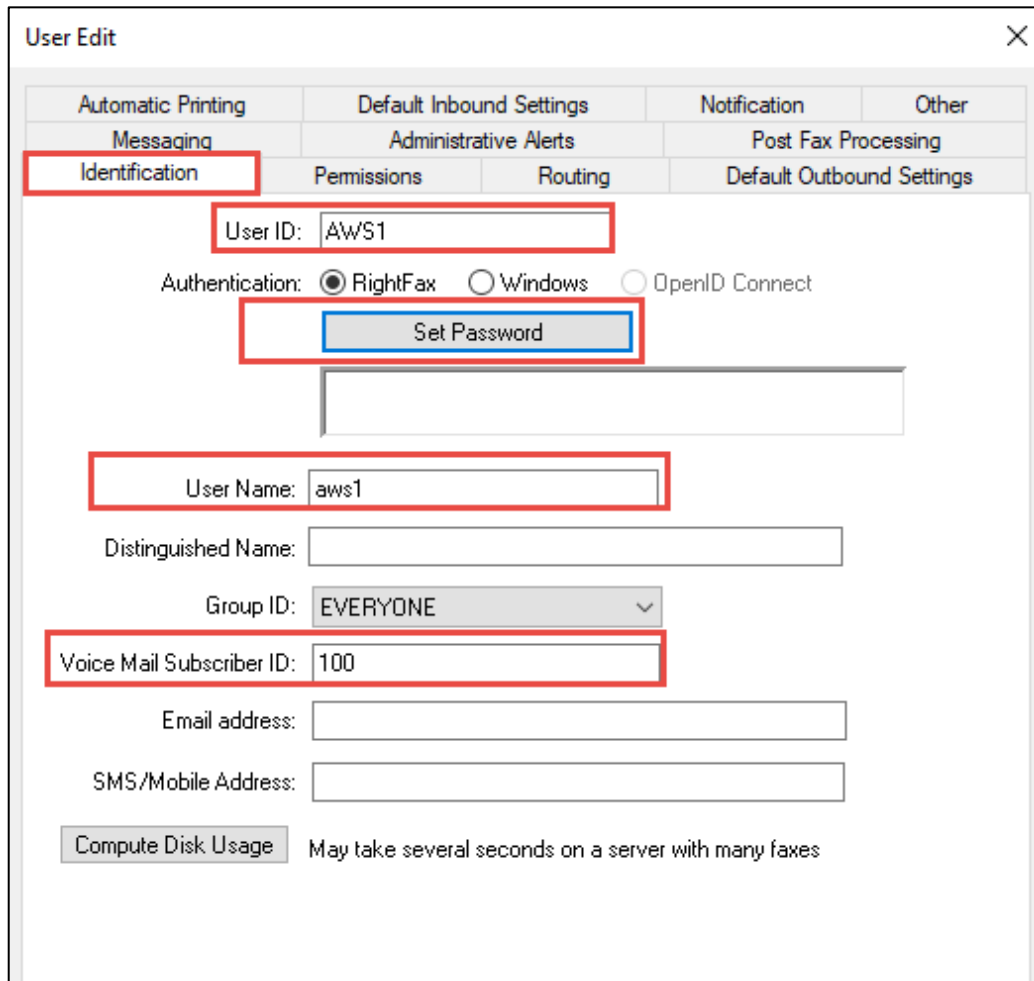


Figure 3: Right Fax Version

## 4.2.2 User Configuration

1. Choose the **Server Name > Users**
2. Right Click on **Users** and Click on **New**
3. The following are the values that are configured in the **User** in **Identification** Tab, Enter the **User ID**, **User Name**, and **Subscriber ID** will be auto populated.



The screenshot shows a 'User Edit' dialog box with a close button (X) in the top right corner. The dialog is divided into several tabs: Automatic Printing, Default Inbound Settings, Notification, Other, Messaging, Administrative Alerts, Post Fax Processing, Identification (highlighted with a red box), Permissions, Routing, and Default Outbound Settings. The 'Identification' tab contains the following fields and controls:

- User ID:** A text field containing 'AWS1' (highlighted with a red box).
- Authentication:** Radio buttons for 'RightFax' (selected), 'Windows', and 'OpenID Connect'.
- Set Password:** A button (highlighted with a blue box) that triggers a password input field.
- User Name:** A text field containing 'aws1' (highlighted with a red box).
- Distinguished Name:** An empty text field.
- Group ID:** A dropdown menu showing 'EVERYONE'.
- Voice Mail Subscriber ID:** A text field containing '100' (highlighted with a red box).
- Email address:** An empty text field.
- SMS/Mobile Address:** An empty text field.
- Compute Disk Usage:** A button with a tooltip that reads 'May take several seconds on a server with many faxes'.

Figure 4: User Configuration

4. The following are the values that are configured in the **User** in **Routing** Tab, Enter the **Extension in Fax Number / Routing Code** to route the inbound fax to the user.

The screenshot shows the 'User Edit' dialog box with the 'Routing' tab selected. The 'Fax Number/Routing Code' field is highlighted with a red box and contains the value '111'. Below this field, the 'Routing Type' is set to 'Fax Mailbox', and the 'File Format' is set to 'TIFF(G3-1D)'. The 'Routing Info' field is empty, and a scrollable text area below it contains the instruction: 'When routing to a Fax Mailbox, no additional information is necessary. If notifications occur through email, the email address should be specified in the Routing Info field.' The 'Routing Filename Format' field is empty. The 'Received Fax Routing Form' is set to 'Advanced Outlook Form'. There are two unchecked checkboxes: 'Include Web Delivery URL' and 'Delete after routing'.

Figure 5: User Contd.

### 4.2.3 RightFax OEM Configuration

1. Navigate to **Services** > Choose the Service **“RightFax Doc Transport Module”** > Right Click and Choose **Configure Service**
2. Expand **Brooktrout** > choose **RightFax OEM** > Click on **Configure Brooktrout**.

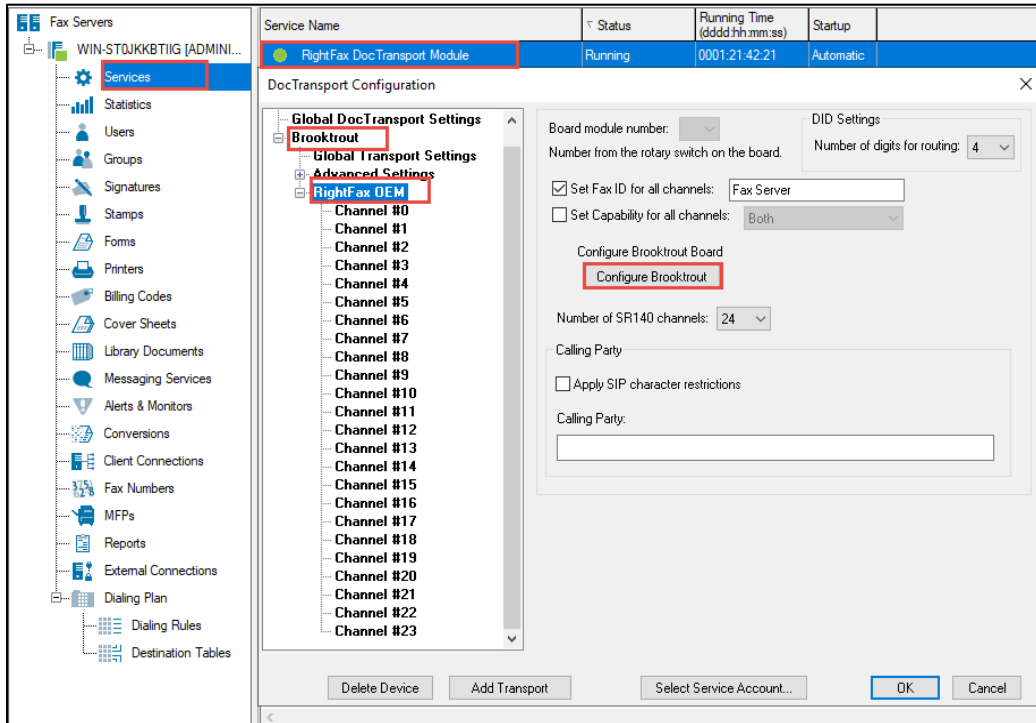


Figure 6: SIP Configuration

3. Enter the **Credentials** and **Login**
4. Click on **Advanced Mode**.



Figure 7:SIP Configuration-Contd.

5. Expand **IP Call Control Modules** and Choose **SIP**
6. **General** tab contains the following information

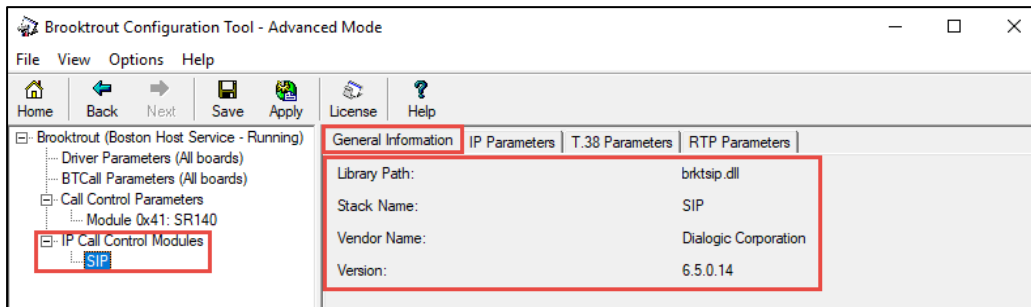


Figure 8 : SIP Configuration-General Information

7. In the **IP Parameters** tab **Enter the Primary Gateway** - CUBE LAN IP address and the Port number, **From Value** – DID@RightFax IP address, **Contact IPv4 Address** – RightFax IP Address, **Session Name** – RightFax Server and the leave the rest of the fields to default values.

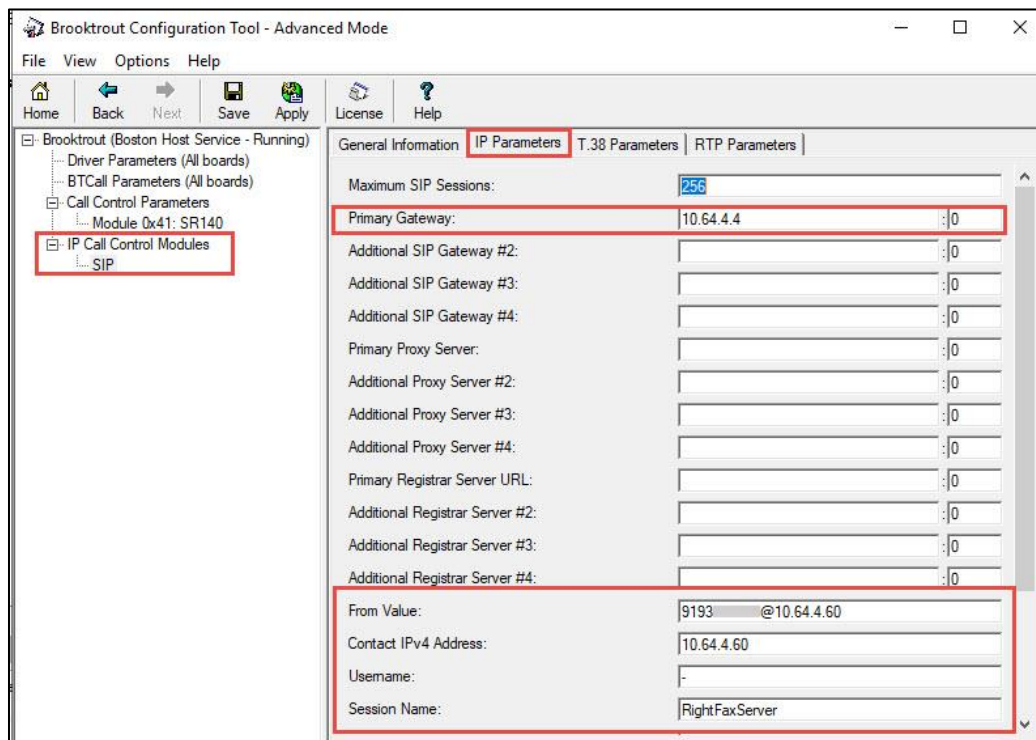


Figure 9: SIP Configuration-IP Parameters

8. In the **T.38 Parameters** tab, choose the **Fax Transporting Protocol** based on the requirement – **T.38 only** or **G711 Pass-through only**. Set the **Media Renegotiate Delay Inbound msec** to **1000** and Set the **Media Renegotiate Delay Outbound msec** to **4000** to trigger the Fax Re-Invite from RightFax.

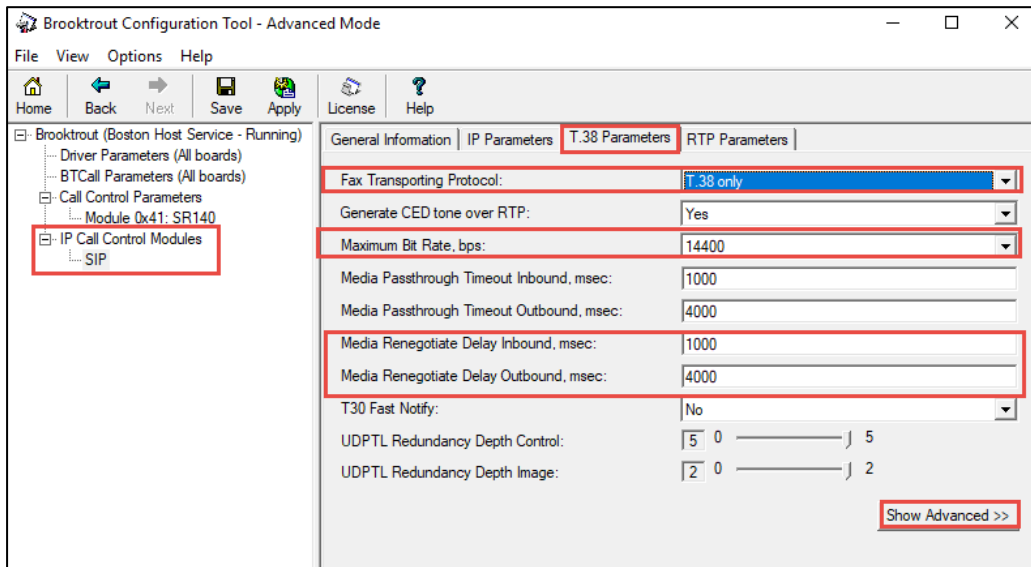


Figure 10: SIP Configuration-T.38 Parameters

9. To Transmit Fax with **G3 & Super G3 Speeds** using **T.38** set the following values in the **Advanced** section of the **T.38 Parameters** tab
  - a. G3 Speed – **Maximum T.38 Version: 0** & **Maximum Bit Rate bps: 14400**
  - b. Super G3 Speed – **Maximum T.38 Version: 3** & **Maximum Bit Rate bps: 33600**

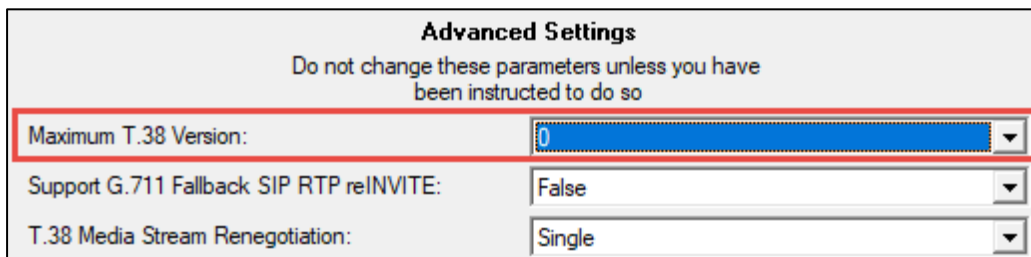


Figure 11: SIP Configuration-T.38 Parameters-G3 & Super G3 Speeds

- c. Navigate to **BTCall Parameters** and the **enable** the following **V.34** parameters as shown below to send fax using **Super G3 speeds**. Choose **disable** to send fax using **G3 speeds**.

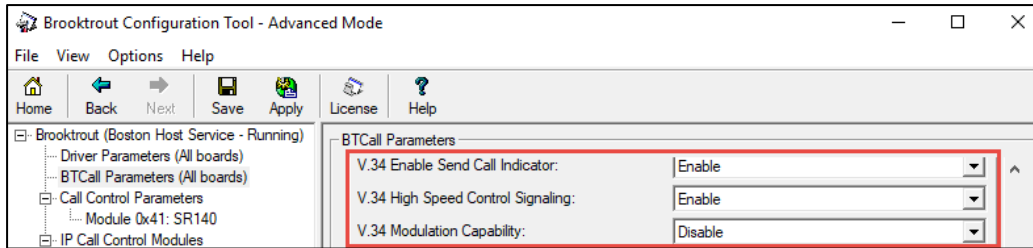


Figure 12: BTCall Parameters-T.38 -G3 & Super G3 Speeds

10. To Transmit Fax with **G3 & Super G3 Speeds** using **G711 Pass-Through only** set the following values in **T.38 Parameters** tab
  - a. G3 Speed –**Maximum Bit Rate bps: 14400**
  - b. Super G3 Speed –**Maximum Bit Rate bps: 33600**.

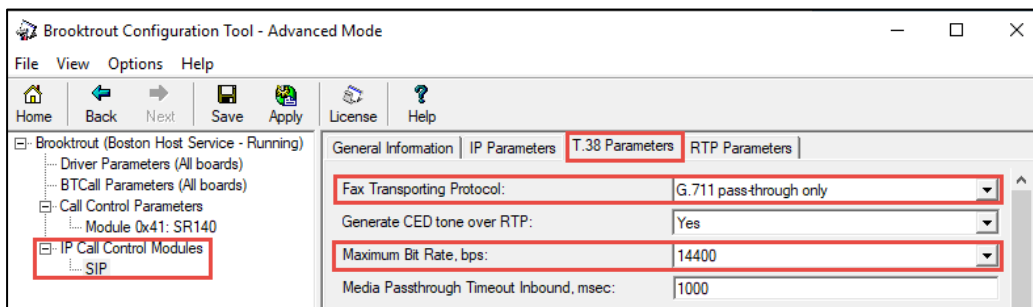


Figure 13 : SIP Configuration- G.711 Pass-Through -G3 & Super G3 Speeds

- c. Navigate to **BTCall Parameters** and the **enable** the following **V.34** parameters as shown below to send fax using **Super G3 speeds**.  
Chosed**disable** to send fax using **G3 speeds**.

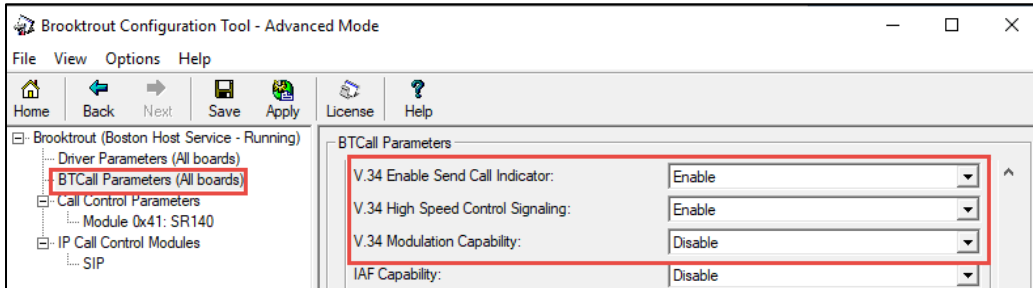


Figure 14: BTCall Parameters-G.711 Pass-Through-G3 & Super G3 speed

11. In the **RTP Parameters** tab set the **RTP codec list** to **pcmu**. Once all the required parameters are set, click on **Save** and **Apply**.

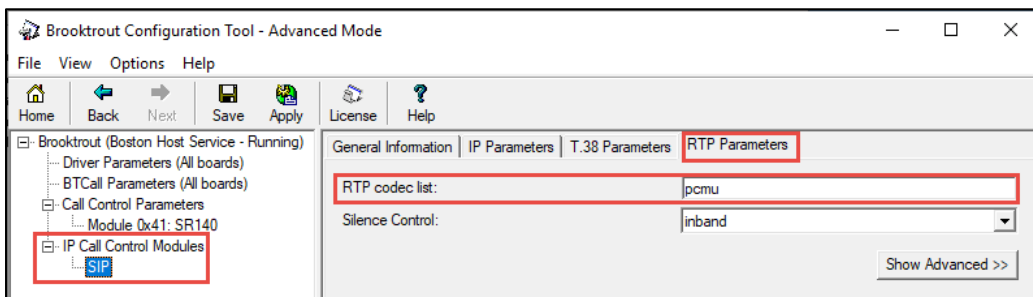


Figure 15: RTP Parameters-Codec List

## 4.3 Cisco UBE Configuration

### 4.3.1 Global Cisco UBE settings

```
voice service voip
  ip address trusted list
    ipv4 3.80.xx.xx 255.255.255.0
    ipv4 10.64.4.60 255.255.255.255
  address-hiding
  mode border-element
  allow-connections sip to sip
  no supplementary-service sip refer
  supplementary-service media-renegotiate
  fax protocol pass-through g711ulaw
  sip
    session refresh
    asserted-id pai
    early-offer forced
    midcall-signaling passthru
    privacy-policy passthru
    pass-thru headers un supp
```

**Note:**

**Specification for G711 Pass-through Fax:**

Use the below command in **voice service voip**  
**fax protocol pass-through g711ulaw**

**Specification for T.38 Fax:**

Use the below command in **voice service voip**

**fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none**

T.38 Fax with G3 Speed- Set the t38 version to 0

T.38 Fax with SG3 Speed- Set the t38 version to 3

#### 4.3.2 Codecs

```
voice class codec 1  
  codec preference 1 g711ulaw
```

#### 4.3.3 Dial Peer

**Inbound Dial Peer for Right Fax**

```
dial-peer voice 600 voip  
description *** Inbound Dial-Peer-from Rightfax to CUBE LAN  
session protocol sipv2  
session transport udp  
incoming uri via RightFax  
voice-class codec 1  
voice-class sip bind control source-interface GigabitEthernet0/0/1  
voice-class sip bind media source-interface GigabitEthernet0/0/1  
dtmf-relay rtp-nte  
no vad
```

### **Inbound Dial Peer for Amazon Chime SDK VC**

```
dial-peer voice 500 voip
description *** Inbound Dial-Peer-from Amazon to CUBE WAN
translation-profile incoming Amazon-In
session protocol sipv2
session transport udp
incoming called e164-pattern-map 890
voice-class codec 1
voice-class sip bind control source-interface GigabitEthernet0/0/2
voice-class sip bind media source-interface GigabitEthernet0/0/2
dtmf-relay rtp-nte
no va
```

### **Outbound Dial Peer to RightFax**

```
dial-peer voice 601 voip
description Outbound Dial-Peer from CUBE-LAN to Rightfax****
destination-pattern 919.....
session protocol sipv2
session target ipv4:10.64.4.60:5060
session transport udp
voice-class codec 1
voice-class sip asserted-id pai
voice-class sip options-keepalive
voice-class sip bind control source-interface GigabitEthernet0/0/1
voice-class sip bind media source-interface GigabitEthernet0/0/1
dtmf-relay rtp-nte
no vad
```

## Outbound Dial Peer to Amazon SDK Chime VC

```
dial-peer voice 501 voip
description *** Outbound Dial-Peer to Amazon***
translation-profile outgoing Amazon-Out
destination-pattern [0-9]T
session protocol sipv2
session target sip-server session transport udp
voice-class codec 1
voice-class sip localhost dns:dtndxxxxxxxxx.voiceconnector.chime.aws
voice-class sip options-keepalive
voice-class sip bind control source-interface GigabitEthernet0/0/02
voice-class sip bind media source-interface GigabitEthernet0/0/2
dtmf-relay rtp-nte
no vad
```

#### 4.3.4 Cisco UBE Running Configuration

Building configuration...

```
Current configuration : 13281 bytes
!
! Last configuration change at 12:23:10 UTC Mon Dec 5 2022
! NVRAM config last updated at 11:53:03 UTC Mon Dec 5 2022
!
version 17.6
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
service call-home
platform qfp utilization monitor load 80
platform punt-keepalive disable-kernel-core
!
hostname AWS
!
boot-start-marker
boot system flash:isr4300-universalk9.17.06.04.SPA.bin
boot-end-marker
!
!
vrf definition Mgmt-intf
!
address-family ipv4
exit-address-family
!
address-family ipv6
exit-address-family
!
```



```
!  
!  
multilink bundle-name authenticated  
!  
!  
!  
!  
!  
!  
!  
!  
isdn switch-type primary-ni  
isdn logging  
!  
!  
trunk group Lumen1  
  hunt-scheme round-robin both up  
!  
!  
crypto pki trustpoint TP-self-signed-2930804041  
  enrollment selfsigned  
  subject-name cn=IOS-Self-Signed-Certificate-2930804041  
  revocation-check none  
  rsakeypair TP-self-signed-2930804041  
!  
crypto pki trustpoint SLA-TrustPoint  
  enrollment pkcs12  
  revocation-check crl  
!  
!  
crypto pki certificate chain TP-self-signed-2930804041  
  certificate self-signed 01  
    30820330 30820218 A0030201 02020101 300D0609 2A864886 F70D0101  
    05050030
```

31312F30 2D060355 04031326 494F532D 53656C66 2D536967 6E65642D  
43657274

69666963 6174652D 32393330 38303430 3431301E 170D3231 30383235  
31373434

32335A17 0D333130 38323531 37343432 335A3031 312F302D 06035504  
03132649

4F532D53 656C662D 5369676E 65642D43 65727469 66696361 74652D32  
39333038

30343034 31308201 22300D06 092A8648 86F70D01 01010500 0382010F  
00308201

0A028201 0100B05D 6404776B 743D882D FA0514D1 B28392BC 5279F3A7  
EE856A86

A16EA023 E8519284 84BE4C53 20D12592 CD6CD6A4 2418E7D4 3E7945EA  
35331308

3A291C93 03A1B3BD 815B4881 CE12DF15 5B492BFC AEE637A5 C8718365  
A723E3E5

6814D270 E99D05E9 EF0A01AC 87543061 D7B1B45B B85CB576 312526A9  
9B3FD2F0

E869CC4B 31AC96CA DA6418E2 E23CE22A B34E98CE 0E32AD07 D9545EF7  
3C76A7BA

097D499A 2D685370 87AEA804 757E9EEC F11E93D9 69317B04 09FB7681  
92903E6D

2446F174 A8B50A8F 3DA47D2B 7BE0223D 43949C5E 1367C6EC AB0782A5  
0C53F3AA

E8948819 6032AC4A E7EDB9EE 5918760D 2F77E05A 3B731C75 90ABE1E8  
E70CF701

0453E70A 9BD70203 010001A3 53305130 0F060355 1D130101 FF040530  
030101FF

301F0603 551D2304 18301680 146A2B1A 396299A5 D5C48E66 C168A8EB  
1C918AAD

1F301D06 03551D0E 04160414 6A2B1A39 6299A5D5 C48E66C1 68A8EB1C  
918AAD1F

300D0609 2A864886 F70D0101 05050003 82010100 50CE007B ED2C971F  
11BFD5AD

C8209572 71329248 39228164 7671DB39 8B0CA99C 4494A052 6BA9D111  
6557AE9E

D5A1B08D EDD2A603 6062E13D E957E3C0 932E13D4 8AF6B1E7 B8ED3F12  
276A068D

A57A1D90 4C268FD0 395BA4ED 8795AB00 184D9C45 81FB0490 EF0DDF37  
67361050

AD1A1019 3910AAD4 7F308B5F 572E70D8 13B8F3A2 547FA4DD 64049940  
5E62AED2

B1D2CAD3 110202BD DC29AD8F 8DBF6C63 24C94B38 3F2B7FBB 7940F46D  
1AB1C6F1

DE2B5808 76839852 C65AA788 F935764E 6F23855A 2BC3D3F7 4AAD12F3  
48C6D653

08BC6A87 F855D660 DCCA1558 24210AEF 35019381 F14C42EE DE9EE209  
843DF419

8BB84432 66CB0D65 0E3C9695 4BE0A520 30C4E762

quit

crypto pki certificate chain SLA-TrustPoint

certificate ca 01

30820321 30820209 A0030201 02020101 300D0609 2A864886 F70D0101  
0B050030

32310E30 0C060355 040A1305 43697363 6F312030 1E060355 04031317  
43697363

6F204C69 63656E73 696E6720 526F6F74 20434130 1E170D31 33303533  
30313934

3834375A 170D3338 30353330 31393438 34375A30 32310E30 0C060355  
040A1305

43697363 6F312030 1E060355 04031317 43697363 6F204C69 63656E73  
696E6720

526F6F74 20434130 82012230 0D06092A 864886F7 0D010101 05000382  
010F0030

82010A02 82010100 A6BCBD96 131E05F7 145EA72C 2CD686E6 17222EA1  
F1EFF64D

CBB4C798 212AA147 C655D8D7 9471380D 8711441E 1AAF071A 9CAE6388  
8A38E520

1C394D78 462EF239 C659F715 B98C0A59 5BBB5CBD 0CFEBEA3 700A8BF7  
D8F256EE

4AA4E80D DB6FD1C9 60B1FD18 FFC69C96 6FA68957 A2617DE7 104FDC5F  
EA2956AC

7390A3EB 2B5436AD C847A2C5 DAB553EB 69A9A535 58E9F3E3 C0BD23CF  
58BD7188

68E69491 20F320E7 948E71D7 AE3BCC84 F10684C7 4BC8E00F 539BA42B  
42C68BB7

C7479096 B4CB2D62 EA2F505D C7B062A4 6811D95B E8250FC4 5D5D5FB8  
8F27D191

C55F0D76 61F9A4CD 3D992327 A8BB03BD 4E6D7069 7CBADF8B DF5F4368  
95135E44

DFC7C6CF 04DD7FD1 02030100 01A34230 40300E06 03551D0F 0101FF04  
04030201

06300F06 03551D13 0101FF04 05300301 01FF301D 0603551D 0E041604  
1449DC85

4B3D31E5 1B3E6A17 606AF333 3D3B4C73 E8300D06 092A8648 86F70D01  
010B0500

03820101 00507F24 D3932A66 86025D9F E838AE5C 6D4DF6B0 49631C78  
240DA905

604EDCDE FF4FED2B 77FC460E CD636FDB DD44681E 3A5673AB 9093D3B1  
6C9E3D8B

D98987BF E40CBD9E 1AECA0C2 2189BB5C 8FA85686 CD98B646 5575B146  
8DFC66A8

467A3DF4 4D565700 6ADF0F0D CF835015 3C04FF7C 21E878AC 11BA9CD2  
55A9232C

7CA7B7E6 C1AF74F6 152E99B7 B1FCF9BB E973DE7F 5BDDEB86 C71E3B49  
1765308B

5FB0DA06 B92AFE7F 494E8A9E 07B85737 F3A58BE1 1A48A229 C37C1E69  
39F08678

80DDCD16 D6BACECA EEBC7CF9 8428787B 35202CDC 60E4616A B623CDBD  
230E3AFB

418616A9 4093E049 4D10AB75 27E86F73 932E35B5 8862FDAE 0275156F  
719BB2F0

D697DF7F 28

quit

!

crypto pki certificate pool

! ('certificate ca' cmd has been deprecated. Downloaded

! Trustpool certificates should be re-downloaded

! using 'crypto pki trustpool import url <url>')

!

!

!

voice call send-alert

voice rtp send-recv

!

voice service voip

ip address trusted list

```
    ipv4 3.80.xx.xx 255.255.xx.xx
    ipv4 10.64.4.60 255.255.255.255
address-hiding
mode border-element
allow-connections sip to sip
no supplementary-service sip refer
supplementary-service media-renegotiate
fax protocol t38 version 0 ls-redundancy 2 hs-redundancy 0 fallback
none
trace
sip
    session refresh
    header-passing
    asserted-id pai
    conn-reuse
    midcall-signaling passthru
    privacy-policy passthru
    g729 annexb-all
!

!
voice class uri Rightfax sip
    host 10.64.4.60
voice class codec 1
    codec preference 1 g711u1aw
!
!
!
!
voice class e164-pattern-map 890
    e164 +191.....$
!
!
```

```
!  
!  
!  
!  
voice translation-rule 10  
  rule 1 /\(^.....$\)/ /+1\1/  
!  
voice translation-rule 11  
  rule 1 /\(^.....$\)/ /+1\1/  
!  
voice translation-rule 20  
  rule 1 /\^+1\(.*\)/ /\1/  
  rule 2 /91935xxxxx/ /1111/  
!  
!  
voice translation-profile Amazon-In  
  translate called 20  
!  
voice translation-profile Amazon-Out  
  translate calling 11  
  translate called 10  
!  
!  
!  
!  
!  
!  
voice-card 0/1  
  dsp services dspfarm  
  no watchdog  
!  
voice-card 0/2  
  no watchdog
```

```
!  
voice-card 0/4  
  no watchdog  
!  
no license feature hseck9  
license udi pid ISR4331/K9 sn FD021381F17  
license accept end user agreement  
license boot level appxk9  
license boot level uck9  
license boot level securityk9  
memory free low-watermark processor 69085  
!  
diagnostic bootup level minimal  
!  
spanning-tree extend system-id  
!  
!  
redundancy  
  mode none  
!  
!  
!  
!  
!  
controller T1 0/1/0  
  framing esf  
  clock source network  
  linecode b8zs  
  cablelength long 0db  
  pri-group timeslots 1-4,24 voice-dsp  
  description T1 CAS 1 to Customer PBX  
!  
controller T1 0/2/0
```

```
framing esf
clock source line primary
linecode b8zs
cablelength long 0db
ds0-group 1 timeslots 1-24 type e&m-wink-start
cas-custom 1
  trunk-group Lumen1
description T1 CAS 2 to Customer PBX
!
!
!
interface GigabitEthernet0/0/1
  description Access 01 G4/0/13
  ip address 10.64.4.4 255.255.0.0
  media-type rj45
  negotiation auto
!
interface GigabitEthernet0/0/2
  description Access01 G4/0/7
  ip address 192.65.XX.XX 255.255.XX.XX
  media-type sfp
  negotiation auto
!
interface Service-Engine0/1/0
!
interface Serial0/1/0:23
  no ip address
  encapsulation hdlc
  no cdp enable
  isdn switch-type primary-ni
  isdn incoming-voice voice
!
interface Service-Engine0/2/0
```

```
!  
interface Service-Engine0/4/0  
!  
interface GigabitEthernet0  
  vrf forwarding Mgmt-intf  
  no ip address  
  negotiation auto  
!  
ip http server  
ip http authentication local  
ip http secure-server  
ip http client source-interface GigabitEthernet0/0/2  
ip forward-protocol nd  
ip ftp username admin  
ip ftp password 7 011202095205  
ip route 0.0.0.0 0.0.0.0 192.65.XX.XX  
ip route 10.64.0.0 255.255.0.0 10.64.1.1  
ip route 10.80.0.0 255.255.0.0 10.64.1.1  
ip route 172.0.0.0 255.0.0.0 10.64.1.1  
!  
!  
!  
!  
!  
!  
!  
!  
control-plane  
!  
!  
voice-port 0/2/0:1  
!  
voice-port 0/1/0:23  
  bearer-cap Speech
```

```
!  
mgcp behavior rsip-range tgcp-only  
mgcp behavior comedia-role none  
mgcp behavior comedia-check-media-src disable  
mgcp behavior comedia-sdp-force disable  
!  
mgcp profile default  
!  
!  
!  
!  
  
!  
dial-peer voice 600 voip  
  description Shabab *** Inbound Dial-Peer- from Rightfax to CUBE LAN  
  ***  
  session protocol sipv2  
  session transport udp  
  incoming uri via Rightfax  
  voice-class codec 1  
  voice-class sip bind control source-interface GigabitEthernet0/0/1  
  voice-class sip bind media source-interface GigabitEthernet0/0/1  
  dtmf-relay rtp-nte  
  no vad  
!  
dial-peer voice 601 voip  
  description Shabab*** Outbound Dial-Peer from CUBE-LAN to  
  Rightfax****  
  destination-pattern 919.....  
  session protocol sipv2  
  session target ipv4:10.64.4.60:5060  
  session transport udp  
  voice-class codec 1
```

```
voice-class sip asserted-id pai
voice-class sip options-keepalive
voice-class sip bind control source-interface GigabitEthernet0/0/1
voice-class sip bind media source-interface GigabitEthernet0/0/1
dtmf-relay rtp-nte
no vad
!
dial-peer voice 500 voip
description shabab *** Inbound Dial-Peer- from Amazon to CUBE WAN ***
translation-profile incoming Amazon-In
session protocol sipv2
session transport udp
incoming called e164-pattern-map 890
voice-class codec 1
voice-class sip bind control source-interface GigabitEthernet0/0/2
voice-class sip bind media source-interface GigabitEthernet0/0/2
dtmf-relay rtp-nte
no vad
!
dial-peer voice 501 voip
description *** Outbound Dial-Peer to Amazon****
translation-profile outgoing Amazon-Out
destination-pattern [0-9]T
session protocol sipv2
session target sip-server
session transport udp
voice-class codec 1
voice-class sip localhost dns:dtndxxxxxx.voiceconnector.chime.aws
voice-class sip options-keepalive
voice-class sip bind control source-interface GigabitEthernet0/0/2
voice-class sip bind media source-interface GigabitEthernet0/0/2
dtmf-relay rtp-nte
no vad
```

```
!  
!  
gateway  
  timer receive-rtp 1200  
!  
sip-ua  
  no remote-party-id  
  sip-server dns:dtndxxxxxx.voiceconnector.chime.aws:5060  
!  
!  
line con 0  
  exec-timeout 5 0  
  password 7 0822455D0A16  
  logging synchronous  
  login  
  stopbits 1  
line aux 0  
line vty 0 4  
  exec-timeout 30 0  
  password 7 104D000A0618  
  logging synchronous  
  login  
  transport input telnet  
line vty 5 14  
  login  
  transport input ssh  
!  
network-clock synchronization automatic  
call-home  
  ! If contact email address in call-home is configured as sch-smart-  
  licensing@cisco.com  
  ! the email address configured in Cisco Smart License Portal will be  
  used as contact email address to send SCH notifications.
```

```
contact-email-addr sch-smart-licensing@cisco.com
profile "CiscoTAC-1"
  active
  destination transport-method http
ntp server 10.10.10.5
!
!
!
end
```