

---

# Ribbon SBC Core SWe V08.01.00-R000 IOT Cisco Unified Communication Manager PlusNet SIP Trunk TCP Application Note

---

## Table of Contents

- [Document Overview](#)
- [Introduction](#)
  - [Audience](#)
  - [Equipment](#)
  - [Topology Configuration](#)
  - [Support](#)
  - [Third-Party Product Features](#)
  - [Verify License](#)
- [CUCM 12.0.1 Configuration](#)
  - [1. Security Profile](#)
  - [2. SIP Profile](#)
  - [3. SIP Trunk](#)
  - [4. Route Group](#)
  - [5. Route List](#)
  - [6. Route Pattern](#)
- [Ribbon SBC Core Series Configuration](#)
- [Test Results](#)
- [Conclusion](#)
- [Appendix A](#)
- [Document Overview](#)
- [Introduction](#)
  - [Audience](#)
  - [Equipment](#)
  - [Topology Configuration](#)
  - [Support](#)
  - [Third-Party Product Features](#)
  - [Verify License](#)
- [CUCM 12.0.1 Configuration](#)
  - [1. Security Profile](#)
  - [2. SIP Profile](#)
  - [3. SIP Trunk](#)
  - [4. Route Group](#)
  - [5. Route List](#)
  - [6. Route Pattern](#)
- [Ribbon SBC Core Series Configuration](#)
- [Test Results](#)
- [Conclusion](#)
- [Appendix A](#)

# Document Overview

Use this configuration information to connect a Ribbon Session Border Controller (SBC) with a Cisco Unified Communication Manager (CUCM) system and a PlusNet SIP trunk.

This configuration information is applicable to the Ribbon SBC SWe, SBC 5XX0 series and SBC 7XX0 series.

For more information about the Ribbon SBC, refer to your Ribbon SBC product documentation <http://ribboncommunications.com/>.

## Introduction

The interoperability compliance testing focuses on verifying inbound and outbound call flows between a Ribbon Core SBC and Cisco Unified Communication Manager (CUCM).

### Audience

This technical document is intended for telecommunication engineers that configure the Ribbon SBC Core aspects of the PlusNet SIP trunk group with the Cisco Unified Communication Manager (CUCM). This configuration requires access to a third-party server and the Ribbon SBC Web browser user interface, Embedded Management Application (EMA). Engineers require a basic understanding of IP routing, SIP, RTP, and TLS to configure and troubleshoot this solution.

### Equipment

The following table lists the equipment and software used to complete the tests that a PlusNet SIP trunk requires to connect with Ribbon software.

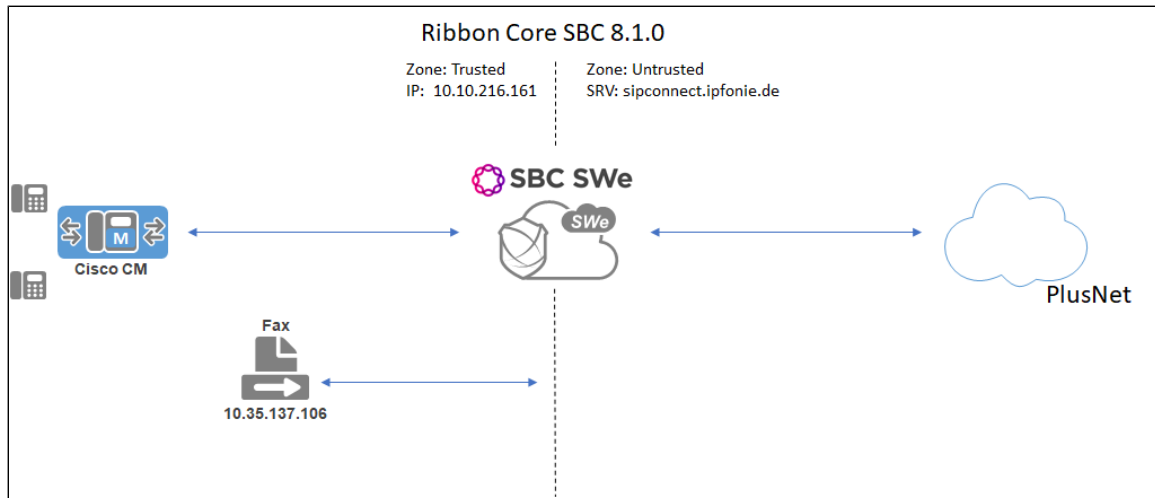
Table 1: Equipment

	Equipment	Software Version
Ribbon Communications	Ribbon SBC SWe	V08.01.00-R000
	ConnexIP OS	V07.01.00-R000
	SonusDB	V08.01.00-R000
	EMA	V08.01.00-R000
	SBX	V08.01.00-R000
Third-party Equipment	Cisco Unified Communication Manager (CUCM)	12.0.1.21900-7
	Cisco 7841	sip78xx.11-7-1-17
	Fax Machine VentaFax	7.6.243.616

## Topology Configuration

The following topology illustrates the network connection between the Microsoft Skype for Business 2015, Virgin Media network and the Ribbon SBC Core.

Figure 1: Topology



## Support

For issues with connectivity or configuration between Ribbon SBC, PlusNet SIP trunk, and Cisco Unified Communication Manager (CUCM), contact Ribbon Support in either of the following ways:

- Global Support Assistance Center +1-978-614-8589 or +1-888-391-3434 (English language Support)
- Web: <https://ribboncommunications.com/services/ribbon-support-portal-login>

## Third-Party Product Features

We tested the following features between Cisco Unified Communication Manager (CUCM) and PlusNet:

- Basic Calls
- Calling Number Format/Called Number Format
- Call Disconnects
- Call Error Handling
- CLIP/CLIR
- Call Forwarding
- Call Hold
- Conference
- Call Park
- Call Waiting
- DTMF
- Fax
- Long Call

## Verify License

- POL-BASE

## CUCM 12.0.1 Configuration


The following new configurations are included in this section:

1. [Security Profile](#)
2. [SIP Profile](#)
3. [SIP Trunk](#)
4. [Route Group](#)
5. [Route List](#)
6. [Route Pattern](#)

### 1. Security Profile







Select **System > Security > SIP Trunk Security Profile**


**Figure 2:** SIP Trunk Security Profile

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### SIP Trunk Security Profile Configuration

 Save  Delete  Copy  Reset  Apply Config  Add New

**Status**  
 Status: Ready

**SIP Trunk Security Profile Information**  
Name \*   
Description   
Device Security Mode   
Incoming Transport Type\*   
Outgoing Transport Type   
☐ Enable Digest Authentication  
Nonce Validity Time (mins)\*   
X.509 Subject Name   
Incoming Port\*   
☐ Enable Application level authorization  
☐ Accept presence subscription  
☒ Accept out-of-dialog refer\*\*  
☒ Accept unsolicited notification  
☒ Accept replaces header  
☒ Transmit security status  
☐ Allow charging header  
SIP V.150 Outbound SDP Offer Filtering\*

## 2. SIP Profile

Select **Device > Device Settings > SIP Profile**

Figure 3: SIP Profile

Cisco

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System

Call Routing

Media Resources

Advanced Features

Device

Application

User Management

Bulk Administration

Help

SIP Profile Configuration

Save

✖ Delete

📄 Copy

🔄 Reset

🔧 Apply Config

➕ Add New

Status

📘

Status: Ready

📘

All SIP devices using this profile must be restarted before any changes will take affect.

SIP Profile Information

Name\*

SIP OPTIONS Profile

Description

Default SIP Profile

Default MTP Telephony Event Payload Type\*

101

Early Offer for G.Clear Calls\*

Disabled

User-Agent and Server header information\*

Send Unified CM Version Information as User-Ager

Version in User Agent and Server Header\*

Major And Minor

Dial String Interpretation\*

Phone number consists of characters 0-9, \*, #, an

Confidential Access Level Headers\*

Disabled

☐ Redirect by Application

☐ Disable Early Media on 180

☐ Outgoing T.38 INVITE include audio mline

☐ Offer valid IP and Send/Receive mode only for T.38 Fax Relay

☐ Use Fully Qualified Domain Name in SIP Requests

☐ Assured Services SIP conformance

☐ Enable External QoS\*\*

SDP Information

SDP Session-level Bandwidth Modifier for Early Offer and Re-invites\*

TIAS and AS

SDP Transparency Profile

Pass all unknown SDP attributes

Accept Audio Codec Preferences in Received Offer\*

Default

☐ Require SDP Inactive Exchange for Mid-Call Media Change

☐ Allow RR/RS bandwidth modifier (RFC 3556)

Figure 4: SIP Profile1

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ | Call Routing ▾ | Media Resources ▾ | Advanced Features ▾ | Device ▾ | Application ▾ | User Management ▾ | Bulk Administration ▾ | Help ▾

### SIP Profile Configuration


Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

---

#### Parameters used in Phone







Timer Invite Expires (seconds)*	<input type="text" value="180"/>
Timer Register Delta (seconds)*	<input type="text" value="5"/>
Timer Register Expires (seconds)*	<input type="text" value="3600"/>
Timer T1 (msec)*	<input type="text" value="500"/>
Timer T2 (msec)*	<input type="text" value="4000"/>
Retry INVITE*	<input type="text" value="6"/>
Retry Non-INVITE*	<input type="text" value="10"/>
Media Port Ranges	<input checked="" type="radio"/> Common Port Range for Audio and Video <input type="radio"/> Separate Port Ranges for Audio and Video
Start Media Port*	<input type="text" value="16384"/>
Stop Media Port*	<input type="text" value="32766"/>
DSCP for Audio Calls	<input type="text" value="Use System Default"/> ▾
DSCP for Video Calls	<input type="text" value="Use System Default"/> ▾
DSCP for Audio Portion of Video Calls	<input type="text" value="Use System Default"/> ▾
DSCP for TelePresence Calls	<input type="text" value="Use System Default"/> ▾
DSCP for Audio Portion of TelePresence Calls	<input type="text" value="Use System Default"/> ▾
Call Pickup URI*	<input type="text" value="x-cisco-serviceuri-pickup"/>
Call Pickup Group Other URI*	<input type="text" value="x-cisco-serviceuri-opickup"/>
Call Pickup Group URI*	<input type="text" value="x-cisco-serviceuri-gpickup"/>
Meet Me Service URI*	<input type="text" value="x-cisco-serviceuri-meetme"/>
User Info*	<input type="text" value="None"/> ▾
DTMF DB Level*	<input type="text" value="Nominal"/> ▾
Call Hold Ring Back*	<input type="text" value="Off"/> ▾
Anonymous Call Block*	<input type="text" value="Off"/> ▾
Caller ID Blocking*	<input type="text" value="Off"/> ▾
Do Not Disturb Control*	<input type="text" value="User"/> ▾
Telnet Level for 7940 and 7960*	<input type="text" value="Disabled"/> ▾
Resource Priority Namespace	<input type="text" value="&lt; None &gt;"/> ▾
Timer Keep Alive Expires (seconds)*	<input type="text" value="120"/>
Timer Subscribe Expires (seconds)*	<input type="text" value="120"/>
Timer Subscribe Delta (seconds)*	<input type="text" value="5"/>

**Figure 5:** SIP Profile2


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions



System ▾ | Call Routing ▾ | Media Resources ▾ | Advanced Features ▾ | Device ▾ | Application ▾ | User Management ▾ | Bulk Administration ▾ | Help ▾

### SIP Profile Configuration

 Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Maximum Redirections\*   
Off Hook To First Digit Timer (milliseconds)\*   
Call Forward URI\*   
Speed Dial (Abbreviated Dial) URI\*   
☒ Conference Join Enabled  
☐ RFC 2543 Hold  
☒ Semi Attended Transfer  
☐ Enable VAD  
☐ Stutter Message Waiting  
☐ MLPP User Authorization


**Normalization Script**  
Normalization Script   
☐ Enable Trace

	Parameter Name	Parameter Value	
1	<input type="text"/>	<input type="text"/>	 

**Incoming Requests FROM URI Settings**  
Caller ID DN   
Caller Name

**Trunk Specific Configuration**  
Reroute Incoming Request to new Trunk based on\*   
Resource Priority Namespace List   
SIP Rel1XX Options\*   
Video Call Traffic Class\*   
Calling Line Identification Presentation\*   
Session Refresh Method\*   
Early Offer support for voice and video calls\*   
☐ Enable ANAT  
☐ Deliver Conference Bridge Identifier  
☐ Allow Passthrough of Configured Line Device Caller Information  
☐ Reject Anonymous Incoming Calls

**Figure 6:** SIP Profile3


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ | Call Routing ▾ | Media Resources ▾ | Advanced Features ▾ | Device ▾ | Application ▾ | User Management ▾ | Bulk Administration ▾ | Help ▾

SIP Profile Configuration

Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Reroute Incoming Request to new Trunk based on\* Never ▾  
Resource Priority Namespace List < None > ▾  
SIP Rel1XX Options\* Disabled ▾  
Video Call Traffic Class\* Mixed ▾  
Calling Line Identification Presentation\* Default ▾  
Session Refresh Method\* Invite ▾  
Early Offer support for voice and video calls\* Disabled (Default value) ▾  
☐ Enable ANAT  
☐ Deliver Conference Bridge Identifier  
☐ Allow Passthrough of Configured Line Device Caller Information  
☐ Reject Anonymous Incoming Calls  
☐ Reject Anonymous Outgoing Calls  
☐ Send ILS Learned Destination Route String  
☐ Connect Inbound Call before Playing Queuing Announcement

SIP OPTIONS Ping

☒ Enable OPTIONS Ping to monitor destination status for Trunks with Service Type "None (Default)"  
Ping Interval for In-service and Partially In-service Trunks (seconds)\* 60  
Ping Interval for Out-of-service Trunks (seconds)\* 120  
Ping Retry Timer (milliseconds)\* 500  
Ping Retry Count\* 6

SDP Information

☐ Send send-receive SDP in mid-call INVITE  
☐ Allow Presentation Sharing using BFCP  
☐ Allow iX Application Media  
☐ Allow multiple codecs in answer SDP

Save | Delete | Copy | Reset | Apply Config | Add New

### 3. SIP Trunk

Select **Device > Trunk > Add New**

**Figure 7:** SIP Trunk



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Trunk Configuration

Save
 Delete
 Reset
 Add New

Status

Status: Ready

SIP Trunk Status

**Service Status:** Full Service  
**Duration:** Time In Full Service: 28 days 23 hours 36 minutes

Device Information

Product: SIP Trunk  
Device Protocol: SIP  
Trunk Service Type: None(Default)  
Device Name\*: Rewa  
Description: Rewa  
Device Pool\*: Sonus\_DP ▾  
Common Device Configuration: < None > ▾  
Call Classification\*: Use System Default ▾  
Media Resource Group List: < None > ▾  
Location\*: Hub\_None ▾  
AAR Group: < None > ▾  
Tunneled Protocol\*: None ▾  
QSIG Variant\*: No Changes ▾  
ASN.1 ROSE OID Encoding\*: No Changes ▾  
Packet Capture Mode\*: None ▾  
Packet Capture Duration: 0  
☐ Media Termination Point Required  
☒ Retry Video Call as Audio  
☐ Path Replacement Support  
☐ Transmit UTF-8 for Calling Party Name  
☐ Transmit UTF-8 Names in QSIG APDU  
☐ Unattended Port  
☐ SRTP Allowed - When this flag is checked, Encrypted TLS needs to be configured in the network to provide end to end security. Failure to do so will expose keys and other information.  
Consider Traffic on This Trunk Secure\*: When using both sRTP and TLS ▾  
Route Class Signaling Enabled\*: Default ▾  
Use Trusted Relay Point\*: Default ▾

**Figure 8: SIP Trunk1**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Trunk Configuration

Save
 Delete
 Reset
 Add New

☐ PSTN Access  
☐ Run On All Active Unified CM Nodes

Intercompany Media Engine (IME)

E.164 Transformation Profile: < None > ▾

MLPP and Confidential Access Level Information

MLPP Domain: < None > ▾  
Confidential Access Mode: < None > ▾  
Confidential Access Level: < None > ▾

Call Routing Information

☒ Remote-Party-Id  
☒ Asserted-Identity  
Asserted-Type\*: Default ▾  
SIP Privacy\*: Default ▾  
Trust Received Identity\*: Trust All (Default) ▾

Inbound Calls

Significant Digits\*: All ▾  
Connected Line ID Presentation\*: Default ▾  
Connected Name Presentation\*: Default ▾  
Calling Search Space: < None > ▾  
AAR Calling Search Space: < None > ▾  
Prefix DN:   
☐ Redirecting Diversion Header Delivery - Inbound

Incoming Calling Party Settings

If the administrator sets the prefix to Default this indicates call processing will use prefix at the next level setting (DevicePool/Service Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix assigned.

[Clear Prefix Settings](#) | [Default Prefix Settings](#)

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
Incoming Number	Default ▾	0	< None > ▾	<input checked="" type="checkbox"/>

**Figure 9: SIP Trunk2**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

administr

System
Call Routing
Media Resources
Advanced Features
Device
Application
User Management
Bulk Administration
Help

Trunk Configuration

Save
Delete
Reset
Add New

Incoming Called Party Settings

If the administrator sets the prefix to Default this indicates call processing will use prefix at the next level setting (DevicePool/Service Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix assigned.

Clear Prefix Settings
Default Prefix Settings

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
Incoming Number	Default	0	< None >	<input checked="" type="checkbox"/>

Connected Party Settings

Connected Party Transformation CSS < None >  
☒ Use Device Pool Connected Party Transformation CSS

Outbound Calls

Called Party Transformation CSS < None >  
☒ Use Device Pool Called Party Transformation CSS  
Calling Party Transformation CSS < None >  
☒ Use Device Pool Calling Party Transformation CSS  
Calling Party Selection\* Originator  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default  
Calling and Connected Party Info Format\* Deliver DN only in connected party  
☐ Redirecting Diversion Header Delivery - Outbound  
Redirecting Party Transformation CSS < None >  
☒ Use Device Pool Redirecting Party Transformation CSS

Caller Information

Caller ID DN  
Caller Name  
☐ Maintain Original Caller ID DN and Caller Name in Identity Headers

**Figure 10: SIP Trunk3**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

administr

System
Call Routing
Media Resources
Advanced Features
Device
Application
User Management
Bulk Administration
Help

Trunk Configuration

Save
Delete
Reset
Add New

SIP Information

Destination

☐ Destination Address is an SRV

	Destination Address	Destination Address IPv6	Destination Port	Status	Status Reason	Duration
1*	10.35.179.136		5060	up		Time Up: 0 day 23 hours 36 minutes

MTP Preferred Originating Codec\* 711ulaw  
SLP Presence Group\* Standard Presence group  
SIP Trunk Security Profile\* Non Secure SIP Trunk Profile  
Rerouting Calling Search Space < None >  
Out-Of-Dialog Refer Calling Search Space < None >  
SUBSCRIBE Calling Search Space < None >  
SIP Profile\* Standard SIP Profile - OPTIONS Enable [View Details](#)  
DTMF Signaling Method\* No Preference

Normalization Script

Normalization Script < None >  
☐ Enable Trace

Parameter Name	Parameter Value
1	

Recording Information

☒ None  
☐ This trunk connects to a recording-enabled gateway  
☐ This trunk connects to other clusters with recording-enabled gateways

Geolocation Configuration


Geolocation < None >  
Geolocation Filter < None >  
☐ Send Geolocation Information

Save
Delete
Reset
Add New

## 4. Route Group



Select **Call Routing** > **Route/Hunt** > **Route Group** > **Add New**


Figure 11: Route Group

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Route Group Configuration

Save  Delete  Add New

**Status**  
 Status: Ready

**Route Group Information**  
Route Group Name\*   
Distribution Algorithm\*

**Route Group Member Information**



**Find Devices to Add to Route Group**  
Device Name contains    
Available Devices\*\*  




CUBE  
Rewa  
USTX-SBCLAB01



  
Port(s)



**Current Route Group Members**  
Selected Devices (ordered by priority)\* 

Rewa (All Ports)



   
  
Removed Devices\*\*\*  



**Route Group Members**  
 [Rewa](#)  


Save Delete Add New

## 5. Route List

Select **Call Routing > Route/Hunt > Route List > Add New**

Figure 12: Route List

Cisco

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Route List Configuration

Save

Delete

Copy

Reset

Apply Config

Add New

Status

i

Status: Ready

Route List Information

Registration: Registered with Cisco Unified Communications Manager UCM12.vo.sonusnet.com

IPv4 Address: 10.35.180.111

☒ Device is trusted

Name\*

Description

Cisco Unified Communications Manager Group\*

☒ Enable this Route List (change effective on Save; no reset required)

☐ Run On All Active Unified CM Nodes

Route List Member Information

Selected Groups\*\*

▼

▲

Add Route Group

Removed Groups\*\*\*

Route List Details

Rewa\_SBC

Save

Delete

Copy

Reset

Apply Config

Add New

i

\*- indicates required item.

i

\*\*Ordered by highest priority

i


\*\*\*Will be removed from Route List when you click Save

Confidential and Proprietary. Copyright © 2020-2023 Ribbon Communications Operating Company, Inc. © 2020-2023 ECI Telecom Ltd.

## 6. Route Pattern




Select **Call Routing > Route/Hunt > Route Pattern > Add New**


Figure 13: Route Pattern

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Route Pattern Configuration**


Save  Delete  Copy  Add New

**Status**  
 Status: Ready

**Pattern Definition**  
Route Pattern\*   
Route Partition   
Description   
Numbering Plan   
Route Filter   
MLPP Precedence\*   
☐ Apply Call Blocking Percentage  
Resource Priority Namespace Network Domain   
Route Class\*   
Gateway/Route List\*  [\(Edit\)](#)  
Route Option  
☒ Route this pattern  
☐ Block this pattern   
Call Classification\*   
External Call Control Profile   
☐ Allow Device Override ☒ Provide Outside Dial Tone ☐ Allow Overlap Sending ☐ Urgent Priority  
☐ Require Forced Authorization Code  
Authorization Level\*   
☐ Require Client Matter Code





**Calling Party Transformations**  
☐ Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask   
Prefix Digits (Outgoing Calls)   
Calling Line ID Presentation\*   
Calling Name Presentation\*   
Calling Party Number Type\*   
Calling Party Numbering Plan\*

Figure 14: Route Pattern1


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Route Pattern Configuration

 Save
 Delete
 Copy
 Add New

☐ Allow Device Override
☒ Provide Outside Dial Tone
☐ Allow Overlap Sending
☐ Urgent Priority

☐ Require Forced Authorization Code

Authorization Level\*

☐ Require Client Matter Code

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation\*

Calling Name Presentation\*

Calling Party Number Type\*

Calling Party Numbering Plan\*

Connected Party Transformations

Connected Line ID Presentation\*

Connected Name Presentation\*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type\*

Called Party Numbering Plan\*

ISDN Network-Specific Facilities Information Element

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input type="text" value="&lt; Not Exist &gt;"/>	<input type="text"/>

Save Delete Copy Add New

## Ribbon SBC Core Series Configuration

The follow configuration applies to the SWe, 5xxx and 7xxx series Core SBC. It is included in the Cisco Unified Communication Manager and PlusNet SIP trunk configuration.

### SBC Core Configuration

```

configure
#DSP Resources
set system mediaProfile compression 90 tone 10
commit

#Element Routing Priority
set global callRouting routingLabel TO_CUCM overflowNumber ""
set global callRouting routingLabel TO_CUCM overflowNOA none
set global callRouting routingLabel TO_CUCM overflowNPI none
set global callRouting routingLabel TO_CUCM routePrioritizationType sequence
set global callRouting routingLabel TO_CUCM action routes
set global callRouting routingLabel TO_CUCM numRoutesPerCall 10
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 trunkGroup CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 ipPeer CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 testing normal
set global callRouting routingLabel TO_PLUSNET overflowNumber ""
set global callRouting routingLabel TO_PLUSNET overflowNOA none
set global callRouting routingLabel TO_PLUSNET overflowNPI none
set global callRouting routingLabel TO_PLUSNET routePrioritizationType sequence
set global callRouting routingLabel TO_PLUSNET action routes
set global callRouting routingLabel TO_PLUSNET numRoutesPerCall 10
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 trunkGroup PLUSNET
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 ipPeer PLUSNET

```

```

set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 testing normal
set global callRouting routingLabel TO_VENTAFAX overflowNumber ""
set global callRouting routingLabel TO_VENTAFAX overflowNOA none
set global callRouting routingLabel TO_VENTAFAX overflowNPI none
set global callRouting routingLabel TO_VENTAFAX routePrioritizationType sequence
set global callRouting routingLabel TO_VENTAFAX action routes
set global callRouting routingLabel TO_VENTAFAX numRoutesPerCall 10
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 trunkGroup VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 ipPeer VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 testing normal
commit

#PathCheck Profile
set profiles services pathCheckProfile CUCM_OPTIONS protocol sipOptions
set profiles services pathCheckProfile CUCM_OPTIONS sendInterval 60
set profiles services pathCheckProfile CUCM_OPTIONS replyTimeoutCount 6
set profiles services pathCheckProfile CUCM_OPTIONS recoveryCount 6
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference1 udp
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference2 tcp
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference3 tls-tcp
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference4 sctp
commit

set profiles services pathCheckProfile PLUSNET_OPTIONS protocol sipOptions
set profiles services pathCheckProfile PLUSNET_OPTIONS sendInterval 60
set profiles services pathCheckProfile PLUSNET_OPTIONS replyTimeoutCount 6
set profiles services pathCheckProfile PLUSNET_OPTIONS recoveryCount 6
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference1 udp
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference2 tcp
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference3 tls-tcp
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference4 sctp
commit

#Codecs
set profiles media codecEntry G711_PlusNet codec g711
set profiles media codecEntry G711_PlusNet packetSize 10
set profiles media codecEntry G711_PlusNet fax failureHandling continue
set profiles media codecEntry G711_PlusNet fax toneTreatment faxRelay
set profiles media codecEntry G711_PlusNet fax honorToneDetection disable
set profiles media codecEntry G711_PlusNet modem failureHandling continue
set profiles media codecEntry G711_PlusNet modem toneTreatment none
set profiles media codecEntry G711_PlusNet modem honorToneDetection disable
set profiles media codecEntry G711_PlusNet law deriveFromOtherLeg
set profiles media codecEntry G711_PlusNet dtmf relay rfc2833
set profiles media codecEntry G711_PlusNet dtmf removeDigits disable
commit

set profiles media codecEntry G711_Ventafax packetSize 10
set profiles media codecEntry G711_Ventafax fax failureHandling continue
set profiles media codecEntry G711_Ventafax fax toneTreatment faxRelay
set profiles media codecEntry G711_Ventafax fax honorToneDetection disable
set profiles media codecEntry G711_Ventafax modem failureHandling continue
set profiles media codecEntry G711_Ventafax modem toneTreatment none
set profiles media codecEntry G711_Ventafax modem honorToneDetection disable
set profiles media codecEntry G711_Ventafax law deriveFromOtherLeg
set profiles media codecEntry G711_Ventafax dtmf relay none
set profiles media codecEntry G711_Ventafax dtmf removeDigits enable
commit

set profiles media codecEntry G_722_PlusNet codec g722
set profiles media codecEntry G_722_PlusNet codingRate 64
set profiles media codecEntry G_722_PlusNet packetSize 20
set profiles media codecEntry G_722_PlusNet preferredRtpPayloadType 128
set profiles media codecEntry G_722_PlusNet fax failureHandling continue
set profiles media codecEntry G_722_PlusNet fax toneTreatment none

```

```

set profiles media codecEntry G_722_PlusNet modem failureHandling continue
set profiles media codecEntry G_722_PlusNet modem toneTreatment none
set profiles media codecEntry G_722_PlusNet dtmf relay none
set profiles media codecEntry G_722_PlusNet dtmf removeDigits enable
commit

set profiles media codecEntry G729_PlusNet codec g729a
set profiles media codecEntry G729_PlusNet packetSize 20
set profiles media codecEntry G729_PlusNet preferredRtpPayloadType 128
set profiles media codecEntry G729_PlusNet fax failureHandling continue
set profiles media codecEntry G729_PlusNet fax toneTreatment none
set profiles media codecEntry G729_PlusNet modem failureHandling continue
set profiles media codecEntry G729_PlusNet modem toneTreatment none
set profiles media codecEntry G729_PlusNet dtmf relay none
set profiles media codecEntry G729_PlusNet dtmf removeDigits enable
commit

#PSPs
set profiles media packetServiceProfile PlusNet dataCalls preferredRtpDataPayloadType 56
set profiles media packetServiceProfile PlusNet dataCalls initialPlayoutBufferDelay 50
set profiles media packetServiceProfile PlusNet dataCalls packetSize 20
set profiles media packetServiceProfile PlusNet silenceFactor 40
set profiles media packetServiceProfile PlusNet typeOfService 0
set profiles media packetServiceProfile PlusNet voiceInitialPlayoutBufferDelay 10
set profiles media packetServiceProfile PlusNet peerAbsenceAction none
set profiles media packetServiceProfile PlusNet silenceInsertionDescriptor g711SidRtpPayloadType 13
set profiles media packetServiceProfile PlusNet silenceInsertionDescriptor heartbeat enable
set profiles media packetServiceProfile PlusNet aallPayloadSize 47
set profiles media packetServiceProfile PlusNet codec codecEntry1 G711_PlusNet
set profiles media packetServiceProfile PlusNet packetToPacketControl transcode conditional
set profiles media packetServiceProfile PlusNet packetToPacketControl codecsAllowedForTranscoding thisLeg ""
set profiles media packetServiceProfile PlusNet packetToPacketControl codecsAllowedForTranscoding otherLeg ""
set profiles media packetServiceProfile PlusNet t38 dataRateManagementType type2TransferOfTcf
set profiles media packetServiceProfile PlusNet t38 ecm ecmPreferred disable
set profiles media packetServiceProfile PlusNet t38 lowSpeedNumberOfRedundantPackets 1
set profiles media packetServiceProfile PlusNet t38 maxBitRate 14.4Kbits_s
set profiles media packetServiceProfile PlusNet t38 numberOfRedundantPackets 1
set profiles media packetServiceProfile PlusNet t38 protocolVersion 0
set profiles media packetServiceProfile PlusNet preferredRtpPayloadTypeForDtmfRelay 128
set profiles media packetServiceProfile PlusNet videoCalls maxVideoBandwidth 0
set profiles media packetServiceProfile PlusNet videoCalls videoBandwidthReductionFactor 0
set profiles media packetServiceProfile PlusNet videoCalls ipv4Tos 0
set profiles media packetServiceProfile PlusNet videoCalls ipv6TrafficClass 0
set profiles media packetServiceProfile PlusNet videoCalls ieee8021QVLanCos 0
set profiles media packetServiceProfile PlusNet videoCalls audioOnlyIfVideoIsPrevented enable
set profiles media packetServiceProfile PlusNet qosValues msrpDscp 0
set profiles media packetServiceProfile PlusNet qosValues dtlsSctpDscp 0
set profiles media packetServiceProfile PlusNet qosValues tl40Dscp 0
set profiles media packetServiceProfile PlusNet qosValues applicationDscp 0
set profiles media packetServiceProfile PlusNet nonRtpStream maxNonRtpBandwidth 0
set profiles media packetServiceProfile PlusNet audioTransparency unknownCodecPacketSize 10
set profiles media packetServiceProfile PlusNet audioTransparency unknownCodecBitRate 124
set profiles media packetServiceProfile PlusNet mediaPacketCos 0
commit

set profiles media packetServiceProfile VENTAFAX dataCalls preferredRtpDataPayloadType 56
set profiles media packetServiceProfile VENTAFAX dataCalls initialPlayoutBufferDelay 50
set profiles media packetServiceProfile VENTAFAX dataCalls packetSize 20
set profiles media packetServiceProfile VENTAFAX silenceFactor 40
set profiles media packetServiceProfile VENTAFAX typeOfService 0
set profiles media packetServiceProfile VENTAFAX voiceInitialPlayoutBufferDelay 10
set profiles media packetServiceProfile VENTAFAX peerAbsenceAction none
set profiles media packetServiceProfile VENTAFAX silenceInsertionDescriptor g711SidRtpPayloadType 13
set profiles media packetServiceProfile VENTAFAX silenceInsertionDescriptor heartbeat enable
set profiles media packetServiceProfile VENTAFAX aallPayloadSize 47
set profiles media packetServiceProfile VENTAFAX codec codecEntry1 G711_Ventafax
set profiles media packetServiceProfile VENTAFAX packetToPacketControl transcode conditional
set profiles media packetServiceProfile VENTAFAX packetToPacketControl codecsAllowedForTranscoding thisLeg ""
set profiles media packetServiceProfile VENTAFAX packetToPacketControl codecsAllowedForTranscoding otherLeg ""
set profiles media packetServiceProfile VENTAFAX t38 dataRateManagementType type2TransferOfTcf
set profiles media packetServiceProfile VENTAFAX t38 lowSpeedNumberOfRedundantPackets 1
set profiles media packetServiceProfile VENTAFAX t38 maxBitRate 14.4Kbits_s

```



```

set profiles media packetServiceProfile VENTAFAX t38 numberOfRedundantPackets 1
set profiles media packetServiceProfile VENTAFAX t38 protocolVersion 0
set profiles media packetServiceProfile VENTAFAX preferredRtpPayloadTypeForDtmfRelay 128
set profiles media packetServiceProfile VENTAFAX videoCalls maxVideoBandwidth 0
set profiles media packetServiceProfile VENTAFAX videoCalls videoBandwidthReductionFactor 0
set profiles media packetServiceProfile VENTAFAX videoCalls ipv4Tos 0
set profiles media packetServiceProfile VENTAFAX videoCalls ipv6TrafficClass 0
set profiles media packetServiceProfile VENTAFAX videoCalls ieee8021QVlanCos 0
set profiles media packetServiceProfile VENTAFAX videoCalls audioOnlyIfVideoIsPrevented enable
set profiles media packetServiceProfile VENTAFAX qosValues msrpDscp 0
set profiles media packetServiceProfile VENTAFAX qosValues dtlsSctpDscp 0
set profiles media packetServiceProfile VENTAFAX qosValues t140Dscp 0
set profiles media packetServiceProfile VENTAFAX qosValues applicationDscp 0
set profiles media packetServiceProfile VENTAFAX nonRtpStream maxNonRtpBandwidth 0
set profiles media packetServiceProfile VENTAFAX audioTransparency unknownCodecPacketSize 10
set profiles media packetServiceProfile VENTAFAX audioTransparency unknownCodecBitRate 124
set profiles media packetServiceProfile VENTAFAX mediaPacketCos 0
commit

```

#### #DNS

```

set addressContext default dnsGroup DNS1 type none
set addressContext default dnsGroup DNS1 transport udp
set addressContext default dnsGroup DNS1 useConfiguredDnsServer disabled
set addressContext default dnsGroup DNS1 ednsSupport disabled
set addressContext default dnsGroup DNS1 server PRIMARY state enabled
set addressContext default dnsGroup DNS1 server PRIMARY recursionDesired true
set addressContext default dnsGroup DNS1 server PRIMARY ipAddress 8.8.8.8
set addressContext default dnsGroup DNS1 server PRIMARY transportProtocol udp
set addressContext default dnsGroup DNS1 server PRIMARY tcpFallback disabled
set addressContext default dnsGroup DNS1 server PRIMARY priority 0
set addressContext default dnsGroup DNS1 server PRIMARY weight 0
set addressContext default dnsGroup DNS1 server PRIMARY recordOrder priority
commit

```

#### #Internal Side Configuration

##### #IP Interface Group

```

set addressContext default ipInterfaceGroup IPIG0 ipsec disabled
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 portName pkt0
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 ipAddress 10.10.216.161
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 prefix 26
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 mode inService
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 action dryUp
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 dryUpTimeout 60
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 state enabled
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 bwContingency 0
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 bandwidth 0
commit

```

##### #IP Static Route

```

set addressContext default staticRoute 0.0.0.0 0 10.10.216.129 IPIG0 IPIF0 preference 100
commit

```

##### #Zone

```

set addressContext default zone CUCM id 2
commit

```

##### #SIP signaling port

```

set addressContext default zone CUCM sipSigPort 2 ipInterfaceGroupName IPIG0
set addressContext default zone CUCM sipSigPort 2 ipAddressV4 10.10.216.161
set addressContext default zone CUCM sipSigPort 2 portNumber 5060
set addressContext default zone CUCM sipSigPort 2 mode inService
set addressContext default zone CUCM sipSigPort 2 transportProtocolsAllowed sip-udp,sip-tcp
set addressContext default zone CUCM sipSigPort 2 state enabled
commit

```

##### #CUCM IP peer

```

set addressContext default zone CUCM ipPeer CUCM ipAddress 10.35.180.111
set addressContext default zone CUCM ipPeer CUCM ipPort 5060
set addressContext default zone CUCM ipPeer CUCM authentication intChallengeResponse enabled
set addressContext default zone CUCM ipPeer CUCM authentication incInternalCredentials enabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration userPart XXXXX
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration authUserName XXXXX

```

```

set addressContext default zone CUCM ipPeer CUCM surrogateRegistration retryTimer 900000
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration regAuthPassword "XXXXX!"
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration state enabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration sendCredentials
challengeForAnyMessageAndInDialogRequests
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration suppressRegRetryAfterAuthFail disabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration useNextSurrRegForCall disabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration useUserNameAsPAI disabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration hostPart sipconnect.ipfonie.de
commit

#Fax IP peer
set addressContext default zone CUCM ipPeer VENTAFAX ipAddress 10.35.137.106
set addressContext default zone CUCM ipPeer VENTAFAX ipPort 5060
set addressContext default zone CUCM ipPeer VENTAFAX defaultForIp false
set addressContext default zone CUCM ipPeer VENTAFAX authentication intChallengeResponse enabled
set addressContext default zone CUCM ipPeer VENTAFAX authentication incInternalCredentials enabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration userPart XXXXX
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration authUserName XXXXX
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration retryTimer 900000
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration regAuthPassword "XXXXX!"
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration state enabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration sendCredentials
challengeForAnyMessageAndInDialogRequests
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration suppressRegRetryAfterAuthFail disabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration useNextSurrRegForCall disabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration useUserNameAsPAI disabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration hostPart sipconnect.ipfonie.de
commit

#CUCM IP trunk
set addressContext default zone CUCM sipTrunkGroup CUCM state enabled
set addressContext default zone CUCM sipTrunkGroup CUCM mode inService
set addressContext default zone CUCM sipTrunkGroup CUCM action dryUp
set addressContext default zone CUCM sipTrunkGroup CUCM dryUpTimeout 5
set addressContext default zone CUCM sipTrunkGroup CUCM ucIdSupport none
set addressContext default zone CUCM sipTrunkGroup CUCM recordingDNpreference fromHeaderOnly
set addressContext default zone CUCM sipTrunkGroup CUCM policy carrier 0000
set addressContext default zone CUCM sipTrunkGroup CUCM policy country 1
set addressContext default zone CUCM sipTrunkGroup CUCM policy localizationVariant northAmerica
set addressContext default zone CUCM sipTrunkGroup CUCM policy tgIPVersionPreference both-ipv4-and-ipv6
set addressContext default zone CUCM sipTrunkGroup CUCM policy digitParameterHandling numberingPlan CUCM_NP
set addressContext default zone CUCM sipTrunkGroup CUCM policy callRouting elementRoutingPriority DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup CUCM policy media packetServiceProfile DEFAULT
set addressContext default zone CUCM sipTrunkGroup CUCM policy services classOfService DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup CUCM policy signaling ipSignalingProfile CUCM_IPSP
set addressContext default zone CUCM sipTrunkGroup CUCM policy featureControlProfile DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup CUCM policy hpcOversubscription 10
set addressContext default zone CUCM sipTrunkGroup CUCM policy ingress flags
nonZeroVideoBandwidthBasedRoutingForSip enable
commit

#Fax IP trunk
set addressContext default zone CUCM sipTrunkGroup VENTAFAX state enabled
set addressContext default zone CUCM sipTrunkGroup VENTAFAX mode inService
set addressContext default zone CUCM sipTrunkGroup VENTAFAX action dryUp
set addressContext default zone CUCM sipTrunkGroup VENTAFAX dryUpTimeout 5
set addressContext default zone CUCM sipTrunkGroup VENTAFAX ucIdSupport none
set addressContext default zone CUCM sipTrunkGroup VENTAFAX recordingDNpreference fromHeaderOnly
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy carrier 0000
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy country 1
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy localizationVariant northAmerica
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy tgIPVersionPreference both-ipv4-and-ipv6
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy digitParameterHandling numberingPlan NANP_ACCESS
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy callRouting elementRoutingPriority DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy media packetServiceProfile VENTAFAX
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy services classOfService DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy signaling ipSignalingProfile DEFAULT_SIP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX signaling messageManipulation outputAdapterProfile
REMOVE_PLUS
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy featureControlProfile DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy hpcOversubscription 10

```

```

set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy ingress flags
nonZeroVideoBandwidthBasedRoutingForSip enable
commit

#IP Signaling Profile
set profiles signaling ipSignalingProfile CUCM_IPSP ipProtocolType sipOnly
set profiles signaling ipSignalingProfile CUCM_IPSP commonIpAttributes callTransferFlags
handleIpAddressesNotPresentInNetworkSelectorTableNst routeViaTransferringIptg
set profiles signaling ipSignalingProfile CUCM_IPSP commonIpAttributes transparencyFlags pCalledPartyID enable
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes numberPortabilityAttributes npdiOptions
includeNpdiYes
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes privacy privacyInformation pPreferredId
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes privacy flags includePrivacy enable
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes redirect mode acceptRedirection
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes redirect contactHandling
mergeReceivedContacts
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters callForwarding
dataMapping diversion
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters
includeChargeInformation includeNone
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters sipToHeaderMapping
none
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters
destinationTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters
originatingTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters generateCallIdUsing
doNotUseIngressCallId
set profiles signaling ipSignalingProfile CUCM_IPSP trfParameters preferredMrbUri ""
set profiles signaling ipSignalingProfile CUCM_IPSP trfParameters preferredTrfUri ""

#Numbering Plan
set profiles digitParameterHandling numberingPlan CUCM_NP prefixProfile CUCM_PP
set profiles digitParameterHandling numberingPlan CUCM_NP lengths nationalNumber min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths nationalNumber max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths subscriberNumber min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths subscriberNumber max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths line min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths line max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths exchangeCode min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths exchangeCode max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths areaCode min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths areaCode max 0

#PrefixProfile
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 callType internationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 digitType international
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 natureOfAddress international
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 numberLeadingPrefixDigits 1
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 numberLeadingPrefixDigitsToStrip 1
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 numberLeadingPrefixDigitsToStrip 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 numberLeadingPrefixDigitsToStrip 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 2 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry 2 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile CUCM_PP entry 2 0 1 31 natureOfAddress none

```



```

set addressContext default ipInterfaceGroup IPIG1 ipInterface IPIF1 bandwidth 0
commit

#IP static route
set addressContext default staticRoute 0.0.0.0 0 10.10.216.193 IPIG1 IPIF1 preference 100
commit

#Zone
set addressContext default zone PLUSNET id 3
set addressContext default zone PLUSNET dnsGroup DNS1
commit

#SIP signaling port
set addressContext default zone PLUSNET sipSigPort 3 ipInterfaceGroupName IPIG1
set addressContext default zone PLUSNET sipSigPort 3 ipAddressV4 10.10.216.211
set addressContext default zone PLUSNET sipSigPort 3 portNumber 5060
set addressContext default zone PLUSNET sipSigPort 3 mode inService
set addressContext default zone PLUSNET sipSigPort 3 state enabled
set addressContext default zone PLUSNET sipSigPort 3 recorder disabled
set addressContext default zone PLUSNET sipSigPort 3 siprec disabled
set addressContext default zone PLUSNET sipSigPort 3 tcpConnectTimeout 5
set addressContext default zone PLUSNET sipSigPort 3 dscpValue 0
set addressContext default zone PLUSNET sipSigPort 3 tlsProfileName defaultTlsProfile
set addressContext default zone PLUSNET sipSigPort 3 transportProtocolsAllowed sip-udp,sip-tcp
set addressContext default zone PLUSNET sipSigPort 3 sctpProfileName defaultSctpProfile
set addressContext default zone PLUSNET sipSigPort 3 tcpKeepaliveTime 0
set addressContext default zone PLUSNET sipSigPort 3 tcpKeepaliveInterval 60
set addressContext default zone PLUSNET sipSigPort 3 tcpKeepaliveProbes 2
set addressContext default zone PLUSNET sipSigPort 3 maskPortforRcb disabled
set addressContext default zone PLUSNET sipSigPort 3 maskIpAddressforRcb disabled
set addressContext default zone PLUSNET sipSigPort 3 enforceAORMatch disabled
set addressContext default zone PLUSNET sipSigPort 3 action force
set addressContext default zone PLUSNET sipSigPort 3 tcpUserTimeout 0
set addressContext default zone PLUSNET sipSigPort 3 sipTcpConnectionAgingState enabled
commit

#IP peers
set addressContext default zone PLUSNET ipPeer PLUSNET ipPort 0
set addressContext default zone PLUSNET ipPeer PLUSNET defaultForIp false
set addressContext default zone PLUSNET ipPeer PLUSNET policy description ""
set addressContext default zone PLUSNET ipPeer PLUSNET policy sip fqdn sipconnect.ipfonie.de
set addressContext default zone PLUSNET ipPeer PLUSNET policy sip fqdnPort 0
set addressContext default zone PLUSNET ipPeer PLUSNET policy packetServiceProfile PlusNet
set addressContext default zone PLUSNET ipPeer PLUSNET pathCheck profile PLUSNET_OPTIONS
set addressContext default zone PLUSNET ipPeer PLUSNET pathCheck hostName ""
set addressContext default zone PLUSNET ipPeer PLUSNET pathCheck hostPort 5060
commit

#PlusNet trunks
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET state enabled
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET mode inService
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET action dryUp
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET dryUpTimeout 5
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET ucidSupport none
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET recordingDNpreference fromHeaderOnly
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy carrier 0000
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy country 1
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy localizationVariant northAmerica
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy tgIPVersionPreference both-ipv4-and-ipv6
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy digitParameterHandling numberingPlan
PLUSNET_NP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy digitParameterHandling egressDmPmRule AddPlus
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy callRouting elementRoutingPriority DEFAULT_IP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy media packetServiceProfile PlusNet
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy services classOfService DEFAULT_IP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy signaling ipSignalingProfile PLUSNET_IPSP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy featureControlProfile DEFAULT_IP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy hpcOversubscription 10
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication authUserPart XXXXXXXXXXXX
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication authPassword "XXXXXXX"
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication intChallengeResponse
disabled

```

```

set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication incInternalCredentials
disabled
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling messageManipulation inputAdapterProfile
PLUSNETDEL
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET services dnsSupportType a-srv-naptr
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET services dnsNaptrAlways enabled
commit

#IP Signaling Profile
set profiles signaling ipSignalingProfile PLUSNET_IPSP ipProtocolType sipOnly
set profiles signaling ipSignalingProfile PLUSNET_IPSP commonIpAttributes callTransferFlags
handleIpAddressesNotPresentInNetworkSelectorTableNst routeViaTransferringIptg
set profiles signaling ipSignalingProfile PLUSNET_IPSP commonIpAttributes transparencyFlags pCalledPartyID enable
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes numberPortabilityAttributes npdiOptions
includeNpdiYes
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes privacy privacyInformation pPreferredId
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes privacy flags includePrivacy enable
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes redirect mode acceptRedirection
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes redirect contactHandling
mergeReceivedContacts
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters callForwarding
dataMapping diversion
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
includeChargeInformation includeNone
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
sipToHeaderMapping none
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
destinationTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
originatingTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
generateCallIdUsing doNotUseIngressCallId
set profiles signaling ipSignalingProfile PLUSNET_IPSP trfParameters preferredMrbUri ""
set profiles signaling ipSignalingProfile PLUSNET_IPSP trfParameters preferredTrfUri ""

#Numbering Plan
set profiles digitParameterHandling numberingPlan PLUSNET_NP prefixProfile PLUSNET_PP
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths nationalNumber min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths nationalNumber max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths subscriberNumber min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths subscriberNumber max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths line min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths line max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths exchangeCode min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths exchangeCode max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths areaCode min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths areaCode max 0

#Prefix Profile
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 callType internationalType
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 digitType international
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 natureOfAddress international
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 numberLeadingPrefixDigits 1
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 numberLeadingPrefixDigitsToStrip 1
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 numberLeadingPrefixDigitsToStrip 0
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 numberLeadingPrefixDigitsToStrip 0

```





```

set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
numberingPlanIndicator isdn
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
numberLength noInput
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
presentation none
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
screening none
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
includeInEgress none
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement type constant
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement digitString calledNumber
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement value +
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation action
none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 ruleType digit
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberType callingNumber
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
natureOfAddress national
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
numberingPlanIndicator isdn
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
numberLength noInput
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
presentation none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
screening none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
includeInEgress none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement type constant
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement digitString callingNumber
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement value +
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation action
none

#Global Configuration
#Route Labels
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 trunkGroup CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 ipPeer CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 testing normal
commit
set global callRouting routingLabel TO_PLUSNET overflowNumber ""
set global callRouting routingLabel TO_PLUSNET overflowNOA none
set global callRouting routingLabel TO_PLUSNET overflowNPI none
set global callRouting routingLabel TO_PLUSNET routePrioritizationType sequence

```



```

set global callRouting routingLabel TO_PLUSNET action routes
set global callRouting routingLabel TO_PLUSNET numRoutesPerCall 10
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 trunkGroup PLUSNET
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 ipPeer PLUSNET
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 testing normal
commit

set global callRouting routingLabel TO_VENTAFAX overflowNumber ""
set global callRouting routingLabel TO_VENTAFAX overflowNOA none
set global callRouting routingLabel TO_VENTAFAX overflowNPI none
set global callRouting routingLabel TO_VENTAFAX routePrioritizationType sequence
set global callRouting routingLabel TO_VENTAFAX action routes
set global callRouting routingLabel TO_VENTAFAX numRoutesPerCall 10
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 trunkGroup VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 ipPeer VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 testing normal
commit

set global callRouting routingLabel TO_CUCM1 overflowNumber ""
set global callRouting routingLabel TO_CUCM1 overflowNOA none
set global callRouting routingLabel TO_CUCM1 overflowNPI none
set global callRouting routingLabel TO_CUCM1 routePrioritizationType sequence
set global callRouting routingLabel TO_CUCM1 action routes
set global callRouting routingLabel TO_CUCM1 numRoutesPerCall 10
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 trunkGroup CUCM1
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 ipPeer CUCM1
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 testing normal

#Routes
set global callRouting route none Sonus_NULL Sonus_NULL standard 32211057459 49 all all ALL none Sonus_NULL
routingLabel TO_VENTAFAX
set global callRouting route none Sonus_NULL Sonus_NULL standard 91147726289 49 all all ALL none Sonus_NULL
routingLabel TO_CUCM1
set global callRouting route none Sonus_NULL Sonus_NULL standard Sonus_NULL 49 all all ALL none Sonus_NULL
routingLabel TO_CUCM
set global callRouting route trunkGroup CUCM SBC standard Sonus_NULL Sonus_NULL all all ALL none Sonus_NULL
routingLabel TO_PLUSNET
set global callRouting route trunkGroup CUCM1 SBC standard Sonus_NULL Sonus_NULL all all ALL none Sonus_NULL
routingLabel TO_PLUSNET
set global callRouting route trunkGroup VENTAFAX SBC standard Sonus_NULL Sonus_NULL all all ALL none Sonus_NULL
routingLabel TO_PLUSNET
commit

```

## Test Results

The following table provides information about the tests that Ribbon performed to complete all scenarios that PlusNet needs for their customers.

**Table 2:** Interoperability Compliance Test Results

Test Number	Test Scenario	Setup / Test Results	Status	Comment
-------------	---------------	----------------------	--------	---------

4.1	Registration and authentication (registration mode)	The PBX is able to execute the correct resolution of the DNS SRV record.	Pass	
4.3	Basic call	With the basic call tests, the standard call scenarios and the CLIP/CLIR features are tested. <ul style="list-style-type: none"> <li>Only en-bloc dialing is supported, overlap sending is not possible.</li> </ul>	Pass	
4.3.1	Normal call	Outgoing call from PBX to PSTN <ul style="list-style-type: none"> <li>En-bloc dialing</li> <li>Local area call (without area code); area code must be set by the PBX</li> <li>Setting of the correct calling number with all available telephone number blocks</li> <li>If two or more locations with different area codes are assigned to one SIP trunk, the number in the PAI header has to be the geographic number which belongs to the user's location. This is very important in case of emergency calls, because Plusnet uses the number of the PAI header to route the emergency call to the proper emergency call center.</li> </ul>	Pass	
4.3.1.1	Normal call	The geographic number in the PAI header corresponds to the location 11 of the user	Pass	Is it possible to configure several PAI per SIP trunk? Yes
4.3.1.2	Normal call	Display of A-number in B-party CLIP (national PSTN)	Pass	
4.3.1.3	Normal call	Display of A-number in B-party CLIP (international PSTN)	Pass	
4.3.1.4	Normal call	Display of A-number in B-party CLIP (mobile)	Pass	
4.3.1.5	Normal call	Call to mobile Outgoing call to mobile => mobile phone turned off	Pass	
4.3.1.6	Normal call	Suppression of A-number => CUR	Pass	
4.3.1.7	Normal call	Outgoing call from analog extension	Pass	
4.3.1.8	Normal call	Outgoing call (> 5 min.) => PSTN	Pass	Hold connection for 5 minutes => RTP still correct? Yes
4.3.2	Normal call	Incoming call from PSTN (national) => PBX <ul style="list-style-type: none"> <li>Test all available telephone number blocks</li> </ul>	Pass	
4.3.2.1	Normal call	Display of A-number => CLIP	Pass	
4.3.2.2	Normal call	Incoming call from mobile => PBX Display of A-number => CLIP	Pass	
4.3.2.3	Normal call	Suppression of A-number => CLIR	Pass	
4.3.3	Normal call	Two simultaneous outgoing/incoming calls	Pass	
4.3.4	Normal call	Enabled feature DND (do not disturb)	Pass	
4.3.5	Normal call	Test call with codec G.711	Pass	
4.3.6	Normal call	Test call with codec G.722 (only SIP <=> SIP)	Fail	PlusNet did not support G.722
4.3.7	Normal call	Test call with codec G.729	Pass	

4.3.2.8	Clip No Screening	Outgoing call from PBX to PSTN <ul style="list-style-type: none"> <li>With feature Clip No Screening</li> <li>Test with several different A-numbers</li> <li>If two or more locations with different area codes are assigned to one SIP trunk, the number in the PAI header has to be the geographic number which belongs to the users location. This is very important in case of emergency calls, because PlusNet uses the number</li> </ul>	Pass	
4.3.2.8.1	Clip No Screening	Despite Clip No Screening the geographic number in the PAI header corresponds to the location of the user	Pass	Is it possible to configure several PAI per SIP trunk? Yes
4.3.2.8.2	Clip No Screening	Display of A-number (NoSClip) at B-party (PSTN)	Pass	
4.3.2.8.3	Clip No Screening	Display of A-number (NoSClip) at B-party (international PSTN; depending on the destination carrier, the NoSClip telephone number may not be displayed in this case)	Pass	
4.3.2.8.3	Clip No Screening	Call made from a PSTN line to an IP-PBX line with call forward to a line within the same IP-PBX, Answer Call. <ul style="list-style-type: none"> <li>Either party terminates call.</li> </ul>	Pass	Does the IP-PBX have configuration settings to send SIP status 181 messages to the soft switch? Yes
4.3.2.8.4	Clip No Screening	Display of A-number (NoSClip) at B-party (mobile)	Pass	
4.3.3.9	Special call situations	Outgoing call PBX => PSTN <ul style="list-style-type: none"> <li>Call is rejected by B-party</li> </ul>	Pass	
4.3.3.10	Special call situations	Outgoing call PBX=> PSTN <ul style="list-style-type: none"> <li>B-party does not answer; clearing after timer</li> </ul>	Pass	
4.3.3.11	Special call situations	Outgoing call PBX => PSTN <ul style="list-style-type: none"> <li>B-party busy; busy tone</li> </ul>	Pass	
4.3.3.12	Special call situations	Outgoing call PBX=> PSTN <ul style="list-style-type: none"> <li>A-party hangs up before call is established (cancel)</li> </ul>	Pass	
4.3.3.13	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>Call is rejected by PBX party</li> </ul>	Pass	
4.3.3.14	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>PBX party does not answer; clearing after timer</li> </ul>	Pass	
4.3.3.15	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>PBX party busy; busy tone</li> </ul>	Pass	
4.3.3.16	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>A-party hangs up before call is established (cancel)</li> </ul>	Pass	
4.3.4.17	Call clearing	Incoming / outgoing call; clearing after established call. Correct clearing on both sides <ul style="list-style-type: none"> <li>PBX party hangs up</li> <li>PSTN party hangs up</li> </ul>	Pass	

4.3.4.18	Call clearing	Interrupting the network connection of the SIP terminal device during a call <ul style="list-style-type: none"> <li>• Call should be cleared correctly</li> </ul>	Pass	
4.4.19	Hold	PBX => PSTN and PSTN => PBX <ul style="list-style-type: none"> <li>• Test call in both directions</li> </ul>	Pass	
4.4.19.1	Hold	Putting an external call on hold in the PBX	Pass	
4.4.19.2	Hold	If applicable, MoH (music on hold) at A-party (PSTN)	Pass	
4.4.19.3	Hold	HOLD RETRIEVE: retrieving the external call	Pass	
4.4.19.4	Hold	Clearing the connection of the A-party while it is put on hold	Pass	
4.4.20	Hold	PBX => PSTN and PSTN => PBX <ul style="list-style-type: none"> <li>• Test call in both directions</li> </ul>	Pass	
4.4.20.1	Hold	Putting an external call on hold in the PSTN	Pass	
4.4.20.2	Hold	If applicable, MoH (music on hold) at A-party (PBX)	Pass	
4.4.20.3	Hold	HOLD RETRIEVE: retrieving the external call	Pass	
4.4.20.4	Hold	Clearing the connection of the A-party while it is put on hold	Pass	
4.5.21	Call transfer	Internal call is transferred to external party: internal => PBX => external	Pass	
4.5.21.1	Call transfer	Call transfer from PBX party => PSTN party with announcement (attendant transfer)	Pass	
4.5.21.2	Call transfer	Call transfer from PBX party => PSTN party without announcement (blind transfer)	Pass	
4.5.21.3	Call transfer	Call transfer from PBX party => PSTN party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• Call is rejected or not answered</li> </ul>	Pass	
4.5.21.4	Call transfer	Call transfer from PBX party => PSTN party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• PSTN party busy</li> </ul>	Pass	
4.5.22	Call transfer	Transferred call from external party to PBX: PSTN => PBX	Pass	
4.5.22.1	Call transfer	Call transfer from PSTN => PBX party with announcement (attendant transfer)	Pass	
4.5.22.2	Call transfer	Call transfer from PSTN => PBX party without announcement (blind transfer)	Pass	
4.5.22.3	Call transfer	Call transfer from PSTN => PBX party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• Call is rejected or not answered</li> </ul>	Pass	
4.5.22.4	Call transfer	Call transfer from PSTN => PBX party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• PBX party busy</li> </ul>	Pass	
4.5.23	Call transfer	Call from external party transferred to another external party: external => PBX => external	Pass	
4.5.23.1	Call transfer	PSTN => PBX party => PSTN with announcement (attendant transfer)	Pass	
4.5.23.2	Call transfer	PSTN => PBX party => PSTN without announcement (blind transfer)	Pass	
4.5.23.3	Call transfer	PSTN => PBX party => PSTN without announcement (blind transfer) <ul style="list-style-type: none"> <li>• Call is rejected or not answered</li> </ul>	Pass	
4.5.23.4	Call transfer	PSTN => PBX party => PSTN without announcement (blind transfer) <ul style="list-style-type: none"> <li>• PSTN party busy</li> </ul>	Pass	
4.6.24	Call diversion	PBX party CFU to external party (PSTN)	Pass	

4.6.24.1	Call diversion	Internal call (CFU) => PSTN	Pass	
4.6.24.2	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.24.3	Call diversion	A-party clears in ring phase	Pass	
4.6.24.4	Call diversion	External => PBX party (CFU) => PSTN	Pass	
4.6.24.5	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.24.6	Call diversion	A-party clears in ring phase	Pass	
4.6.25	Call diversion	PBX party CFNR to external party	Pass	
4.6.25.1	Call diversion	Internal call (CFNR) => PSTN	Pass	
4.6.25.2	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.25.3	Call diversion	A-party clears in ring phase	Pass	
4.6.25.4	Call diversion	External => PBX party (CFNR) => PSTN	Pass	
4.6.25.5	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.25.6	Call diversion	A-party clears in ring phase	Pass	
4.6.26	Call diversion	PBX party CFB to external party	Pass	
4.6.26.1	Call diversion	Internal call (CFB) => PSTN	Pass	
4.6.26.2	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.26.3	Call diversion	A-party clears in ring phase	Pass	
4.6.26.4	Call diversion	External => PBX party (CFB) => PSTN	Pass	
4.6.26.5	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.26.6	Call diversion	A-party clears in ring phase	Pass	
4.6.27	Call diversion	External party (PSTN, mobile, etc.) CFU to PBX party:	Pass	
4.6.27.1	Call diversion	External (CFU) => PBX party	Pass	
4.6.27.2	Call diversion	PBX party busy, rejects call, does not answer	Pass	
4.6.27.3	Call diversion	A-party clears in ring phase	Pass	
4.6.27.4	Call diversion	External (CFNR) => PBX party	Pass	
4.6.27.5	Call diversion	PBX party busy, rejects call, does not answer	Pass	

4.6.27.6	Call diversion	A-party clears in ring phase	Pass	
4.6.28	Call diversion	External party (PSTN, mobile, etc.) CFB to PBX party:	Pass	
4.6.28.1	Call diversion	PBX party busy, rejects call, does not answer	Pass	
4.6.28.2	Call diversion	A-party clears in ring phase	Pass	
4.6.29	Call diversion	Call deflection: diversion during the ring phase	Pass	
4.6.29.1.1	Call diversion	Internal call PBX party CD => PBX party	Pass	
4.6.29.1.2	Call diversion	PBX party busy	Pass	
4.6.29.1.3	Call diversion	PBX party does not answer	Pass	
4.6.29.1.4	Call diversion	A-party clears in ring phase	Pass	
4.6.29.2.1	Call diversion	External call to PBX party CD => PBX party	Pass	
4.6.29.2.2	Call diversion	PBX party busy	Pass	
4.6.29.2.3	Call diversion	PBX party does not answer	Pass	
4.6.29.2.4	Call diversion	A-party clears in ring phase	Pass	
4.6.29.3.1	Call diversion	External call to PBX party CD => external PSTN party	Pass	
4.6.29.3.2	Call diversion	PSTN party busy	Pass	
4.6.29.3.3	Call diversion	PSTN party does not answer	Pass	
4.6.29.3.4	Call diversion	A-party clears in ring phase	Pass	
4.7.30	Call waiting	Incoming call during active internal call	Pass	
4.7.30.1	Call waiting	Call waiting tone	Pass	
4.7.30.2	Call waiting	Display of number of waiting party	Pass	
4.7.30.3	Call waiting	Acceptance of waiting call	Pass	
4.7.30.4	Call waiting	Putting the waiting call on hold	Pass	
4.7.30.5	Call waiting	Retrieve of waiting call	Pass	
4.7.30.6	Call waiting	Holding the 2nd call	Pass	
4.7.30.7	Call waiting	Terminating the active call	Pass	
4.7.30.8	Call waiting	Disregarding the waiting call	Pass	
4.7.30.9	Call waiting	Rejecting the waiting call	Pass	
4.8.31	3-party conference	Establishing a conference according to the operating instructions of the PBX Internal - internal - external	Pass	

4.8.31.1	3-party conference	Selecting a party (internal or external); 3rd party is put on hold <ul style="list-style-type: none"> <li>Switching to 3rd party; 2nd party is put on hold</li> <li>Reactivating the conference</li> <li>Clearing one party (internal or external)</li> <li>Terminating the conference</li> </ul>	Pass	
4.8.32	3-party conference	Establishing a conference according to the operating instructions of the PBX internal - external - external	Pass	
4.8.32.1	3-party conference	Selecting a party (external); 3rd party is put on hold <ul style="list-style-type: none"> <li>Switching to 3rd party; 2nd party is put on hold</li> <li>Reactivating the conference</li> <li>Clearing one party (external)</li> <li>Terminating the conference</li> </ul>	Pass	
4.9.33	Pick up	Picking up a call from another extension of the PBX	Pass	
4.10.34	Call list	Entries in the call list <ul style="list-style-type: none"> <li>Incoming from PSTN</li> <li>Incoming from mobile</li> <li>Incoming CLIR</li> <li>Dialing prefix for outside line in the call list</li> </ul>	Pass	
4.10.35	Call list	Call-back from call list <ul style="list-style-type: none"> <li>To PSTN</li> <li>To mobile</li> </ul>	Pass	
4.11.36	DTMF	DTMF support (G.711) <ul style="list-style-type: none"> <li>PSTN =&gt; PBX (SIP terminal device)</li> <li>PSTN =&gt; PBX (analog or system terminal device)</li> <li>PBX (SIP terminal device) =&gt; PSTN</li> <li>PBX (analog or system terminal device) =&gt; PSTN</li> </ul>	Pass	
4.11.37	DTMF	DTMF support (G.729) <ul style="list-style-type: none"> <li>- PSTN =&gt; PBX (SIP terminal device)</li> <li>- PSTN =&gt; PBX (analog or system terminal device)</li> <li>- PBX (SIP terminal device) =&gt; PSTN</li> <li>- PBX (analog or system terminal device) =&gt; PSTN</li> </ul>	Pass	
4.12.38	Fax	Fax reception (G.711 only)	Pass	
4.12.38.1	Fax	Network-side T.38 re-invite rejected by PBX (response 488) or only G.711 codec is confirmed <ul style="list-style-type: none"> <li>One-page fax</li> <li>Multi-page fax (at least 5 pages)</li> </ul>	Pass	
4.12.39	Fax	Fax sending (G.711 only)	Pass	
4.12.39.1	Fax	Network-side T.38 re-invite rejected by PBX (response 488) or only G.711 codec is confirmed <ul style="list-style-type: none"> <li>One-page fax</li> <li>Multi-page fax (at least 5 pages)</li> </ul>	Pass	
4.12.40	Fax	Fax reception via T.38	Pass	
4.12.40.1	Fax	Re-invite to T.38 by PBX or network <ul style="list-style-type: none"> <li>One-page fax</li> <li>Multi-page fax (at least 5 pages)</li> </ul>	Pass	
4.12.41	Fax	Fax sending via T.38 (not possible in conjunction with the encryption option)	Pass	

4.12.41.1	Fax	Re-invite to T.38 by PBX or network <ul style="list-style-type: none"> <li>• T.38-only invites are not supported</li> <li>• One-page fax</li> <li>• Multi-page fax (at least 5 pages)</li> </ul>	Pass	
5.42	Redundancy	Test of redundancy: <ul style="list-style-type: none"> <li>• Only if redundant connection is possible on the PBX side</li> <li>• This requires at least two PBX servers to be online on the SIP trunk in registration mode, or exactly two PBX servers in peering mode.</li> </ul>	Pass	
5.42.1	Redundancy	<ol style="list-style-type: none"> <li>1. Register all available PBX systems the Plusnet SBC.</li> <li>2. Calls from Plusnet =&gt; PBX are routed by round robin procedure</li> <li>3. Deliberately de-register one PBX system =&gt; no more calls are routed to this PBX</li> <li>4. and/or disconnect the PBX system from LAN =&gt; after the register expire period, no more calls are routed to this PBX.</li> <li>5. Calls are only routed to the remaining PBX systems.</li> </ol>	Pass	

## Conclusion

---

Ribbon successfully completed configuration and testing for the Ribbon SBC Core to interoperate with a Cisco Unified Communication Manager (CUCM) system and a PlusNet SIP trunk. All feature and serviceability issues were completed with the noted exceptions and observations.

## Appendix A

---

- We need to remove the next Parameter from PLUSNET Invite: INVITE sip:+4991147726260@10.10.216.211:5060;**dtg=CUCM**;reg-info=108 SIP/2.0 because this parameter will impact our Routing from CUCM side:



## DTGREMOVE

```
set profiles signaling sipAdaptorProfile PLUSNETDEL state enabled
set profiles signaling sipAdaptorProfile PLUSNETDEL advancedSMM disabled
set profiles signaling sipAdaptorProfile PLUSNETDEL profileType messageManipulation
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 applyMatchHeader all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 type message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 message messageTypes all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header name P-Called-Party-ID
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header value ""
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header numberOfInstances qualifier undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 operation delete
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 paramType undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 to
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 to type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 to value P-Called-Party-ID
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 applyMatchHeader one
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 type message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 message messageTypes all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header name Request-line
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header value ""
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header numberOfInstances qualifier undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 type parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter condition exist
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter paramType uri
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter name dtg
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter value ""
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 type parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 operation delete
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 paramType uri
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 to
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 to type parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 to value dtg

#Assign the Adapter Profile in Trunk as incoming
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling messageManipulation inputAdapterProfile
PLUSNETDEL
```

- For the test case where you need to modify the PAI, you need to apply the next AdaptorProfile:

## CHANGEPAI

```
set profiles signaling sipAdaptorProfile PAID_CHANGE state enabled
set profiles signaling sipAdaptorProfile PAID_CHANGE advancedSMM disabled
set profiles signaling sipAdaptorProfile PAID_CHANGE profileType messageManipulation
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 applyMatchHeader one
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 type message
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message methodTypes [ invite ]
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 type header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header name P-Asserted-Identity
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header value ""
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 type header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 operation modify
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 headerInfo fieldValue
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 paramType undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 from
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 from type value
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 from value <sip:+4932211057459@10.10.216.211:5060>
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 to
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 to type header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 to value P-Asserted-Identity

# Apply this AdaptorProfile only if you need to modify the PAI in the outgoing trunk PLUSNET
```

- For the test case where you need to remove "+" from URI and To: in INVITE for CUCM, you need to apply the next AdaptorProfile:

## CHANGEPAI

```
set profiles signaling sipAdaptorProfile REMOVE_PLUS state enabled
set profiles signaling sipAdaptorProfile REMOVE_PLUS advancedSMM disabled
set profiles signaling sipAdaptorProfile REMOVE_PLUS profileType messageManipulation
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message methodTypes [ invite ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header name to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token tokenType uriusername
```

```

set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 operation regdel
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 regexp matchInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message methodTypes [ invite ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header name request-line
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token tokenType uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 operation regdel
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 regexp matchInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message methodTypes [ cancel ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header name to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token tokenType uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token regexp numMatch match
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 operation regdel

```

```

set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 from
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 from type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 from tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 regexp matchInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message methodTypes [ cancel ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header name request-line
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token tokenType uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token regexp numMatch match
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 operation regdel
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 from
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 from type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 from tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 regexp matchInstance all

#Assign the Adapter Profile in Trunk as outgoing
set addressContext default zone CUCM sipTrunkGroup CUCM1 signaling messageManipulation outputAdapterProfile
REMOVE_PLUS

```

## Table of Contents

- Document Overview
- Introduction
  - Audience
  - Equipment
  - Topology Configuration
  - Support
  - Third-Party Product Features
  - Verify License
- CUCM 12.0.1 Configuration
  - 1. Security Profile
  - 2. SIP Profile
  - 3. SIP Trunk
  - 4. Route Group
  - 5. Route List
  - 6. Route Pattern
- Ribbon SBC Core Series Configuration
- Test Results
- Conclusion
- Appendix A
- Document Overview
- Introduction
  - Audience
  - Equipment
  - Topology Configuration
  - Support
  - Third-Party Product Features
  - Verify License
- CUCM 12.0.1 Configuration
  - 1. Security Profile
  - 2. SIP Profile
  - 3. SIP Trunk
  - 4. Route Group
  - 5. Route List
  - 6. Route Pattern
- Ribbon SBC Core Series Configuration
- Test Results
- Conclusion
- Appendix A

# Document Overview

Use this configuration information to connect a Ribbon Session Border Controller (SBC) with a Cisco Unified Communication Manager (CUCM) system and a PlusNet SIP trunk.

This configuration information is applicable to the Ribbon SBC SWe, SBC 5XX0 series and SBC 7XX0 series.

For more information about the Ribbon SBC, refer to your Ribbon SBC product documentation <http://ribboncommunications.com/>.

## Introduction

The interoperability compliance testing focuses on verifying inbound and outbound call flows between a Ribbon Core SBC and Cisco Unified Communication Manager (CUCM).

### Audience

This technical document is intended for telecommunication engineers that configure the Ribbon SBC Core aspects of the PlusNet SIP trunk group with the Cisco Unified Communication Manager (CUCM). This configuration requires access to a third-party server and the Ribbon SBC Web browser user interface, Embedded Management Application (EMA). Engineers require a basic understanding of IP routing, SIP, RTP, and TLS to configure and troubleshoot this solution.

### Equipment

The following table lists the equipment and software used to complete the tests that a PlusNet SIP trunk requires to connect with Ribbon software.

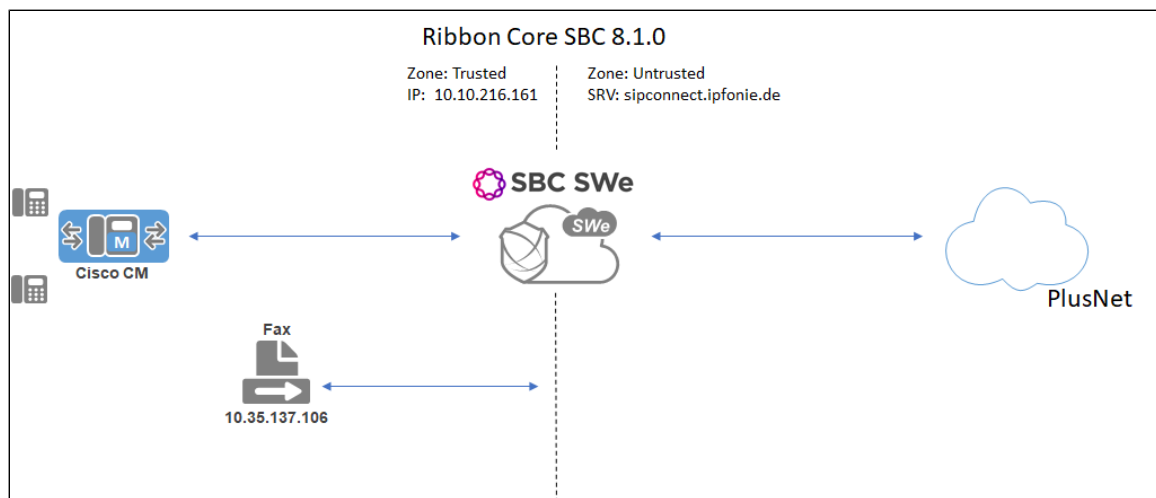
Table 3: Equipment

	Equipment	Software Version
Ribbon Communications	Ribbon SBC SWe	V08.01.00-R000
	ConnexIP OS	V07.01.00-R000
	SonusDB	V08.01.00-R000
	EMA	V08.01.00-R000
	SBX	V08.01.00-R000
Third-party Equipment	Cisco Unified Communication Manager (CUCM)	12.0.1.21900-7
	Cisco 7841	sip78xx.11-7-1-17
	Fax Machine VentaFax	7.6.243.616

## Topology Configuration

The following topology illustrates the network connection between the Microsoft Skype for Business 2015, Virgin Media network and the Ribbon SBC Core.

Figure 15: Topology



## Support

For issues with connectivity or configuration between Ribbon SBC, PlusNet SIP trunk, and Cisco Unified Communication Manager (CUCM), contact Ribbon Support in either of the following ways:

- Global Support Assistance Center +1-978-614-8589 or +1-888-391-3434 (English language Support)
- Web: <https://ribboncommunications.com/services/ribbon-support-portal-login>

## Third-Party Product Features

We tested the following features between Cisco Unified Communication Manager (CUCM) and PlusNet:

- Basic Calls
- Calling Number Format/Called Number Format
- Call Disconnects
- Call Error Handling
- CLIP/CLIR
- Call Forwarding
- Call Hold
- Conference
- Call Park
- Call Waiting
- DTMF
- Fax
- Long Call

## Verify License

- POL-BASE

## CUCM 12.0.1 Configuration


The following new configurations are included in this section:

1. [Security Profile](#)
2. [SIP Profile](#)
3. [SIP Trunk](#)
4. [Route Group](#)
5. [Route List](#)
6. [Route Pattern](#)

### 1. Security Profile






Select **System > Security > SIP Trunk Security Profile**


**Figure 16:** SIP Trunk Security Profile

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**SIP Trunk Security Profile Configuration**

Save  Delete  Copy  Reset  Apply Config  Add New

**Status**  
 Status: Ready

**SIP Trunk Security Profile Information**

Name \*

Non Secure SIP Trunk Profile

Description

Non Secure SIP Trunk Profile authenticated by null String

Device Security Mode

Non Secure ▾

Incoming Transport Type\*

TCP+UDP ▾

Outgoing Transport Type

UDP ▾

☐ Enable Digest Authentication

Nonce Validity Time (mins)\*

600

X.509 Subject Name

Incoming Port\*

5060

☐ Enable Application level authorization

☐ Accept presence subscription

☒ Accept out-of-dialog refer\*\*

☒ Accept unsolicited notification

☒ Accept replaces header

☒ Transmit security status

☐ Allow charging header

SIP V.150 Outbound SDP Offer Filtering\*

Use Default Filter ▾

Save Delete Copy Reset Apply Config Add New



## 2. SIP Profile

Select **Device > Device Settings > SIP Profile**

Figure 17: SIP Profile

CISCO

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

SIP Profile Configuration

Save

✖ Delete

📄 Copy

🔄 Reset

🔧 Apply Config

➕ Add New

Status

📘 Status: Ready

📘 All SIP devices using this profile must be restarted before any changes will take affect.

SIP Profile Information

Name\*

SIP OPTIONS Profile

Description

Default SIP Profile

Default MTP Telephony Event Payload Type\*

101

Early Offer for G.Clear Calls\*

Disabled

User-Agent and Server header information\*

Send Unified CM Version Information as User-Ager

Version in User Agent and Server Header\*

Major And Minor

Dial String Interpretation\*

Phone number consists of characters 0-9, \*, #, an

Confidential Access Level Headers\*

Disabled

☐ Redirect by Application

☐ Disable Early Media on 180

☐ Outgoing T.38 INVITE include audio mline

☐ Offer valid IP and Send/Receive mode only for T.38 Fax Relay

☐ Use Fully Qualified Domain Name in SIP Requests

☐ Assured Services SIP conformance

☐ Enable External QoS\*\*

SDP Information

SDP Session-level Bandwidth Modifier for Early Offer and Re-invites\*

TIAS and AS

SDP Transparency Profile

Pass all unknown SDP attributes

Accept Audio Codec Preferences in Received Offer\*

Default

☐ Require SDP Inactive Exchange for Mid-Call Media Change

☐ Allow RR/RS bandwidth modifier (RFC 3556)

Figure 18: SIP Profile1

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ | Call Routing ▾ | Media Resources ▾ | Advanced Features ▾ | Device ▾ | Application ▾ | User Management ▾ | Bulk Administration ▾ | Help ▾

### SIP Profile Configuration


Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

---

#### Parameters used in Phone







Timer Invite Expires (seconds)*	<input type="text" value="180"/>
Timer Register Delta (seconds)*	<input type="text" value="5"/>
Timer Register Expires (seconds)*	<input type="text" value="3600"/>
Timer T1 (msec)*	<input type="text" value="500"/>
Timer T2 (msec)*	<input type="text" value="4000"/>
Retry INVITE*	<input type="text" value="6"/>
Retry Non-INVITE*	<input type="text" value="10"/>
Media Port Ranges	<input checked="" type="radio"/> Common Port Range for Audio and Video <input type="radio"/> Separate Port Ranges for Audio and Video
Start Media Port*	<input type="text" value="16384"/>
Stop Media Port*	<input type="text" value="32766"/>
DSCP for Audio Calls	<input type="text" value="Use System Default"/> ▾
DSCP for Video Calls	<input type="text" value="Use System Default"/> ▾
DSCP for Audio Portion of Video Calls	<input type="text" value="Use System Default"/> ▾
DSCP for TelePresence Calls	<input type="text" value="Use System Default"/> ▾
DSCP for Audio Portion of TelePresence Calls	<input type="text" value="Use System Default"/> ▾
Call Pickup URI*	<input type="text" value="x-cisco-serviceuri-pickup"/>
Call Pickup Group Other URI*	<input type="text" value="x-cisco-serviceuri-opickup"/>
Call Pickup Group URI*	<input type="text" value="x-cisco-serviceuri-gpickup"/>
Meet Me Service URI*	<input type="text" value="x-cisco-serviceuri-meetme"/>
User Info*	<input type="text" value="None"/> ▾
DTMF DB Level*	<input type="text" value="Nominal"/> ▾
Call Hold Ring Back*	<input type="text" value="Off"/> ▾
Anonymous Call Block*	<input type="text" value="Off"/> ▾
Caller ID Blocking*	<input type="text" value="Off"/> ▾
Do Not Disturb Control*	<input type="text" value="User"/> ▾
Telnet Level for 7940 and 7960*	<input type="text" value="Disabled"/> ▾
Resource Priority Namespace	<input type="text" value="&lt; None &gt;"/> ▾
Timer Keep Alive Expires (seconds)*	<input type="text" value="120"/>
Timer Subscribe Expires (seconds)*	<input type="text" value="120"/>
Timer Subscribe Delta (seconds)*	<input type="text" value="5"/>

**Figure 19: SIP Profile2**


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ | Call Routing ▾ | Media Resources ▾ | Advanced Features ▾ | Device ▾ | Application ▾ | User Management ▾ | Bulk Administration ▾ | Help ▾



### SIP Profile Configuration

 Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Maximum Redirections\*   
Off Hook To First Digit Timer (milliseconds)\*   
Call Forward URI\*   
Speed Dial (Abbreviated Dial) URI\*

☒ Conference Join Enabled  
☐ RFC 2543 Hold  
☒ Semi Attended Transfer  
☐ Enable VAD  
☐ Stutter Message Waiting  
☐ MLPP User Authorization


**Normalization Script**  
Normalization Script < None > ▾  
☐ Enable Trace

	Parameter Name	Parameter Value	
1	<input type="text"/>	<input type="text"/>	 

**Incoming Requests FROM URI Settings**  
Caller ID DN   
Caller Name







**Trunk Specific Configuration**  
Reroute Incoming Request to new Trunk based on\* Never ▾  
Resource Priority Namespace List < None > ▾  
SIP Rel1XX Options\* Disabled ▾  
Video Call Traffic Class\* Mixed ▾  
Calling Line Identification Presentation\* Default ▾  
Session Refresh Method\* Invite ▾  
Early Offer support for voice and video calls\* Disabled (Default value) ▾  
☐ Enable ANAT  
☐ Deliver Conference Bridge Identifier  
☐ Allow Passthrough of Configured Line Device Caller Information  
☐ Reject Anonymous Incoming Calls

**Figure 20:** SIP Profile3


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

SIP Profile Configuration

 Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Reroute Incoming Request to new Trunk based on\* Never ▾  
Resource Priority Namespace List < None > ▾  
SIP Rel1XX Options\* Disabled ▾  
Video Call Traffic Class\* Mixed ▾  
Calling Line Identification Presentation\* Default ▾  
Session Refresh Method\* Invite ▾  
Early Offer support for voice and video calls\* Disabled (Default value) ▾  
☐ Enable ANAT  
☐ Deliver Conference Bridge Identifier  
☐ Allow Passthrough of Configured Line Device Caller Information  
☐ Reject Anonymous Incoming Calls  
☐ Reject Anonymous Outgoing Calls  
☐ Send ILS Learned Destination Route String  
☐ Connect Inbound Call before Playing Queuing Announcement

**SIP OPTIONS Ping**  
☒ Enable OPTIONS Ping to monitor destination status for Trunks with Service Type "None (Default)"  
Ping Interval for In-service and Partially In-service Trunks (seconds)\* 60  
Ping Interval for Out-of-service Trunks (seconds)\* 120  
Ping Retry Timer (milliseconds)\* 500  
Ping Retry Count\* 6

**SDP Information**  
☐ Send send-receive SDP in mid-call INVITE  
☐ Allow Presentation Sharing using BFCP  
☐ Allow iX Application Media  
☐ Allow multiple codecs in answer SDP

Save Delete Copy Reset Apply Config Add New

### 3. SIP Trunk

Select **Device > Trunk > Add New**

**Figure 21:** SIP Trunk

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Trunk Configuration**

Save
 Delete
 Reset
 Add New

**Status**  
 Status: Ready

**SIP Trunk Status**  
**Service Status:** Full Service  
**Duration:** Time In Full Service: 28 days 23 hours 36 minutes

**Device Information**  
Product: SIP Trunk  
Device Protocol: SIP  
Trunk Service Type: None(Default)  
Device Name\*: Rewa  
Description: Rewa  
Device Pool\*: Sonus\_DP ▾  
Common Device Configuration: < None > ▾  
Call Classification\*: Use System Default ▾  
Media Resource Group List: < None > ▾  
Location\*: Hub\_None ▾  
AAR Group: < None > ▾  
Tunneled Protocol\*: None ▾  
QSIG Variant\*: No Changes ▾  
ASN.1 ROSE OID Encoding\*: No Changes ▾  
Packet Capture Mode\*: None ▾  
Packet Capture Duration: 0  
☐ Media Termination Point Required  
☒ Retry Video Call as Audio  
☐ Path Replacement Support  
☐ Transmit UTF-8 for Calling Party Name  
☐ Transmit UTF-8 Names in QSIG APDU  
☐ Unattended Port  
☐ SRTP Allowed - When this flag is checked, Encrypted TLS needs to be configured in the network to provide end to end security. Failure to do so will expose keys and other information.  
Consider Traffic on This Trunk Secure\*: When using both sRTP and TLS ▾  
Route Class Signaling Enabled\*: Default ▾  
Use Trusted Relay Point\*: Default ▾

**Figure 22: SIP Trunk1**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Trunk Configuration**

Save
 Delete
 Reset
 Add New

☐ PSTN Access  
☐ Run On All Active Unified CM Nodes

**Intercompany Media Engine (IME)**  
E.164 Transformation Profile: < None > ▾

**MLPP and Confidential Access Level Information**  
MLPP Domain: < None > ▾  
Confidential Access Mode: < None > ▾  
Confidential Access Level: < None > ▾

**Call Routing Information**  
☒ Remote-Party-Id  
☒ Asserted-Identity  
Asserted-Type\*: Default ▾  
SIP Privacy\*: Default ▾  
Trust Received Identity\*: Trust All (Default) ▾

**Inbound Calls**  
Significant Digits\*: All ▾  
Connected Line ID Presentation\*: Default ▾  
Connected Name Presentation\*: Default ▾  
Calling Search Space: < None > ▾  
AAR Calling Search Space: < None > ▾  
Prefix DN:  
☐ Redirecting Diversion Header Delivery - Inbound

**Incoming Calling Party Settings**  
If the administrator sets the prefix to Default this indicates call processing will use prefix at the next level setting (DevicePool/Service Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix assigned.  
[Clear Prefix Settings](#) | [Default Prefix Settings](#)

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
Incoming Number	Default ▾	0	< None > ▾	<input checked="" type="checkbox"/>

**Figure 23: SIP Trunk2**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

administr

System
Call Routing
Media Resources
Advanced Features
Device
Application
User Management
Bulk Administration
Help

Trunk Configuration

Save
Delete
Reset
Add New

Incoming Called Party Settings

If the administrator sets the prefix to Default this indicates call processing will use prefix at the next level setting (DevicePool/Service Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix assigned.

Clear Prefix Settings

Default Prefix Settings

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
Incoming Number	Default	0	< None >	<input checked="" type="checkbox"/>

Connected Party Settings

Connected Party Transformation CSS < None >

☒ Use Device Pool Connected Party Transformation CSS

Outbound Calls

Called Party Transformation CSS < None >

☒ Use Device Pool Called Party Transformation CSS

Calling Party Transformation CSS < None >

☒ Use Device Pool Calling Party Transformation CSS

Calling Party Selection\* Originator

Calling Line ID Presentation\* Default

Calling Name Presentation\* Default

Calling and Connected Party Info Format\* Deliver DN only in connected party

☐ Redirecting Diversion Header Delivery - Outbound

Redirecting Party Transformation CSS < None >

☒ Use Device Pool Redirecting Party Transformation CSS

Caller Information

Caller ID DN

Caller Name

☐ Maintain Original Caller ID DN and Caller Name in Identity Headers

**Figure 24: SIP Trunk3**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

administr

System
Call Routing
Media Resources
Advanced Features
Device
Application
User Management
Bulk Administration
Help

Trunk Configuration

Save
Delete
Reset
Add New

SIP Information

Destination

☐ Destination Address is an SRV

	Destination Address	Destination Address IPv6	Destination Port	Status	Status Reason	Duration
1*	10.35.179.136		5060	up		Time Up: 0 day 23 hours 36 minutes

MTP Preferred Originating Codec\* 711ulaw

SLP Presence Group\* Standard Presence group

SIP Trunk Security Profile\* Non Secure SIP Trunk Profile

Rerouting Calling Search Space < None >

Out-Of-Dialog Refer Calling Search Space < None >

SUBSCRIBE Calling Search Space < None >

SIP Profile\* Standard SIP Profile - OPTIONS Enable [View Details](#)

DTMF Signaling Method\* No Preference

Normalization Script

Normalization Script < None >

☐ Enable Trace

Parameter Name	Parameter Value
1	

Recording Information

☒ None

☐ This trunk connects to a recording-enabled gateway

☐ This trunk connects to other clusters with recording-enabled gateways

Geolocation Configuration

Geolocation < None >

Geolocation Filter < None >


☐ Send Geolocation Information

Save
Delete
Reset
Add New

## 4. Route Group




Select **Call Routing** > **Route/Hunt** > **Route Group** > **Add New**


Figure 25: Route Group

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Route Group Configuration

 Save  Delete  Add New

**Status**  
 Status: Ready

**Route Group Information**  
Route Group Name\*   
Distribution Algorithm\*

**Route Group Member Information**



**Find Devices to Add to Route Group**  
Device Name contains    
Available Devices\*\*  




CUBE  
Rewa  
USTX-SBCLAB01



  
Port(s)



**Current Route Group Members**  
Selected Devices (ordered by priority)\* 

Rewa (All Ports)



   
  
Removed Devices\*\*\*  



**Route Group Members**  
 [Rewa](#)  


Confidential and Proprietary. Copyright © 2020-2023 Ribbon Communications Operating Company, Inc. © 2020-2023 ECI Telecom Ltd.

## 5. Route List

Select **Call Routing > Route/Hunt > Route List > Add New**

Figure 26: Route List

Cisco

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Route List Configuration

Save

Delete

Copy

Reset

Apply Config

Add New

Status

Status: Ready

Route List Information

Registration:

Registered with Cisco Unified Communications Manager UCM12.vo.sonusnet.com

IPv4 Address:

10.35.180.111

☒ Device is trusted

Name\*

Rewa\_SBC

Description

Rewa\_SBC

Cisco Unified Communications Manager Group\*

UCM\_UCMG ▾

☒ Enable this Route List (change effective on Save; no reset required)

☐ Run On All Active Unified CM Nodes

Route List Member Information

Selected Groups\*\*

Rewa\_SBC

▼

▼

▲

Add Route Group

Removed Groups\*\*\*

▼

▼

▲

Route List Details

Rewa\_SBC

Save

Delete

Copy

Reset

Apply Config

Add New

\*- indicates required item.

\*\*Ordered by highest priority

\*\*\*Will be removed from Route List when you click Save

Confidential and Proprietary. Copyright © 2020-2023 Ribbon Communications Operating Company, Inc. © 2020-2023 ECI Telecom Ltd.



## 6. Route Pattern

Select **Call Routing > Route/Hunt > Route Pattern > Add New**

Figure 27: Route Pattern

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Route Pattern Configuration

Save

Delete

Copy

Add New

Status

Status: Ready

Pattern Definition

Route Pattern\*

491

Route Partition

< None >

Description

PlusNet

Numbering Plan

-- Not Selected --

Route Filter

< None >

MLPP Precedence\*

Default

☐ Apply Call Blocking Percentage

Resource Priority Namespace Network Domain

< None >

Route Class\*

Default

Gateway/Route List\*

Rewa\_SBC

(Edit)

Route Option

☒ Route this pattern

☐ Block this pattern

No Error

Call Classification\*

OffNet

External Call Control Profile

< None >

☐ Allow Device Override

☒ Provide Outside Dial Tone

☐ Allow Overlap Sending

☐ Urgent Priority

☐ Require Forced Authorization Code

Authorization Level\*

0

☐ Require Client Matter Code

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation\*

Default

Calling Name Presentation\*

Default


Calling Party Number Type\*

Cisco CallManager

Calling Party Numbering Plan\*





Cisco CallManager

Figure 28: Route Pattern1


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Route Pattern Configuration

 Save
 Delete
 Copy
 Add New

☐ Allow Device Override
☒ Provide Outside Dial Tone
☐ Allow Overlap Sending
☐ Urgent Priority

☐ Require Forced Authorization Code

Authorization Level\*

☐ Require Client Matter Code

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation\*

Calling Name Presentation\*

Calling Party Number Type\*

Calling Party Numbering Plan\*

Connected Party Transformations

Connected Line ID Presentation\*

Connected Name Presentation\*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type\*

Called Party Numbering Plan\*

ISDN Network-Specific Facilities Information Element

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input type="text" value="&lt; Not Exist &gt;"/>	<input type="text"/>

Save Delete Copy Add New

## Ribbon SBC Core Series Configuration

The follow configuration applies to the SWe, 5xxx and 7xxx series Core SBC. It is included in the Cisco Unified Communication Manager and PlusNet SIP trunk configuration.

### SBC Core Configuration

```

configure
#DSP Resources
set system mediaProfile compression 90 tone 10
commit

#Element Routing Priority
set global callRouting routingLabel TO_CUCM overflowNumber ""
set global callRouting routingLabel TO_CUCM overflowNOA none
set global callRouting routingLabel TO_CUCM overflowNPI none
set global callRouting routingLabel TO_CUCM routePrioritizationType sequence
set global callRouting routingLabel TO_CUCM action routes
set global callRouting routingLabel TO_CUCM numRoutesPerCall 10
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 trunkGroup CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 ipPeer CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 testing normal
set global callRouting routingLabel TO_PLUSNET overflowNumber ""
set global callRouting routingLabel TO_PLUSNET overflowNOA none
set global callRouting routingLabel TO_PLUSNET overflowNPI none
set global callRouting routingLabel TO_PLUSNET routePrioritizationType sequence
set global callRouting routingLabel TO_PLUSNET action routes
set global callRouting routingLabel TO_PLUSNET numRoutesPerCall 10
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 trunkGroup PLUSNET
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 ipPeer PLUSNET

```

```

set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 testing normal
set global callRouting routingLabel TO_VENTAFAX overflowNumber ""
set global callRouting routingLabel TO_VENTAFAX overflowNOA none
set global callRouting routingLabel TO_VENTAFAX overflowNPI none
set global callRouting routingLabel TO_VENTAFAX routePrioritizationType sequence
set global callRouting routingLabel TO_VENTAFAX action routes
set global callRouting routingLabel TO_VENTAFAX numRoutesPerCall 10
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 trunkGroup VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 ipPeer VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 testing normal
commit

#PathCheck Profile
set profiles services pathCheckProfile CUCM_OPTIONS protocol sipOptions
set profiles services pathCheckProfile CUCM_OPTIONS sendInterval 60
set profiles services pathCheckProfile CUCM_OPTIONS replyTimeoutCount 6
set profiles services pathCheckProfile CUCM_OPTIONS recoveryCount 6
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference1 udp
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference2 tcp
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference3 tls-tcp
set profiles services pathCheckProfile CUCM_OPTIONS transportPreference preference4 sctp
commit

set profiles services pathCheckProfile PLUSNET_OPTIONS protocol sipOptions
set profiles services pathCheckProfile PLUSNET_OPTIONS sendInterval 60
set profiles services pathCheckProfile PLUSNET_OPTIONS replyTimeoutCount 6
set profiles services pathCheckProfile PLUSNET_OPTIONS recoveryCount 6
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference1 udp
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference2 tcp
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference3 tls-tcp
set profiles services pathCheckProfile PLUSNET_OPTIONS transportPreference preference4 sctp
commit

#Codecs
set profiles media codecEntry G711_PlusNet codec g711
set profiles media codecEntry G711_PlusNet packetSize 10
set profiles media codecEntry G711_PlusNet fax failureHandling continue
set profiles media codecEntry G711_PlusNet fax toneTreatment faxRelay
set profiles media codecEntry G711_PlusNet fax honorToneDetection disable
set profiles media codecEntry G711_PlusNet modem failureHandling continue
set profiles media codecEntry G711_PlusNet modem toneTreatment none
set profiles media codecEntry G711_PlusNet modem honorToneDetection disable
set profiles media codecEntry G711_PlusNet law deriveFromOtherLeg
set profiles media codecEntry G711_PlusNet dtmf relay rfc2833
set profiles media codecEntry G711_PlusNet dtmf removeDigits disable
commit

set profiles media codecEntry G711_Ventafax packetSize 10
set profiles media codecEntry G711_Ventafax fax failureHandling continue
set profiles media codecEntry G711_Ventafax fax toneTreatment faxRelay
set profiles media codecEntry G711_Ventafax fax honorToneDetection disable
set profiles media codecEntry G711_Ventafax modem failureHandling continue
set profiles media codecEntry G711_Ventafax modem toneTreatment none
set profiles media codecEntry G711_Ventafax modem honorToneDetection disable
set profiles media codecEntry G711_Ventafax law deriveFromOtherLeg
set profiles media codecEntry G711_Ventafax dtmf relay none
set profiles media codecEntry G711_Ventafax dtmf removeDigits enable
commit

set profiles media codecEntry G_722_PlusNet codec g722
set profiles media codecEntry G_722_PlusNet codingRate 64
set profiles media codecEntry G_722_PlusNet packetSize 20
set profiles media codecEntry G_722_PlusNet preferredRtpPayloadType 128
set profiles media codecEntry G_722_PlusNet fax failureHandling continue
set profiles media codecEntry G_722_PlusNet fax toneTreatment none

```

```

set profiles media codecEntry G_722_PlusNet modem failureHandling continue
set profiles media codecEntry G_722_PlusNet modem toneTreatment none
set profiles media codecEntry G_722_PlusNet dtmf relay none
set profiles media codecEntry G_722_PlusNet dtmf removeDigits enable
commit

set profiles media codecEntry G729_PlusNet codec g729a
set profiles media codecEntry G729_PlusNet packetSize 20
set profiles media codecEntry G729_PlusNet preferredRtpPayloadType 128
set profiles media codecEntry G729_PlusNet fax failureHandling continue
set profiles media codecEntry G729_PlusNet fax toneTreatment none
set profiles media codecEntry G729_PlusNet modem failureHandling continue
set profiles media codecEntry G729_PlusNet modem toneTreatment none
set profiles media codecEntry G729_PlusNet dtmf relay none
set profiles media codecEntry G729_PlusNet dtmf removeDigits enable
commit

#PSPs
set profiles media packetServiceProfile PlusNet dataCalls preferredRtpDataPayloadType 56
set profiles media packetServiceProfile PlusNet dataCalls initialPlayoutBufferDelay 50
set profiles media packetServiceProfile PlusNet dataCalls packetSize 20
set profiles media packetServiceProfile PlusNet silenceFactor 40
set profiles media packetServiceProfile PlusNet typeOfService 0
set profiles media packetServiceProfile PlusNet voiceInitialPlayoutBufferDelay 10
set profiles media packetServiceProfile PlusNet peerAbsenceAction none
set profiles media packetServiceProfile PlusNet silenceInsertionDescriptor g711SidRtpPayloadType 13
set profiles media packetServiceProfile PlusNet silenceInsertionDescriptor heartbeat enable
set profiles media packetServiceProfile PlusNet aallPayloadSize 47
set profiles media packetServiceProfile PlusNet codec codecEntry1 G711_PlusNet
set profiles media packetServiceProfile PlusNet packetToPacketControl transcode conditional
set profiles media packetServiceProfile PlusNet packetToPacketControl codecsAllowedForTranscoding thisLeg ""
set profiles media packetServiceProfile PlusNet packetToPacketControl codecsAllowedForTranscoding otherLeg ""
set profiles media packetServiceProfile PlusNet t38 dataRateManagementType type2TransferOfTcf
set profiles media packetServiceProfile PlusNet t38 ecm ecmPreferred disable
set profiles media packetServiceProfile PlusNet t38 lowSpeedNumberOfRedundantPackets 1
set profiles media packetServiceProfile PlusNet t38 maxBitRate 14.4Kbits_s
set profiles media packetServiceProfile PlusNet t38 numberOfRedundantPackets 1
set profiles media packetServiceProfile PlusNet t38 protocolVersion 0
set profiles media packetServiceProfile PlusNet preferredRtpPayloadTypeForDtmfRelay 128
set profiles media packetServiceProfile PlusNet videoCalls maxVideoBandwidth 0
set profiles media packetServiceProfile PlusNet videoCalls videoBandwidthReductionFactor 0
set profiles media packetServiceProfile PlusNet videoCalls ipv4Tos 0
set profiles media packetServiceProfile PlusNet videoCalls ipv6TrafficClass 0
set profiles media packetServiceProfile PlusNet videoCalls ieee8021QVLanCos 0
set profiles media packetServiceProfile PlusNet videoCalls audioOnlyIfVideoIsPrevented enable
set profiles media packetServiceProfile PlusNet qosValues msrpDscp 0
set profiles media packetServiceProfile PlusNet qosValues dtlsSctpDscp 0
set profiles media packetServiceProfile PlusNet qosValues tl40Dscp 0
set profiles media packetServiceProfile PlusNet qosValues applicationDscp 0
set profiles media packetServiceProfile PlusNet nonRtpStream maxNonRtpBandwidth 0
set profiles media packetServiceProfile PlusNet audioTransparency unknownCodecPacketSize 10
set profiles media packetServiceProfile PlusNet audioTransparency unknownCodecBitRate 124
set profiles media packetServiceProfile PlusNet mediaPacketCos 0
commit

set profiles media packetServiceProfile VENTAFAX dataCalls preferredRtpDataPayloadType 56
set profiles media packetServiceProfile VENTAFAX dataCalls initialPlayoutBufferDelay 50
set profiles media packetServiceProfile VENTAFAX dataCalls packetSize 20
set profiles media packetServiceProfile VENTAFAX silenceFactor 40
set profiles media packetServiceProfile VENTAFAX typeOfService 0
set profiles media packetServiceProfile VENTAFAX voiceInitialPlayoutBufferDelay 10
set profiles media packetServiceProfile VENTAFAX peerAbsenceAction none
set profiles media packetServiceProfile VENTAFAX silenceInsertionDescriptor g711SidRtpPayloadType 13
set profiles media packetServiceProfile VENTAFAX silenceInsertionDescriptor heartbeat enable
set profiles media packetServiceProfile VENTAFAX aallPayloadSize 47
set profiles media packetServiceProfile VENTAFAX codec codecEntry1 G711_Ventafax
set profiles media packetServiceProfile VENTAFAX packetToPacketControl transcode conditional
set profiles media packetServiceProfile VENTAFAX packetToPacketControl codecsAllowedForTranscoding thisLeg ""
set profiles media packetServiceProfile VENTAFAX packetToPacketControl codecsAllowedForTranscoding otherLeg ""
set profiles media packetServiceProfile VENTAFAX t38 dataRateManagementType type2TransferOfTcf
set profiles media packetServiceProfile VENTAFAX t38 lowSpeedNumberOfRedundantPackets 1
set profiles media packetServiceProfile VENTAFAX t38 maxBitRate 14.4Kbits_s

```

```

set profiles media packetServiceProfile VENTAFAX t38 numberOfRedundantPackets 1
set profiles media packetServiceProfile VENTAFAX t38 protocolVersion 0
set profiles media packetServiceProfile VENTAFAX preferredRtpPayloadTypeForDtmfRelay 128
set profiles media packetServiceProfile VENTAFAX videoCalls maxVideoBandwidth 0
set profiles media packetServiceProfile VENTAFAX videoCalls videoBandwidthReductionFactor 0
set profiles media packetServiceProfile VENTAFAX videoCalls ipv4Tos 0
set profiles media packetServiceProfile VENTAFAX videoCalls ipv6TrafficClass 0
set profiles media packetServiceProfile VENTAFAX videoCalls ieee8021QVlanCos 0
set profiles media packetServiceProfile VENTAFAX videoCalls audioOnlyIfVideoIsPrevented enable
set profiles media packetServiceProfile VENTAFAX qosValues msrpDscp 0
set profiles media packetServiceProfile VENTAFAX qosValues dtlsSctpDscp 0
set profiles media packetServiceProfile VENTAFAX qosValues t140Dscp 0
set profiles media packetServiceProfile VENTAFAX qosValues applicationDscp 0
set profiles media packetServiceProfile VENTAFAX nonRtpStream maxNonRtpBandwidth 0
set profiles media packetServiceProfile VENTAFAX audioTransparency unknownCodecPacketSize 10
set profiles media packetServiceProfile VENTAFAX audioTransparency unknownCodecBitRate 124
set profiles media packetServiceProfile VENTAFAX mediaPacketCos 0
commit

```

#### #DNS

```

set addressContext default dnsGroup DNS1 type none
set addressContext default dnsGroup DNS1 transport udp
set addressContext default dnsGroup DNS1 useConfiguredDnsServer disabled
set addressContext default dnsGroup DNS1 ednsSupport disabled
set addressContext default dnsGroup DNS1 server PRIMARY state enabled
set addressContext default dnsGroup DNS1 server PRIMARY recursionDesired true
set addressContext default dnsGroup DNS1 server PRIMARY ipAddress 8.8.8.8
set addressContext default dnsGroup DNS1 server PRIMARY transportProtocol udp
set addressContext default dnsGroup DNS1 server PRIMARY tcpFallback disabled
set addressContext default dnsGroup DNS1 server PRIMARY priority 0
set addressContext default dnsGroup DNS1 server PRIMARY weight 0
set addressContext default dnsGroup DNS1 server PRIMARY recordOrder priority
commit

```

#### #Internal Side Configuration

##### #IP Interface Group

```

set addressContext default ipInterfaceGroup IPIG0 ipsec disabled
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 portName pkt0
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 ipAddress 10.10.216.161
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 prefix 26
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 mode inService
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 action dryUp
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 dryupTimeout 60
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 state enabled
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 bwContingency 0
set addressContext default ipInterfaceGroup IPIG0 ipInterface IPIF0 bandwidth 0
commit

```

##### #IP Static Route

```

set addressContext default staticRoute 0.0.0.0 0 10.10.216.129 IPIG0 IPIF0 preference 100
commit

```

##### #Zone

```

set addressContext default zone CUCM id 2
commit

```

##### #SIP signaling port

```

set addressContext default zone CUCM sipSigPort 2 ipInterfaceGroupName IPIG0
set addressContext default zone CUCM sipSigPort 2 ipAddressV4 10.10.216.161
set addressContext default zone CUCM sipSigPort 2 portNumber 5060
set addressContext default zone CUCM sipSigPort 2 mode inService
set addressContext default zone CUCM sipSigPort 2 transportProtocolsAllowed sip-udp,sip-tcp
set addressContext default zone CUCM sipSigPort 2 state enabled
commit

```

##### #CUCM IP peer

```

set addressContext default zone CUCM ipPeer CUCM ipAddress 10.35.180.111
set addressContext default zone CUCM ipPeer CUCM ipPort 5060
set addressContext default zone CUCM ipPeer CUCM authentication intChallengeResponse enabled
set addressContext default zone CUCM ipPeer CUCM authentication incInternalCredentials enabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration userPart XXXXX
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration authUserName XXXXX

```

```

set addressContext default zone CUCM ipPeer CUCM surrogateRegistration retryTimer 900000
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration regAuthPassword "XXXXX!"
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration state enabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration sendCredentials
challengeForAnyMessageAndInDialogRequests
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration suppressRegRetryAfterAuthFail disabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration useNextSurrRegForCall disabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration useUserNameAsPAI disabled
set addressContext default zone CUCM ipPeer CUCM surrogateRegistration hostPart sipconnect.ipfonie.de
commit

#Fax IP peer
set addressContext default zone CUCM ipPeer VENTAFAX ipAddress 10.35.137.106
set addressContext default zone CUCM ipPeer VENTAFAX ipPort 5060
set addressContext default zone CUCM ipPeer VENTAFAX defaultForIp false
set addressContext default zone CUCM ipPeer VENTAFAX authentication intChallengeResponse enabled
set addressContext default zone CUCM ipPeer VENTAFAX authentication incInternalCredentials enabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration userPart XXXXX
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration authUserName XXXXX
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration retryTimer 900000
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration regAuthPassword "XXXXX!"
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration state enabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration sendCredentials
challengeForAnyMessageAndInDialogRequests
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration suppressRegRetryAfterAuthFail disabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration useNextSurrRegForCall disabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration useUserNameAsPAI disabled
set addressContext default zone CUCM ipPeer VENTAFAX surrogateRegistration hostPart sipconnect.ipfonie.de
commit

#CUCM IP trunk
set addressContext default zone CUCM sipTrunkGroup CUCM state enabled
set addressContext default zone CUCM sipTrunkGroup CUCM mode inService
set addressContext default zone CUCM sipTrunkGroup CUCM action dryUp
set addressContext default zone CUCM sipTrunkGroup CUCM dryUpTimeout 5
set addressContext default zone CUCM sipTrunkGroup CUCM ucidSupport none
set addressContext default zone CUCM sipTrunkGroup CUCM recordingDNpreference fromHeaderOnly
set addressContext default zone CUCM sipTrunkGroup CUCM policy carrier 0000
set addressContext default zone CUCM sipTrunkGroup CUCM policy country 1
set addressContext default zone CUCM sipTrunkGroup CUCM policy localizationVariant northAmerica
set addressContext default zone CUCM sipTrunkGroup CUCM policy tgIPVersionPreference both-ipv4-and-ipv6
set addressContext default zone CUCM sipTrunkGroup CUCM policy digitParameterHandling numberingPlan CUCM_NP
set addressContext default zone CUCM sipTrunkGroup CUCM policy callRouting elementRoutingPriority DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup CUCM policy media packetServiceProfile DEFAULT
set addressContext default zone CUCM sipTrunkGroup CUCM policy services classOfService DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup CUCM policy signaling ipSignalingProfile CUCM_IPSP
set addressContext default zone CUCM sipTrunkGroup CUCM policy featureControlProfile DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup CUCM policy hpcOversubscription 10
set addressContext default zone CUCM sipTrunkGroup CUCM policy ingress flags
nonZeroVideoBandwidthBasedRoutingForSip enable
commit

#Fax IP trunk
set addressContext default zone CUCM sipTrunkGroup VENTAFAX state enabled
set addressContext default zone CUCM sipTrunkGroup VENTAFAX mode inService
set addressContext default zone CUCM sipTrunkGroup VENTAFAX action dryUp
set addressContext default zone CUCM sipTrunkGroup VENTAFAX dryUpTimeout 5
set addressContext default zone CUCM sipTrunkGroup VENTAFAX ucidSupport none
set addressContext default zone CUCM sipTrunkGroup VENTAFAX recordingDNpreference fromHeaderOnly
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy carrier 0000
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy country 1
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy localizationVariant northAmerica
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy tgIPVersionPreference both-ipv4-and-ipv6
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy digitParameterHandling numberingPlan NANP_ACCESS
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy callRouting elementRoutingPriority DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy media packetServiceProfile VENTAFAX
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy services classOfService DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy signaling ipSignalingProfile DEFAULT_SIP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX signaling messageManipulation outputAdapterProfile
REMOVE_PLUS
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy featureControlProfile DEFAULT_IP
set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy hpcOversubscription 10

```

```

set addressContext default zone CUCM sipTrunkGroup VENTAFAX policy ingress flags
nonZeroVideoBandwidthBasedRoutingForSip enable
commit

#IP Signaling Profile
set profiles signaling ipSignalingProfile CUCM_IPSP ipProtocolType sipOnly
set profiles signaling ipSignalingProfile CUCM_IPSP commonIpAttributes callTransferFlags
handleIpAddressesNotPresentInNetworkSelectorTableNst routeViaTransferringIptg
set profiles signaling ipSignalingProfile CUCM_IPSP commonIpAttributes transparencyFlags pCalledPartyID enable
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes numberPortabilityAttributes npdiOptions
includeNpdiYes
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes privacy privacyInformation pPreferredId
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes privacy flags includePrivacy enable
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes redirect mode acceptRedirection
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes redirect contactHandling
mergeReceivedContacts
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters callForwarding
dataMapping diversion
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters
includeChargeInformation includeNone
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters sipToHeaderMapping
none
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters
destinationTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters
originatingTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile CUCM_IPSP egressIpAttributes sipHeadersAndParameters generateCallIdUsing
doNotUseIngressCallId
set profiles signaling ipSignalingProfile CUCM_IPSP trfParameters preferredMrbUri ""
set profiles signaling ipSignalingProfile CUCM_IPSP trfParameters preferredTrfUri ""

#Numbering Plan
set profiles digitParameterHandling numberingPlan CUCM_NP prefixProfile CUCM_PP
set profiles digitParameterHandling numberingPlan CUCM_NP lengths nationalNumber min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths nationalNumber max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths subscriberNumber min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths subscriberNumber max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths line min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths line max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths exchangeCode min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths exchangeCode max 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths areaCode min 0
set profiles digitParameterHandling numberingPlan CUCM_NP lengths areaCode max 0

#PrefixProfile
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 callType internationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 digitType international
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 natureOfAddress international
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 numberLeadingPrefixDigits 1
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 numberLeadingPrefixDigitsToStrip 1
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry + 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 numberLeadingPrefixDigitsToStrip 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 0 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 numberLeadingPrefixDigitsToStrip 0
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 1 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile CUCM_PP entry 2 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile CUCM_PP entry 2 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile CUCM_PP entry 2 0 1 31 natureOfAddress none

```





```

set addressContext default ipInterfaceGroup IPIG1 ipInterface IPIF1 bandwidth 0
commit

#IP static route
set addressContext default staticRoute 0.0.0.0 0 10.10.216.193 IPIG1 IPIF1 preference 100
commit

#Zone
set addressContext default zone PLUSNET id 3
set addressContext default zone PLUSNET dnsGroup DNS1
commit

#SIP signaling port
set addressContext default zone PLUSNET sipSigPort 3 ipInterfaceGroupName IPIG1
set addressContext default zone PLUSNET sipSigPort 3 ipAddressV4 10.10.216.211
set addressContext default zone PLUSNET sipSigPort 3 portNumber 5060
set addressContext default zone PLUSNET sipSigPort 3 mode inService
set addressContext default zone PLUSNET sipSigPort 3 state enabled
set addressContext default zone PLUSNET sipSigPort 3 recorder disabled
set addressContext default zone PLUSNET sipSigPort 3 siprec disabled
set addressContext default zone PLUSNET sipSigPort 3 tcpConnectTimeout 5
set addressContext default zone PLUSNET sipSigPort 3 dscpValue 0
set addressContext default zone PLUSNET sipSigPort 3 tlsProfileName defaultTlsProfile
set addressContext default zone PLUSNET sipSigPort 3 transportProtocolsAllowed sip-udp,sip-tcp
set addressContext default zone PLUSNET sipSigPort 3 sctpProfileName defaultSctpProfile
set addressContext default zone PLUSNET sipSigPort 3 tcpKeepaliveTime 0
set addressContext default zone PLUSNET sipSigPort 3 tcpKeepaliveInterval 60
set addressContext default zone PLUSNET sipSigPort 3 tcpKeepaliveProbes 2
set addressContext default zone PLUSNET sipSigPort 3 maskPortforRcb disabled
set addressContext default zone PLUSNET sipSigPort 3 maskIpAddressforRcb disabled
set addressContext default zone PLUSNET sipSigPort 3 enforceAORMatch disabled
set addressContext default zone PLUSNET sipSigPort 3 action force
set addressContext default zone PLUSNET sipSigPort 3 tcpUserTimeout 0
set addressContext default zone PLUSNET sipSigPort 3 sipTcpConnectionAgingState enabled
commit

#IP peers
set addressContext default zone PLUSNET ipPeer PLUSNET ipPort 0
set addressContext default zone PLUSNET ipPeer PLUSNET defaultForIp false
set addressContext default zone PLUSNET ipPeer PLUSNET policy description ""
set addressContext default zone PLUSNET ipPeer PLUSNET policy sip fqdn sipconnect.ipfonie.de
set addressContext default zone PLUSNET ipPeer PLUSNET policy sip fqdnPort 0
set addressContext default zone PLUSNET ipPeer PLUSNET policy packetServiceProfile PlusNet
set addressContext default zone PLUSNET ipPeer PLUSNET pathCheck profile PLUSNET_OPTIONS
set addressContext default zone PLUSNET ipPeer PLUSNET pathCheck hostName ""
set addressContext default zone PLUSNET ipPeer PLUSNET pathCheck hostPort 5060
commit

#PlusNet trunks
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET state enabled
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET mode inService
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET action dryUp
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET dryUpTimeout 5
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET ucidSupport none
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET recordingDNpreference fromHeaderOnly
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy carrier 0000
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy country 1
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy localizationVariant northAmerica
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy tgIPVersionPreference both-ipv4-and-ipv6
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy digitParameterHandling numberingPlan
PLUSNET_NP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy digitParameterHandling egressDmPmRule AddPlus
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy callRouting elementRoutingPriority DEFAULT_IP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy media packetServiceProfile PlusNet
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy services classOfService DEFAULT_IP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy signaling ipSignalingProfile PLUSNET_IPSP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy featureControlProfile DEFAULT_IP
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET policy hpcOversubscription 10
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication authUserPart XXXXXXXXXXXX
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication authPassword "XXXXXXX"
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication intChallengeResponse
disabled

```

```

set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling authentication incInternalCredentials
disabled
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling messageManipulation inputAdapterProfile
PLUSNETDEL
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET services dnsSupportType a-srv-naptr
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET services dnsNaptrAlways enabled
commit

#IP Signaling Profile
set profiles signaling ipSignalingProfile PLUSNET_IPSP ipProtocolType sipOnly
set profiles signaling ipSignalingProfile PLUSNET_IPSP commonIpAttributes callTransferFlags
handleIpAddressesNotPresentInNetworkSelectorTableNst routeViaTransferringIptg
set profiles signaling ipSignalingProfile PLUSNET_IPSP commonIpAttributes transparencyFlags pCalledPartyID enable
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes numberPortabilityAttributes npdiOptions
includeNpdiYes
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes privacy privacyInformation pPreferredId
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes privacy flags includePrivacy enable
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes redirect mode acceptRedirection
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes redirect contactHandling
mergeReceivedContacts
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters callForwarding
dataMapping diversion
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
includeChargeInformation includeNone
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
sipToHeaderMapping none
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
destinationTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
originatingTrunkGroupOptions includeNone
set profiles signaling ipSignalingProfile PLUSNET_IPSP egressIpAttributes sipHeadersAndParameters
generateCallIdUsing doNotUseIngressCallId
set profiles signaling ipSignalingProfile PLUSNET_IPSP trfParameters preferredMrbUri ""
set profiles signaling ipSignalingProfile PLUSNET_IPSP trfParameters preferredTrfUri ""

#Numbering Plan
set profiles digitParameterHandling numberingPlan PLUSNET_NP prefixProfile PLUSNET_PP
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths nationalNumber min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths nationalNumber max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths subscriberNumber min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths subscriberNumber max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths line min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths line max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths exchangeCode min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths exchangeCode max 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths areaCode min 0
set profiles digitParameterHandling numberingPlan PLUSNET_NP lengths areaCode max 0

#Prefix Profile
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 callType internationalType
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 digitType international
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 natureOfAddress international
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 numberLeadingPrefixDigits 1
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 numberLeadingPrefixDigitsToStrip 1
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry + 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 numberLeadingPrefixDigitsToStrip 0
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 applyDmRule disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 0 0 1 31 determineArea disable
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 callType nationalType
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 digitType unknown
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 natureOfAddress none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 numberingPlanIndicator none
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 numberLeadingPrefixDigits 0
set profiles digitParameterHandling prefixProfile PLUSNET_PP entry 1 0 1 31 numberLeadingPrefixDigitsToStrip 0

```



```

set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
numberingPlanIndicator isdn
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
numberLength noInput
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
presentation none
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
screening none
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation numberParameterManipulation
includeInEgress none
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement type constant
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement digitString calledNumber
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation
replacement value +
set profiles digitParameterHandling dmPmRule AddPlus subRule 0 digitManipulation digitStringManipulation action
none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 ruleType digit
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberType callingNumber
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
natureOfAddress national
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
numberingPlanIndicator isdn
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
numberLength noInput
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
presentation none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
screening none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation numberParameterManipulation
includeInEgress none
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement type constant
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement digitString callingNumber
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement startDigitPosition 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement numberOfDigits 0
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation
replacement value +
set profiles digitParameterHandling dmPmRule AddPlus subRule 1 digitManipulation digitStringManipulation action
none

#Global Configuration
#Route Labels
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 trunkGroup CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 ipPeer CUCM
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_CUCM routingLabelRoute 0 testing normal
commit
set global callRouting routingLabel TO_PLUSNET overflowNumber ""
set global callRouting routingLabel TO_PLUSNET overflowNOA none
set global callRouting routingLabel TO_PLUSNET overflowNPI none
set global callRouting routingLabel TO_PLUSNET routePrioritizationType sequence

```

```

set global callRouting routingLabel TO_PLUSNET action routes
set global callRouting routingLabel TO_PLUSNET numRoutesPerCall 10
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 trunkGroup PLUSNET
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 ipPeer PLUSNET
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_PLUSNET routingLabelRoute 0 testing normal
commit

set global callRouting routingLabel TO_VENTAFAX overflowNumber ""
set global callRouting routingLabel TO_VENTAFAX overflowNOA none
set global callRouting routingLabel TO_VENTAFAX overflowNPI none
set global callRouting routingLabel TO_VENTAFAX routePrioritizationType sequence
set global callRouting routingLabel TO_VENTAFAX action routes
set global callRouting routingLabel TO_VENTAFAX numRoutesPerCall 10
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 trunkGroup VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 ipPeer VENTAFAX
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_VENTAFAX routingLabelRoute 0 testing normal
commit

set global callRouting routingLabel TO_CUCM1 overflowNumber ""
set global callRouting routingLabel TO_CUCM1 overflowNOA none
set global callRouting routingLabel TO_CUCM1 overflowNPI none
set global callRouting routingLabel TO_CUCM1 routePrioritizationType sequence
set global callRouting routingLabel TO_CUCM1 action routes
set global callRouting routingLabel TO_CUCM1 numRoutesPerCall 10
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 routeType trunkGroup
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 trunkGroup CUCM1
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 ipPeer CUCM1
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 proportion 0
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 cost 1000000
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 inService inService
set global callRouting routingLabel TO_CUCM1 routingLabelRoute 0 testing normal

#Routes
set global callRouting route none Sonus_NULL Sonus_NULL standard 32211057459 49 all all ALL none Sonus_NULL
routingLabel TO_VENTAFAX
set global callRouting route none Sonus_NULL Sonus_NULL standard 91147726289 49 all all ALL none Sonus_NULL
routingLabel TO_CUCM1
set global callRouting route none Sonus_NULL Sonus_NULL standard Sonus_NULL 49 all all ALL none Sonus_NULL
routingLabel TO_CUCM
set global callRouting route trunkGroup CUCM SBC standard Sonus_NULL Sonus_NULL all all ALL none Sonus_NULL
routingLabel TO_PLUSNET
set global callRouting route trunkGroup CUCM1 SBC standard Sonus_NULL Sonus_NULL all all ALL none Sonus_NULL
routingLabel TO_PLUSNET
set global callRouting route trunkGroup VENTAFAX SBC standard Sonus_NULL Sonus_NULL all all ALL none Sonus_NULL
routingLabel TO_PLUSNET
commit

```

## Test Results

The following table provides information about the tests that Ribbon performed to complete all scenarios that PlusNet needs for their customers.

**Table 4:** Interoperability Compliance Test Results

Test Number	Test Scenario	Setup / Test Results	Status	Comment
-------------	---------------	----------------------	--------	---------

4.1	Registration and authentication (registration mode)	The PBX is able to execute the correct resolution of the DNS SRV record.	Pass	
4.3	Basic call	With the basic call tests, the standard call scenarios and the CLIP/CLIR features are tested. <ul style="list-style-type: none"> <li>Only en-bloc dialing is supported, overlap sending is not possible.</li> </ul>	Pass	
4.3.1	Normal call	Outgoing call from PBX to PSTN <ul style="list-style-type: none"> <li>En-bloc dialing</li> <li>Local area call (without area code); area code must be set by the PBX</li> <li>Setting of the correct calling number with all available telephone number blocks</li> <li>If two or more locations with different area codes are assigned to one SIP trunk, the number in the PAI header has to be the geographic number which belongs to the user's location. This is very important in case of emergency calls, because Plusnet uses the number of the PAI header to route the emergency call to the proper emergency call center.</li> </ul>	Pass	
4.3.1.1	Normal call	The geographic number in the PAI header corresponds to the location 11 of the user	Pass	Is it possible to configure several PAI per SIP trunk? Yes
4.3.1.2	Normal call	Display of A-number in B-party CLIP (national PSTN)	Pass	
4.3.1.3	Normal call	Display of A-number in B-party CLIP (international PSTN)	Pass	
4.3.1.4	Normal call	Display of A-number in B-party CLIP (mobile)	Pass	
4.3.1.5	Normal call	Call to mobile Outgoing call to mobile => mobile phone turned off	Pass	
4.3.1.6	Normal call	Suppression of A-number => CUR	Pass	
4.3.1.7	Normal call	Outgoing call from analog extension	Pass	
4.3.1.8	Normal call	Outgoing call (> 5 min.) => PSTN	Pass	Hold connection for 5 minutes => RTP still correct? Yes
4.3.2	Normal call	Incoming call from PSTN (national) => PBX <ul style="list-style-type: none"> <li>Test all available telephone number blocks</li> </ul>	Pass	
4.3.2.1	Normal call	Display of A-number => CLIP	Pass	
4.3.2.2	Normal call	Incoming call from mobile => PBX Display of A-number => CLIP	Pass	
4.3.2.3	Normal call	Suppression of A-number => CLIR	Pass	
4.3.3	Normal call	Two simultaneous outgoing/incoming calls	Pass	
4.3.4	Normal call	Enabled feature DND (do not disturb)	Pass	
4.3.5	Normal call	Test call with codec G.711	Pass	
4.3.6	Normal call	Test call with codec G.722 (only SIP <=> SIP)	Fail	PlusNet did not support G.722
4.3.7	Normal call	Test call with codec G.729	Pass	

4.3.2.8	Clip No Screening	Outgoing call from PBX to PSTN <ul style="list-style-type: none"> <li>With feature Clip No Screening</li> <li>Test with several different A-numbers</li> <li>If two or more locations with different area codes are assigned to one SIP trunk, the number in the PAI header has to be the geographic number which belongs to the users location. This is very important in case of emergency calls, because PlusNet uses the number</li> </ul>	Pass	
4.3.2.8.1	Clip No Screening	Despite Clip No Screening the geographic number in the PAI header corresponds to the location of the user	Pass	Is it possible to configure several PAI per SIP trunk? Yes
4.3.2.8.2	Clip No Screening	Display of A-number (NoSClip) at B-party (PSTN)	Pass	
4.3.2.8.3	Clip No Screening	Display of A-number (NoSClip) at B-party (international PSTN; depending on the destination carrier, the NoSClip telephone number may not be displayed in this case)	Pass	
4.3.2.8.3	Clip No Screening	Call made from a PSTN line to an IP-PBX line with call forward to a line within the same IP-PBX, Answer Call. <ul style="list-style-type: none"> <li>Either party terminates call.</li> </ul>	Pass	Does the IP-PBX have configuration settings to send SIP status 181 messages to the soft switch? Yes
4.3.2.8.4	Clip No Screening	Display of A-number (NoSClip) at B-party (mobile)	Pass	
4.3.3.9	Special call situations	Outgoing call PBX => PSTN <ul style="list-style-type: none"> <li>Call is rejected by B-party</li> </ul>	Pass	
4.3.3.10	Special call situations	Outgoing call PBX=> PSTN <ul style="list-style-type: none"> <li>B-party does not answer; clearing after timer</li> </ul>	Pass	
4.3.3.11	Special call situations	Outgoing call PBX => PSTN <ul style="list-style-type: none"> <li>B-party busy; busy tone</li> </ul>	Pass	
4.3.3.12	Special call situations	Outgoing call PBX=> PSTN <ul style="list-style-type: none"> <li>A-party hangs up before call is established (cancel)</li> </ul>	Pass	
4.3.3.13	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>Call is rejected by PBX party</li> </ul>	Pass	
4.3.3.14	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>PBX party does not answer; clearing after timer</li> </ul>	Pass	
4.3.3.15	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>PBX party busy; busy tone</li> </ul>	Pass	
4.3.3.16	Special call situations	Incoming call PSTN => PBX <ul style="list-style-type: none"> <li>A-party hangs up before call is established (cancel)</li> </ul>	Pass	
4.3.4.17	Call clearing	Incoming / outgoing call; clearing after established call. Correct clearing on both sides <ul style="list-style-type: none"> <li>PBX party hangs up</li> <li>PSTN party hangs up</li> </ul>	Pass	

4.3.4.18	Call clearing	Interrupting the network connection of the SIP terminal device during a call <ul style="list-style-type: none"> <li>• Call should be cleared correctly</li> </ul>	Pass	
4.4.19	Hold	PBX => PSTN and PSTN => PBX <ul style="list-style-type: none"> <li>• Test call in both directions</li> </ul>	Pass	
4.4.19.1	Hold	Putting an external call on hold in the PBX	Pass	
4.4.19.2	Hold	If applicable, MoH (music on hold) at A-party (PSTN)	Pass	
4.4.19.3	Hold	HOLD RETRIEVE: retrieving the external call	Pass	
4.4.19.4	Hold	Clearing the connection of the A-party while it is put on hold	Pass	
4.4.20	Hold	PBX => PSTN and PSTN => PBX <ul style="list-style-type: none"> <li>• Test call in both directions</li> </ul>	Pass	
4.4.20.1	Hold	Putting an external call on hold in the PSTN	Pass	
4.4.20.2	Hold	If applicable, MoH (music on hold) at A-party (PBX)	Pass	
4.4.20.3	Hold	HOLD RETRIEVE: retrieving the external call	Pass	
4.4.20.4	Hold	Clearing the connection of the A-party while it is put on hold	Pass	
4.5.21	Call transfer	Internal call is transferred to external party: internal => PBX => external	Pass	
4.5.21.1	Call transfer	Call transfer from PBX party => PSTN party with announcement (attendant transfer)	Pass	
4.5.21.2	Call transfer	Call transfer from PBX party => PSTN party without announcement (blind transfer)	Pass	
4.5.21.3	Call transfer	Call transfer from PBX party => PSTN party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• Call is rejected or not answered</li> </ul>	Pass	
4.5.21.4	Call transfer	Call transfer from PBX party => PSTN party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• PSTN party busy</li> </ul>	Pass	
4.5.22	Call transfer	Transferred call from external party to PBX: PSTN => PBX	Pass	
4.5.22.1	Call transfer	Call transfer from PSTN => PBX party with announcement (attendant transfer)	Pass	
4.5.22.2	Call transfer	Call transfer from PSTN => PBX party without announcement (blind transfer)	Pass	
4.5.22.3	Call transfer	Call transfer from PSTN => PBX party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• Call is rejected or not answered</li> </ul>	Pass	
4.5.22.4	Call transfer	Call transfer from PSTN => PBX party without announcement (blind transfer) <ul style="list-style-type: none"> <li>• PBX party busy</li> </ul>	Pass	
4.5.23	Call transfer	Call from external party transferred to another external party: external => PBX => external	Pass	
4.5.23.1	Call transfer	PSTN => PBX party => PSTN with announcement (attendant transfer)	Pass	
4.5.23.2	Call transfer	PSTN => PBX party => PSTN without announcement (blind transfer)	Pass	
4.5.23.3	Call transfer	PSTN => PBX party => PSTN without announcement (blind transfer) <ul style="list-style-type: none"> <li>• Call is rejected or not answered</li> </ul>	Pass	
4.5.23.4	Call transfer	PSTN => PBX party => PSTN without announcement (blind transfer) <ul style="list-style-type: none"> <li>• PSTN party busy</li> </ul>	Pass	
4.6.24	Call diversion	PBX party CFU to external party (PSTN)	Pass	



4.6.24.1	Call diversion	Internal call (CFU) => PSTN	Pass	
4.6.24.2	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.24.3	Call diversion	A-party clears in ring phase	Pass	
4.6.24.4	Call diversion	External => PBX party (CFU) => PSTN	Pass	
4.6.24.5	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.24.6	Call diversion	A-party clears in ring phase	Pass	
4.6.25	Call diversion	PBX party CFNR to external party	Pass	
4.6.25.1	Call diversion	Internal call (CFNR) => PSTN	Pass	
4.6.25.2	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.25.3	Call diversion	A-party clears in ring phase	Pass	
4.6.25.4	Call diversion	External => PBX party (CFNR) => PSTN	Pass	
4.6.25.5	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.25.6	Call diversion	A-party clears in ring phase	Pass	
4.6.26	Call diversion	PBX party CFB to external party	Pass	
4.6.26.1	Call diversion	Internal call (CFB) => PSTN	Pass	
4.6.26.2	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.26.3	Call diversion	A-party clears in ring phase	Pass	
4.6.26.4	Call diversion	External => PBX party (CFB) => PSTN	Pass	
4.6.26.5	Call diversion	PSTN party busy, rejects call, does not answer	Pass	
4.6.26.6	Call diversion	A-party clears in ring phase	Pass	
4.6.27	Call diversion	External party (PSTN, mobile, etc.) CFU to PBX party:	Pass	
4.6.27.1	Call diversion	External (CFU) => PBX party	Pass	
4.6.27.2	Call diversion	PBX party busy, rejects call, does not answer	Pass	
4.6.27.3	Call diversion	A-party clears in ring phase	Pass	
4.6.27.4	Call diversion	External (CFNR) => PBX party	Pass	
4.6.27.5	Call diversion	PBX party busy, rejects call, does not answer	Pass	

4.6.27.6	Call diversion	A-party clears in ring phase	Pass	
4.6.28	Call diversion	External party (PSTN, mobile, etc.) CFB to PBX party:	Pass	
4.6.28.1	Call diversion	PBX party busy, rejects call, does not answer	Pass	
4.6.28.2	Call diversion	A-party clears in ring phase	Pass	
4.6.29	Call diversion	Call deflection: diversion during the ring phase	Pass	
4.6.29.1.1	Call diversion	Internal call PBX party CD => PBX party	Pass	
4.6.29.1.2	Call diversion	PBX party busy	Pass	
4.6.29.1.3	Call diversion	PBX party does not answer	Pass	
4.6.29.1.4	Call diversion	A-party clears in ring phase	Pass	
4.6.29.2.1	Call diversion	External call to PBX party CD => PBX party	Pass	
4.6.29.2.2	Call diversion	PBX party busy	Pass	
4.6.29.2.3	Call diversion	PBX party does not answer	Pass	
4.6.29.2.4	Call diversion	A-party clears in ring phase	Pass	
4.6.29.3.1	Call diversion	External call to PBX party CD => external PSTN party	Pass	
4.6.29.3.2	Call diversion	PSTN party busy	Pass	
4.6.29.3.3	Call diversion	PSTN party does not answer	Pass	
4.6.29.3.4	Call diversion	A-party clears in ring phase	Pass	
4.7.30	Call waiting	Incoming call during active internal call	Pass	
4.7.30.1	Call waiting	Call waiting tone	Pass	
4.7.30.2	Call waiting	Display of number of waiting party	Pass	
4.7.30.3	Call waiting	Acceptance of waiting call	Pass	
4.7.30.4	Call waiting	Putting the waiting call on hold	Pass	
4.7.30.5	Call waiting	Retrieve of waiting call	Pass	
4.7.30.6	Call waiting	Holding the 2nd call	Pass	
4.7.30.7	Call waiting	Terminating the active call	Pass	
4.7.30.8	Call waiting	Disregarding the waiting call	Pass	
4.7.30.9	Call waiting	Rejecting the waiting call	Pass	
4.8.31	3-party conference	Establishing a conference according to the operating instructions of the PBX Internal - internal - external	Pass	

4.8.31.1	3-party conference	Selecting a party (internal or external); 3rd party is put on hold <ul style="list-style-type: none"> <li>Switching to 3rd party; 2nd party is put on hold</li> <li>Reactivating the conference</li> <li>Clearing one party (internal or external)</li> <li>Terminating the conference</li> </ul>	Pass	
4.8.32	3-party conference	Establishing a conference according to the operating instructions of the PBX internal - external - external	Pass	
4.8.32.1	3-party conference	Selecting a party (external); 3rd party is put on hold <ul style="list-style-type: none"> <li>Switching to 3rd party; 2nd party is put on hold</li> <li>Reactivating the conference</li> <li>Clearing one party (external)</li> <li>Terminating the conference</li> </ul>	Pass	
4.9.33	Pick up	Picking up a call from another extension of the PBX	Pass	
4.10.34	Call list	Entries in the call list <ul style="list-style-type: none"> <li>Incoming from PSTN</li> <li>Incoming from mobile</li> <li>Incoming CLIR</li> <li>Dialing prefix for outside line in the call list</li> </ul>	Pass	
4.10.35	Call list	Call-back from call list <ul style="list-style-type: none"> <li>To PSTN</li> <li>To mobile</li> </ul>	Pass	
4.11.36	DTMF	DTMF support (G.711) <ul style="list-style-type: none"> <li>PSTN =&gt; PBX (SIP terminal device)</li> <li>PSTN =&gt; PBX (analog or system terminal device)</li> <li>PBX (SIP terminal device) =&gt; PSTN</li> <li>PBX (analog or system terminal device) =&gt; PSTN</li> </ul>	Pass	
4.11.37	DTMF	DTMF support (G.729) <ul style="list-style-type: none"> <li>- PSTN =&gt; PBX (SIP terminal device)</li> <li>- PSTN =&gt; PBX (analog or system terminal device)</li> <li>- PBX (SIP terminal device) =&gt; PSTN</li> <li>- PBX (analog or system terminal device) =&gt; PSTN</li> </ul>	Pass	
4.12.38	Fax	Fax reception (G.711 only)	Pass	
4.12.38.1	Fax	Network-side T.38 re-invite rejected by PBX (response 488) or only G.711 codec is confirmed <ul style="list-style-type: none"> <li>One-page fax</li> <li>Multi-page fax (at least 5 pages)</li> </ul>	Pass	
4.12.39	Fax	Fax sending (G.711 only)	Pass	
4.12.39.1	Fax	Network-side T.38 re-invite rejected by PBX (response 488) or only G.711 codec is confirmed <ul style="list-style-type: none"> <li>One-page fax</li> <li>Multi-page fax (at least 5 pages)</li> </ul>	Pass	
4.12.40	Fax	Fax reception via T.38	Pass	
4.12.40.1	Fax	Re-invite to T.38 by PBX or network <ul style="list-style-type: none"> <li>One-page fax</li> <li>Multi-page fax (at least 5 pages)</li> </ul>	Pass	
4.12.41	Fax	Fax sending via T.38 (not possible in conjunction with the encryption option)	Pass	

4.12.41.1	Fax	Re-invite to T.38 by PBX or network <ul style="list-style-type: none"> <li>• T.38-only invites are not supported</li> <li>• One-page fax</li> <li>• Multi-page fax (at least 5 pages)</li> </ul>	Pass	
5.42	Redundancy	Test of redundancy: <ul style="list-style-type: none"> <li>• Only if redundant connection is possible on the PBX side</li> <li>• This requires at least two PBX servers to be online on the SIP trunk in registration mode, or exactly two PBX servers in peering mode.</li> </ul>	Pass	
5.42.1	Redundancy	<ol style="list-style-type: none"> <li>1. Register all available PBX systems the Plusnet SBC.</li> <li>2. Calls from Plusnet =&gt; PBX are routed by round robin procedure</li> <li>3. Deliberately de-register one PBX system =&gt; no more calls are routed to this PBX</li> <li>4. and/or disconnect the PBX system from LAN =&gt; after the register expire period, no more calls are routed to this PBX.</li> <li>5. Calls are only routed to the remaining PBX systems.</li> </ol>	Pass	

## Conclusion

---

Ribbon successfully completed configuration and testing for the Ribbon SBC Core to interoperate with a Cisco Unified Communication Manager (CUCM) system and a PlusNet SIP trunk. All feature and serviceability issues were completed with the noted exceptions and observations.

## Appendix A

---

- We need to remove the next Parameter from PLUSNET Invite: INVITE sip:+4991147726260@10.10.216.211:5060;**dtg=CUCM**;reg-info=108 SIP/2.0 because this parameter will impact our Routing from CUCM side:

## DTGREMOVE

```
set profiles signaling sipAdaptorProfile PLUSNETDEL state enabled
set profiles signaling sipAdaptorProfile PLUSNETDEL advancedSMM disabled
set profiles signaling sipAdaptorProfile PLUSNETDEL profileType messageManipulation
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 applyMatchHeader all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 type message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 message messageTypes all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header name P-Called-Party-ID
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header value ""
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 criterion 2 header numberOfInstances qualifier undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 operation delete
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 paramType undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 to
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 to type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 1 action 1 to value P-Called-Party-ID
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 applyMatchHeader one
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 type message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 message
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 message messageTypes all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 type header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header name Request-line
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header value ""
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 2 header numberOfInstances qualifier undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 type parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter condition exist
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter paramType uri
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter name dtg
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 criterion 3 parameter value ""
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 type parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 operation delete
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 paramType uri
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 to
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 to type parameter
set profiles signaling sipAdaptorProfile PLUSNETDEL rule 2 action 1 to value dtg

#Assign the Adapter Profile in Trunk as incoming
set addressContext default zone PLUSNET sipTrunkGroup PLUSNET signaling messageManipulation inputAdapterProfile
PLUSNETDEL
```

- For the test case where you need to modify the PAI, you need to apply the next AdaptorProfile:

## CHANGEPAI

```
set profiles signaling sipAdaptorProfile PAID_CHANGE state enabled
set profiles signaling sipAdaptorProfile PAID_CHANGE advancedSMM disabled
set profiles signaling sipAdaptorProfile PAID_CHANGE profileType messageManipulation
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 applyMatchHeader one
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 type message
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message methodTypes [ invite ]
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 type header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header name P-Asserted-Identity
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header value ""
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 type header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 operation modify
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 headerInfo fieldValue
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 paramType undefined
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 from
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 from type value
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 from value <sip:+4932211057459@10.10.216.211:5060>
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 to
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 to type header
set profiles signaling sipAdaptorProfile PAID_CHANGE rule 1 action 1 to value P-Asserted-Identity

# Apply this AdaptorProfile only if you need to modify the PAI in the outgoing trunk PLUSNET
```

- For the test case where you need to remove "+" from URI and To: in INVITE for CUCM, you need to apply the next AdaptorProfile:

## CHANGEPAI

```
set profiles signaling sipAdaptorProfile REMOVE_PLUS state enabled
set profiles signaling sipAdaptorProfile REMOVE_PLUS advancedSMM disabled
set profiles signaling sipAdaptorProfile REMOVE_PLUS profileType messageManipulation
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message methodTypes [ invite ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header name to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token tokenType uriusername
```

```

set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 operation regdel
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 1 action 1 regexp matchInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message methodTypes [ invite ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header name request-line
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token tokenType uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 operation regdel
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 2 action 1 regexp matchInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message methodTypes [ cancel ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header name to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token tokenType uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 criterion 3 token regexp numMatch match
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 operation regdel

```

```

set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 from
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 from type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 from tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 3 action 1 regexp matchInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 applyMatchHeader one
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 applyMatchHdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 type message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message messageTypes request
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message methodTypes [ cancel ]
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 1 message condition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 type header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header name request-line
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header hdrInstance all
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header hdrRange undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header numberOfInstances number 0
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 2 header numberOfInstances qualifier
undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token condition exist
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token tokenType uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token value ""
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 criterion 3 token regexp numMatch match
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 operation regdel
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 headerInfo undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 headerPosition undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 paramType undefined
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 from
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 from type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 from tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 to
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 to type token
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 to tokenValue uriusername
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 regexp
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 regexp string "^\\+"
set profiles signaling sipAdaptorProfile REMOVE_PLUS rule 4 action 1 regexp matchInstance all

#Assign the Adapter Profile in Trunk as outgoing
set addressContext default zone CUCM sipTrunkGroup CUCM1 signaling messageManipulation outputAdapterProfile
REMOVE_PLUS

```

- For incoming calls PlusNet sent the next