DevConnect Program

Application Notes for Uniphore U-Assist and U-Analyze with Avaya Aura® Application Enablement Services 10.1 and Avaya Session Border Controller for Enterprise 10.1 using TSAPI and SIPREC – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Uniphore U-Assist and U-Analyze to interoperate with Avaya Aura® Application Enablement Services 10.1 and Avaya Session Border Controller for Enterprise 10.1 using Telephony Services Application Programming Interface (TSAPI) and Session Recording Protocol (SIPREC). Uniphore U-Assist real time speech analytics solution that provide real time transcription, agent alerts, guidance, and after call work summarization. U-Analyze provides the full picture of customer interactions and the knowledge to make informed decisions.

In the compliance testing, Uniphore U-Assist and U-Analyze use Avaya Aura® Application Enablement Services TSAPI to monitor agents, VDNs/Skill groups details and capture the media for calls recording between agents and the PSTN and real time analytics using Avaya Session Border Controller SIPREC.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program.

1. Introduction

These Application Notes describe the configuration steps required for Uniphore U-Assist and U-Analyze to interoperate with Avaya Aura® Application Enablement Services 10.1 and Avaya Session Border Controller for Enterprise (SBCE) 10.1 using TSAPI and SIPREC. Uniphore U-Assist provides real time speech analytics solution that provide real time transcription, agent alerts, guidance, and after call work summarization. And U-Analyze provides the full picture of customer interactions and the knowledge to make informed decisions.

In the compliance testing, Uniphore U-Assist and U-Analyze use Avaya Aura® Application Enablement Services TSAPI to monitor agents, VDNs/Hunt groups details and capture the media for calls recording between agents and the PSTN and real time analytics using Avaya Session Border Controller SIPREC.

The Uniphore U-Assist and U-Analyze solution consists of multiple components distributed across multiple servers, including the AudioLogger component as the audio capture engine. In the compliance testing, the AudioLogger component consisted of two servers– one Linux server running the OrkWeb and OrkAudio components, and a Windows server running the OrkAvayaTSAPI component along with the Avaya TSAPI Windows Client. The OrkAudio component is responsible for SIPREC connection with SBCE, and the OrkAvayaTSAPI component is responsible for TSAPI connection with Application Enablement Services.

When there is an active ACD call at the agent station, Uniphore U-Assist is informed of the call via TSAPI events and starts the transcription with captured media from the SIPREC interface. The TSAPI events are also used to determine when to stop the transcription, and the captured media are analyzed by Real Intent. At the end of the ACD call, Real Intent stops the transcription and presents an auto generated summary and disposition to the agent based on the call conversation.

The compliance testing covered inbound ACD calls that are delivered to agents and a couple of outbound calls manually dialed by agent to the PSTN. The compliance testing scope did not include outbound calls as part of any outbound application.

2. General Test Approach and Test Results

The feature test cases were performed manually. Upon start of the U-Assist application, the application automatically established TSAPI connection with Application Enablement Services and requested device monitoring.

For the manual part of testing, each call was handled manually at the agent.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to U-Assist and U-Analyze Solution.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

Avaya recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interfaces between U-Assist and U-Analyze and Avaya products did not include use of any specific encryption features as requested by Uniphore.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying the following on Real Intent:

- Use of TSAPI in areas of event notification and value queries.
- Use of SIPREC to capture media from SBCE.
- Proper transcription and disposition handling for call scenarios involving agent drop, customer drop, hold, resume, simultaneous calls, long duration, multiple agents, transfer, and conference.

The serviceability testing focused on verifying the ability of Uniphore U-Assist and U-Analyze to recover from adverse conditions, such as disconnecting and reconnecting the Ethernet connection to Real Intent

2.2. Test Results

All test cases were executed and verified successfully.

2.3. Support

Technical support on U-Assist and U-Analyze can be obtained through the following:

- Email: support@uniphore.com
- Web: https://www.uniphore.com/contact

3. Reference Configuration

The configuration used for the compliance testing is shown in **Figure 1.** In the compliance testing, Uniphore monitored the skill groups and agent stations shown in the table below.

Device Type	Extension
Routing VDN	78000, 78001
Skill Group	79000, 79001
Agent Station	70010, 70011, 70012
Supervisor Station	75099
Agent ID	75000, 75001, 75002

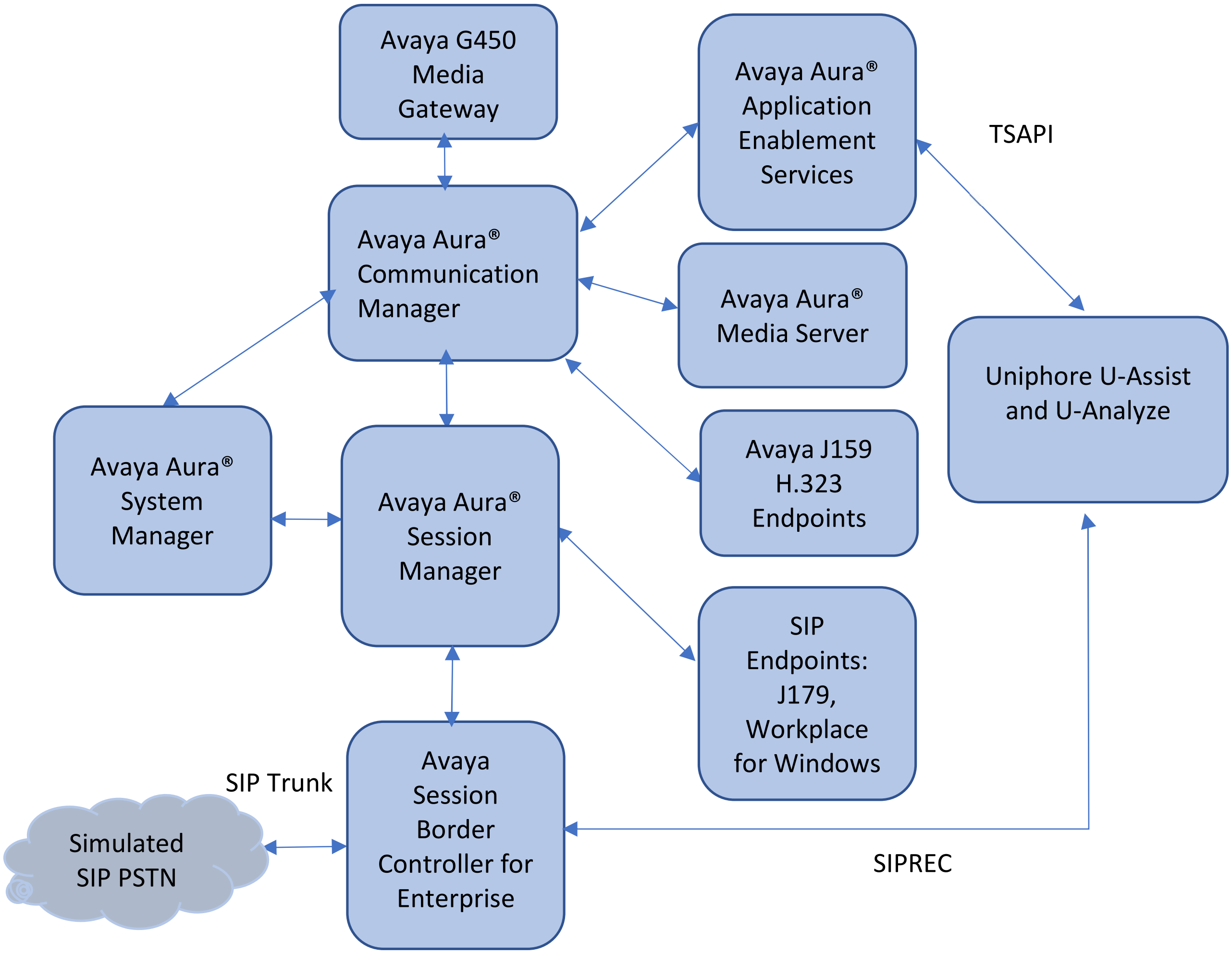

Avaya G450 Media Gateway
Avaya Aura® Application Enablement Services
TSAPI
Avaya Aura® Communication Manager
Avaya Aura® Media Server
Uniphore U-Assist and U-Analyze
Avaya Aura® System Manager
Avaya Aura® Session Manager
Avaya J159 H.323 Endpoints
SIP Endpoints: J179, Workplace for Windows
SIP Trunk
Simulated SIP PSTN
Avaya Session Border Controller for Enterprise
SIPREC

Figure 1: Compliance Testing Configuration

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya Aura® System Manager in Virtual Environment	10.1.2.1012015476
Avaya Aura® Session Manager in Virtual Environment	10.1.2.0.1012016
Avaya Aura® Communication Manager in Virtual Environment	10.1.2 - 01.0.974.0-27783
Avaya G450 Media Gateway	42.18.1
Avaya Aura® Media Server in Virtual Environment	10.1.0.121 A5
Avaya Aura® Application Enablement Services in Virtual Environment	10.1.2.0.0.12-0
Avaya Session Border Controller for Enterprise	10.1.0.0-32-21432
Avaya Workplace Client for Windows	3.33
Avaya J179 IP Phone (SIP)	4.1
Avaya J159 IP Deskphone (H.323)	6.8.5
Uniphore • U-Assist • U- Analyze • OrkAvayaTSAPI – TSAPI client • OrkAudio	 23.3.0.2 23.3.0.2 4.30-2267 4.20_2255_T1462x9995

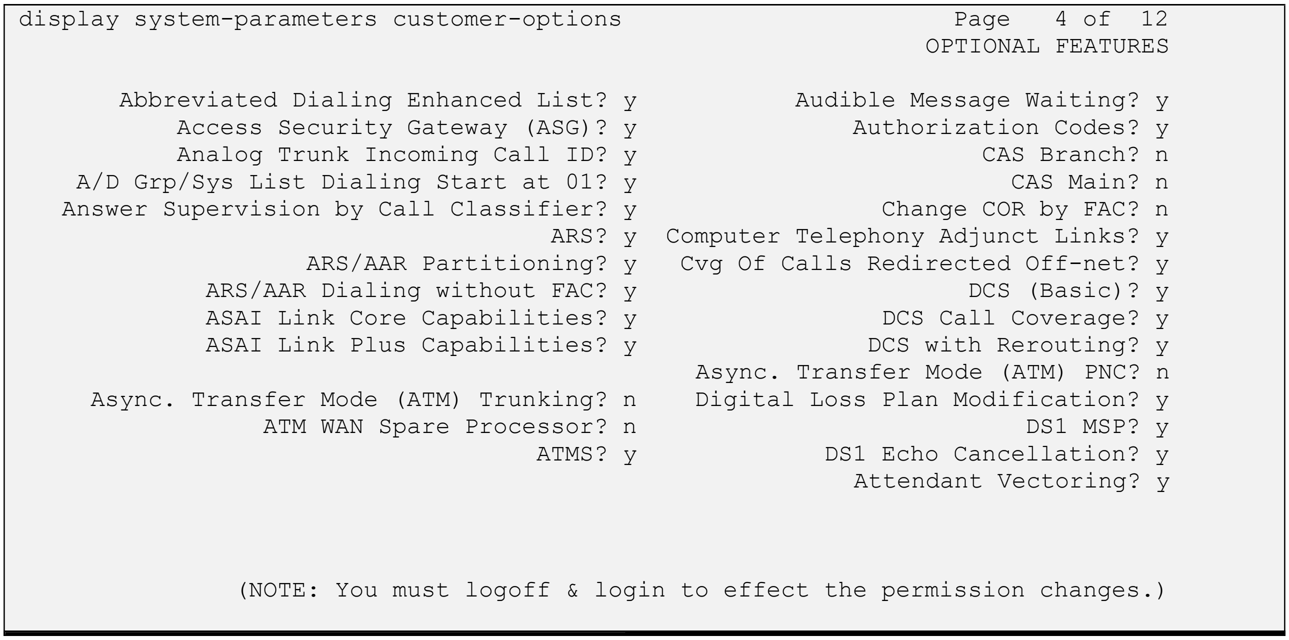
5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager. The procedures include the following areas:

- Verify license.
- Administer CTI link.
- Administer codec set.
- Administer hunt group and agent.
- Administer vectors and VDNs.
- Administer system parameters features.
- Administer SIP trunk group.

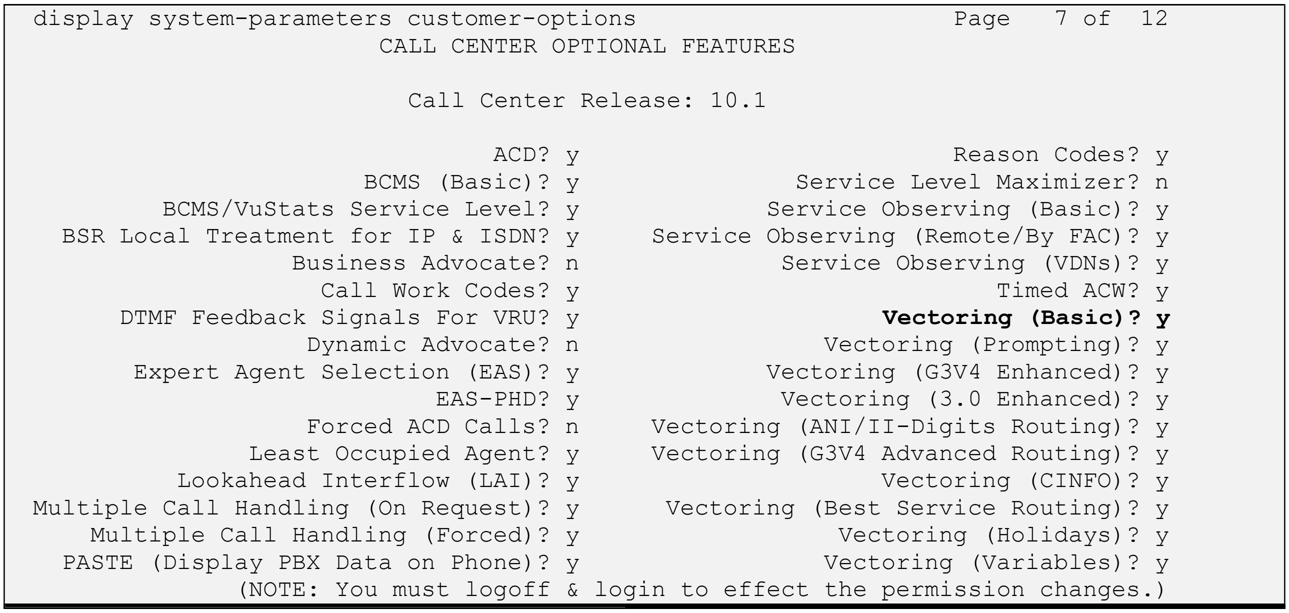
5.1. Verify License

Log into the System Access Terminal to verify that the Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the **display system-parameters customer-options** command to verify that the **Computer Telephony Adjunct Links** customer option is set to **y** on **Page 4**. If this option is not set to **y**, then contact the Avaya sales team or business partner for a proper license file.



```
display system-parameters customer-options                       Page   4 of  12
                                                               OPTIONAL FEATURES

       Abbreviated Dialing Enhanced List? y          Audible Message Waiting? y
           Access Security Gateway (ASG)? y              Authorization Codes? y
           Analog Trunk Incoming Call ID? y                       CAS Branch? n
    A/D Grp/Sys List Dialing Start at 01? y                         CAS Main? n
   Answer Supervision by Call Classifier? y                Change COR by FAC? n
                                    ARS? y  Computer Telephony Adjunct Links? y
                    ARS/AAR Partitioning? y  Cvg Of Calls Redirected Off-net? y
              ARS/AAR Dialing without FAC? y                      DCS (Basic)? y
              ASAI Link Core Capabilities? y                DCS Call Coverage? y
              ASAI Link Plus Capabilities? y               DCS with Rerouting? y
                                              Async. Transfer Mode (ATM) PNC? n
     Async. Transfer Mode (ATM) Trunking? n    Digital Loss Plan Modification? y
                 ATM WAN Spare Processor? n                          DS1 MSP? y
                                   ATMS? y            DS1 Echo Cancellation? y
                                                         Attendant Vectoring? y



               (NOTE: You must logoff & login to effect the permission changes.)
```

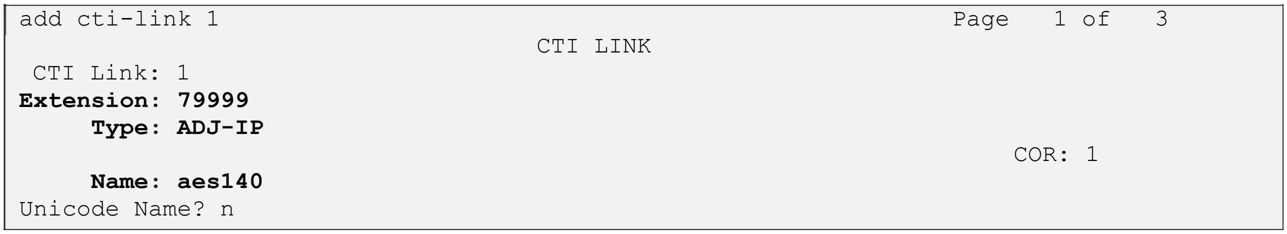
Navigate to **Page 7**, and verify that **Vectoring (Basic)** is set to **y**.



```
display system-parameters customer-options                      Page   7 of  12
                        CALL CENTER OPTIONAL FEATURES

                          Call Center Release: 10.1

                                ACD? y                            Reason Codes? y
                       BCMS (Basic)? y                 Service Level Maximizer? n
         BCMS/VuStats Service Level? y               Service Observing (Basic)? y
  BSR Local Treatment for IP & ISDN? y       Service Observing (Remote/By FAC)? y
                  Business Advocate? n              Service Observing (VDNs)? y
                    Call Work Codes? y                               Timed ACW? y
      DTMF Feedback Signals For VRU? y                       Vectoring (Basic)? y
                   Dynamic Advocate? n                   Vectoring (Prompting)? y
       Expert Agent Selection (EAS)? y               Vectoring (G3V4 Enhanced)? y
                            EAS-PHD? y                Vectoring (3.0 Enhanced)? y
                   Forced ACD Calls? n       Vectoring (ANI/II-Digits Routing)? y
               Least Occupied Agent? y       Vectoring (G3V4 Advanced Routing)? y
          Lookahead Interflow (LAI)? y                       Vectoring (CINFO)? y
Multiple Call Handling (On Request)? y        Vectoring (Best Service Routing)? y
    Multiple Call Handling (Forced)? y                    Vectoring (Holidays)? y
  PASTE (Display PBX Data on Phone)? y                   Vectoring (Variables)? y
              (NOTE: You must logoff & login to effect the permission changes.)
```

5.2. Administer CTI Link

Add a CTI link using the **add cti-link n** command, where **n** is an available CTI link number. Enter an available extension number in the **Extension** field. Note that the CTI link number and extension number may vary. Enter **ADJ-IP** in the **Type** field, and a descriptive name in the **Name** field. Default values may be used in the remaining fields.



```
add cti-link 1                                                  Page   1 of   3
                                    CTI LINK
 CTI Link: 1
Extension: 79999
     Type: ADJ-IP
                                                                    COR: 1
     Name: aes140
Unicode Name? n
```

5.3. Administer Codec Set

Use the **change ip-codec-set n** command, where “n” is an existing codec set number used by the agent stations. For Audio Codec, make certain only variants of G711 and/or G729 codec are configured, as shown below. Note that Uniphore supports the G711 and G729 codec variants

```
change ip-codec-set 1                                           Page   1 of
2

                          IP MEDIA PARAMETERS
    Codec Set: 1

    Audio        Silence      Frames   Packet
    Codec        Suppression  Per Pkt  Size(ms)
 1: G.711A            n         2        20
 2: G.729             n         2        20
 3:
 4:
 5:
 6:
 7:

     Media Encryption                  Encrypted SRTCP: best-effort
 1: 1-srtp-aescm128-hmac80
 2: aes
 3: none
 4:
 5:
```

5.4. Administer Hunt Group and Agent

This section shows the steps required to add a new service or skill on Communication Manager. Services are accessed by calling a Vector Directory Number (VDN), which points to a vector. The vector then points to a hunt group associated with an agent. The following sections give step by step instructions on how to add the following.

- Hunt Group
- Agent

5.4.1. Add Hunt Group

To add a new skillset or hunt group type, **add hunt-group x,** where **x** is the new hunt group number. For example, **hunt group 1** is added for the **Voice Service** queue. Ensure that **ACD**, **Queue** and **Vector** are all set to **y**. Also, that **Group Type** is set to **ucd-mia**.

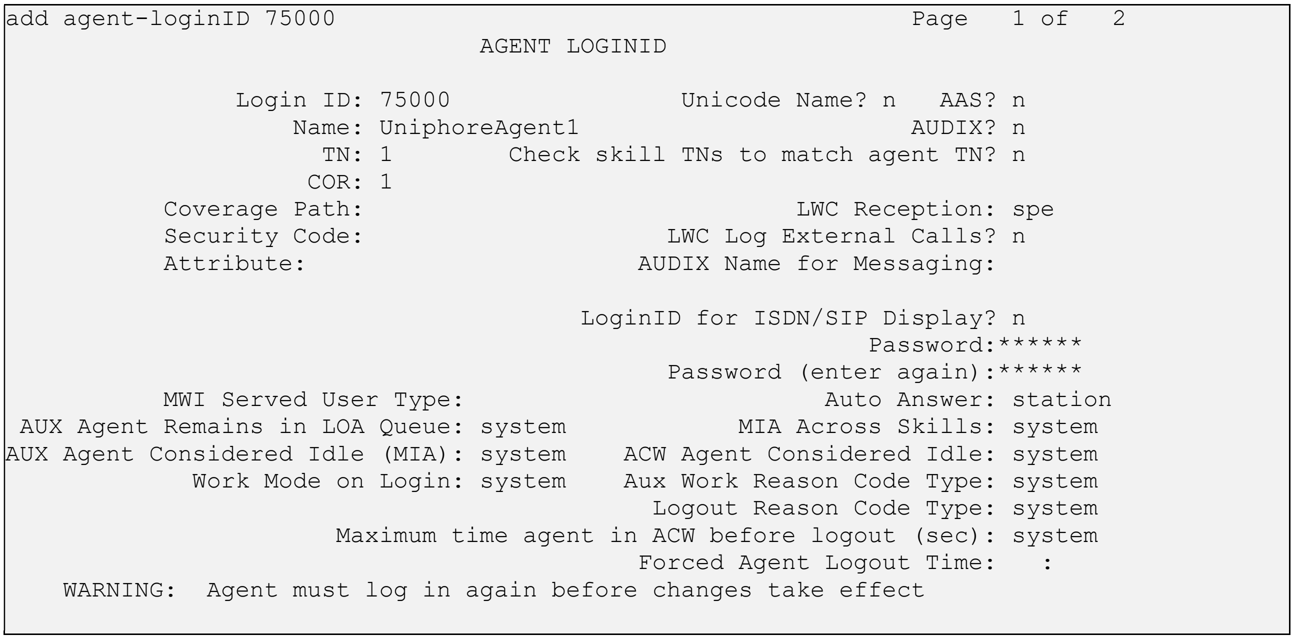
```
add hunt-group 1                                              Page   1 of  62
                                  HUNT GROUP

            Group Number: 1                                ACD? y
              Group Name: UniphoreGroup1                   Queue? y
         Group Extension: 79000                            Vector? y
              Group Type: ucd-mia
                      TN: 1
                     COR: 1                     MM Early Answer? n
           Security Code:                Local Agent Preference? n
 ISDN/SIP Caller Display:

             Queue Limit: unlimited
 Calls Warning Threshold:      Port:
  Time Warning Threshold:      Port:





SIP URI:
```

On **Page 2** ensure that **Skill** is set to **y** as shown below.

```
add hunt-group 1                                              Page   2 of   4
                                  HUNT GROUP

                      Skill? y      Expected Call Handling Time (sec): 180
                        AAS? n
                   Measured: none
     Supervisor Extension:


      Controlling Adjunct: none




   Multiple Call Handling: none


 Timed ACW Interval (sec):          After Xfer or Held Call Drops? n
```

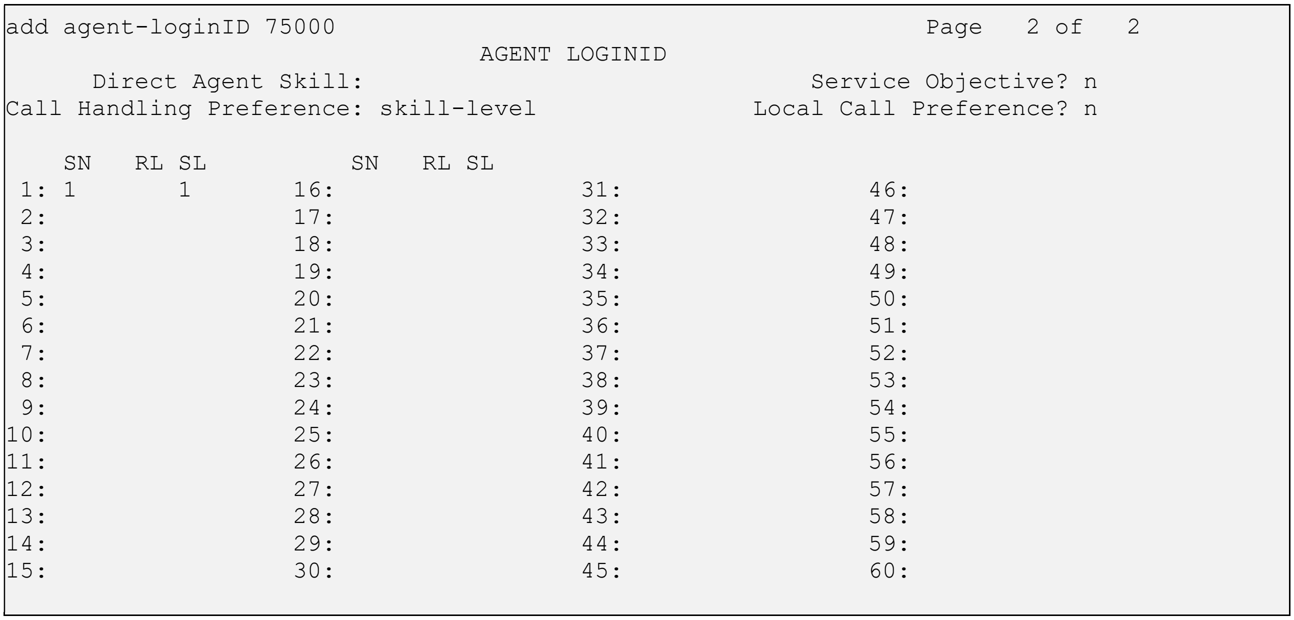
5.4.2. Add Agent

In the compliance testing, the agents 75000, 75001 and 75002 were created. To add a new agent, type **add agent-loginID x**, where x is the login id for the new agent.



```
add agent-loginID 75000                                        Page   1 of   2
                                 AGENT LOGINID

                Login ID: 75000                Unicode Name? n   AAS? n
                    Name: UniphoreAgent1                       AUDIX? n
                      TN: 1        Check skill TNs to match agent TN? n
                     COR: 1
           Coverage Path:                              LWC Reception: spe
           Security Code:                     LWC Log External Calls? n
           Attribute:                       AUDIX Name for Messaging:

                                        LoginID for ISDN/SIP Display? n
                                                            Password:******
                                              Password (enter again):******
           MWI Served User Type:                         Auto Answer: station
 AUX Agent Remains in LOA Queue: system            MIA Across Skills: system
AUX Agent Considered Idle (MIA): system    ACW Agent Considered Idle: system
             Work Mode on Login: system    Aux Work Reason Code Type: system
                                             Logout Reason Code Type: system
                       Maximum time agent in ACW before logout (sec): system
                                            Forced Agent Logout Time:   :
    WARNING:  Agent must log in again before changes take effect
```

On **Page 2,** add the required skills. Note that the skill **1** is added to this agent so when a call for **Voice Service** is initiated, the call can be routed to this agent.

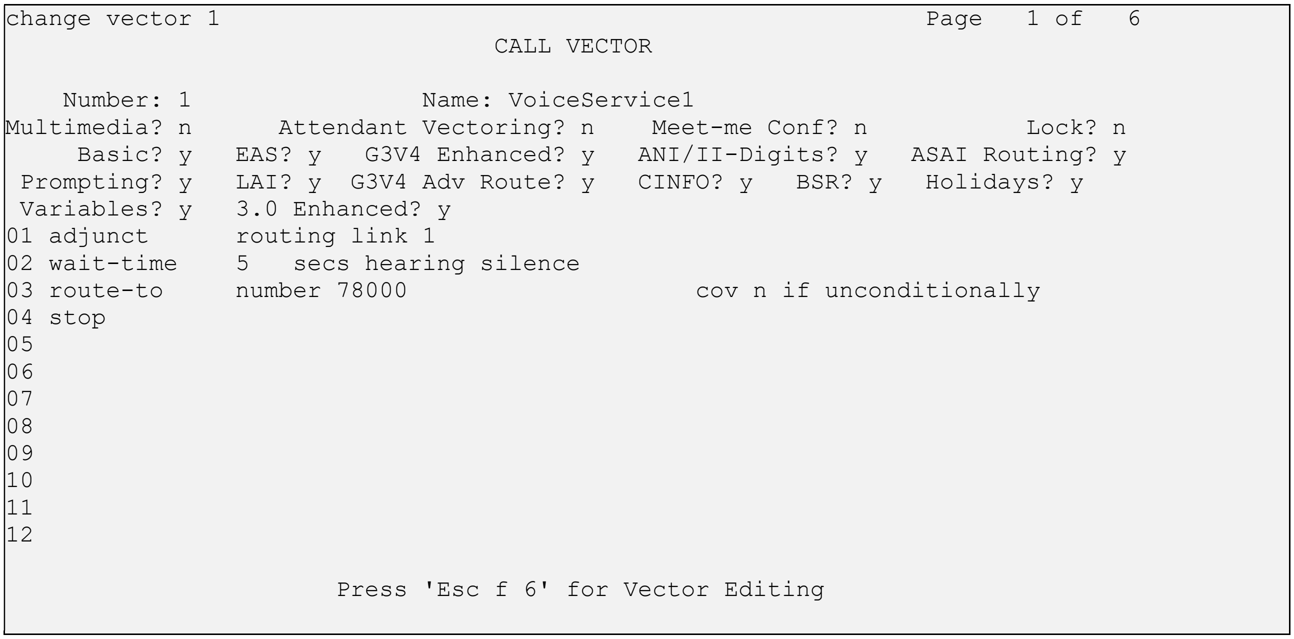


```
add agent-loginID 75000                                         Page   2 of   2
                                 AGENT LOGINID
      Direct Agent Skill:                               Service Objective? n
Call Handling Preference: skill-level              Local Call Preference? n

    SN   RL SL          SN   RL SL
 1: 1       1       16:                 31:                 46:
 2:                 17:                 32:                 47:
 3:                 18:                 33:                 48:
 4:                 19:                 34:                 49:
 5:                 20:                 35:                 50:
 6:                 21:                 36:                 51:
 7:                 22:                 37:                 52:
 8:                 23:                 38:                 53:
 9:                 24:                 39:                 54:
10:                 25:                 40:                 55:
11:                 26:                 41:                 56:
12:                 27:                 42:                 57:
13:                 28:                 43:                 58:
14:                 29:                 44:                 59:
15:                 30:                 45:                 60:
```

Repeat this section to add another agent 75012.

5.5. Administer Vectors and VDNs

Add a vector using the **change vector n** command, where **n** is a vector number. Note that the vector steps may vary, and below is a sample vector used in the compliance testing. The **adjunct routing link** number must match the number configured in the cti-link form in **Section 5.2.**



```
change vector 1                                                 Page   1 of   6
                                  CALL VECTOR

    Number: 1                Name: VoiceService1
Multimedia? n      Attendant Vectoring? n    Meet-me Conf? n           Lock? n
     Basic? y   EAS? y   G3V4 Enhanced? y   ANI/II-Digits? y   ASAI Routing? y
 Prompting? y   LAI? y  G3V4 Adv Route? y   CINFO? y   BSR? y   Holidays? y
 Variables? y   3.0 Enhanced? y
01 adjunct      routing link 1
02 wait-time    5   secs hearing silence
03 route-to     number 78000                    cov n if unconditionally
04 stop
05
06
07
08
09
10
11
12

                       Press 'Esc f 6' for Vector Editing
```

Add a VDN using the **add vdn n** command, where **n** is an available extension number. Enter a descriptive **Name** and the vector number from above for **Destination**. Retain the default values for all remaining fields.

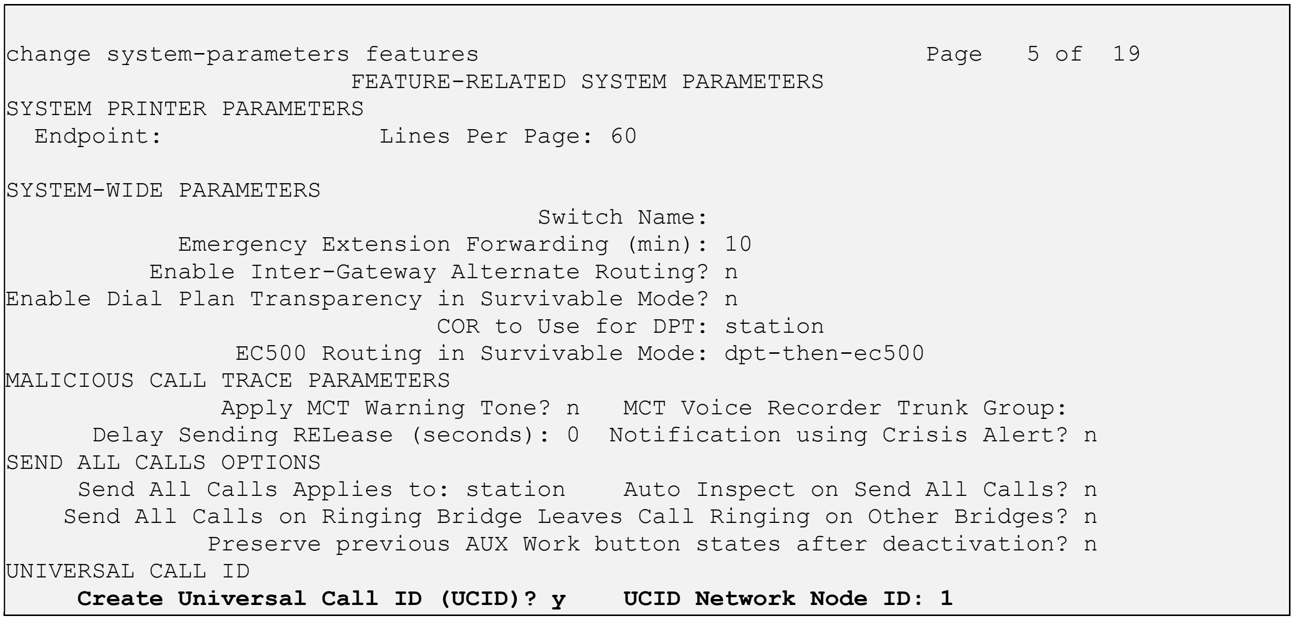
```
add vdn 88000                                                Page   1 of   3
                            VECTOR DIRECTORY NUMBER

                             Extension: 78000                    Unicode Name? n
                                 Name*: UniphoreVDN1
                           Destination: Vector Number        1
                   Attendant Vectoring? n
                  Meet-me Conferencing? n
                    Allow VDN Override? n
                                   COR: 1
                                   TN*: 1
                              Measured: none     Report Adjunct Calls as ACD*? n


        VDN of Origin Annc. Extension*:
                            1st Skill*:
                            2nd Skill*:
                            3rd Skill*:

SIP URI:

* Follows VDN Override Rules
```

Repeat this section to administer the desired number of vectors and VDNs. In the compliance testing, two sets of vectors and VDNs were created, as shown below.

```
list vdn

                          VECTOR DIRECTORY NUMBERS

                                                                        Evnt
                                      VDN         Vec           Orig    Noti
Name (22 characters)   Ext/Skills     Ovr COR  TN PRT Num  Meas Annc    Adj

UniphoreVDN1              78000            n 1    1   V  1    none          1

UniphoreVDN2              78001            n 1    1   V  2    none          1


```

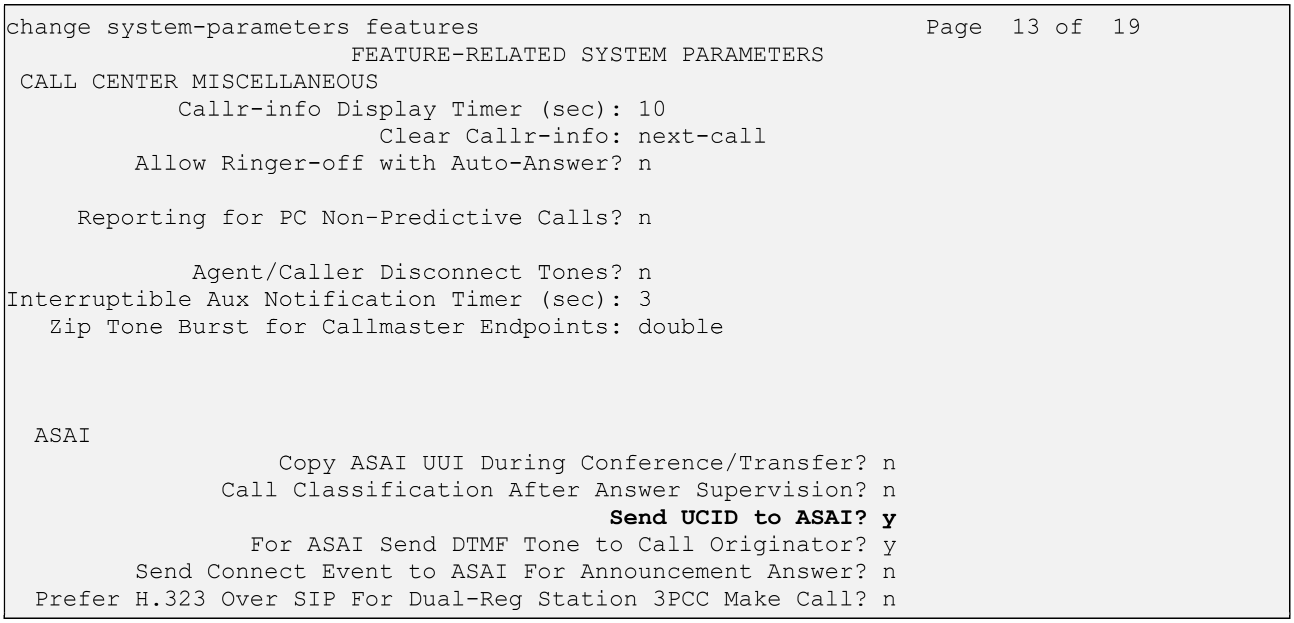
5.6 Administer System Parameters Features

Log into the System Access Terminal. Use the **change system-parameters features** command to enable **Create Universal Call ID (UCID),** which is located on **Page 5**. For **UCID Network Node ID**, enter an available node ID.



```
change system-parameters features                               Page   5 of  19
                        FEATURE-RELATED SYSTEM PARAMETERS
SYSTEM PRINTER PARAMETERS
  Endpoint:               Lines Per Page: 60

SYSTEM-WIDE PARAMETERS
                                     Switch Name:
            Emergency Extension Forwarding (min): 10
          Enable Inter-Gateway Alternate Routing? n
Enable Dial Plan Transparency in Survivable Mode? n
                              COR to Use for DPT: station
                EC500 Routing in Survivable Mode: dpt-then-ec500
MALICIOUS CALL TRACE PARAMETERS
               Apply MCT Warning Tone? n   MCT Voice Recorder Trunk Group:
      Delay Sending RELease (seconds): 0  Notification using Crisis Alert? n
SEND ALL CALLS OPTIONS
     Send All Calls Applies to: station    Auto Inspect on Send All Calls? n
    Send All Calls on Ringing Bridge Leaves Call Ringing on Other Bridges? n
              Preserve previous AUX Work button states after deactivation? n
UNIVERSAL CALL ID
     Create Universal Call ID (UCID)? y    UCID Network Node ID: 1
```

Navigate to **Page 13** and enable **Send UCID to ASAI**. This parameter allows for the universal call ID to be sent to Uniphore.

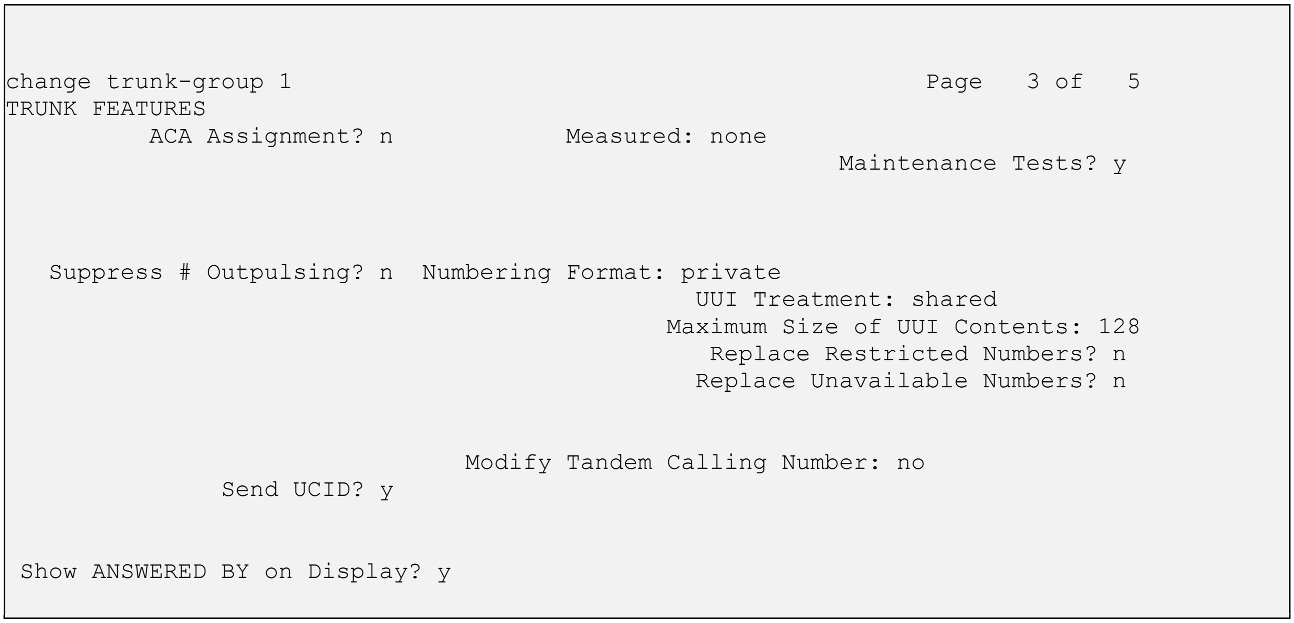


```
change system-parameters features                               Page  13 of  19
                        FEATURE-RELATED SYSTEM PARAMETERS
 CALL CENTER MISCELLANEOUS
            Callr-info Display Timer (sec): 10
                          Clear Callr-info: next-call
         Allow Ringer-off with Auto-Answer? n

     Reporting for PC Non-Predictive Calls? n

             Agent/Caller Disconnect Tones? n
Interruptible Aux Notification Timer (sec): 3
   Zip Tone Burst for Callmaster Endpoints: double



  ASAI
                   Copy ASAI UUI During Conference/Transfer? n
               Call Classification After Answer Supervision? n
                                          Send UCID to ASAI? y
                 For ASAI Send DTMF Tone to Call Originator? y
         Send Connect Event to ASAI For Announcement Answer? n
  Prefer H.323 Over SIP For Dual-Reg Station 3PCC Make Call? n
```

5.7. Administer SIP Trunk Group

Use the **change trunk-group n** command, where “n” is the trunk group number used by Communication Manager with Session Manager for outbound calls to the PSTN. Enter the following values for the specified fields and retain the default values for the remaining fields. In this case, the pertinent trunk group number is “1”. Navigate to **Page 3**. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **UUI Treatment: “shared”**
- **Send UCID: “y”**



```
change trunk-group 1                                            Page   3 of   5
TRUNK FEATURES
          ACA Assignment? n            Measured: none
                                                          Maintenance Tests? y


   Suppress # Outpulsing? n  Numbering Format: private
                                                UUI Treatment: shared
                                              Maximum Size of UUI Contents: 128
                                                 Replace Restricted Numbers? n
                                                Replace Unavailable Numbers? n


                                Modify Tandem Calling Number: no
               Send UCID? y


 Show ANSWERED BY on Display? y
```

6. Configure Avaya Aura® Application Enablement Services

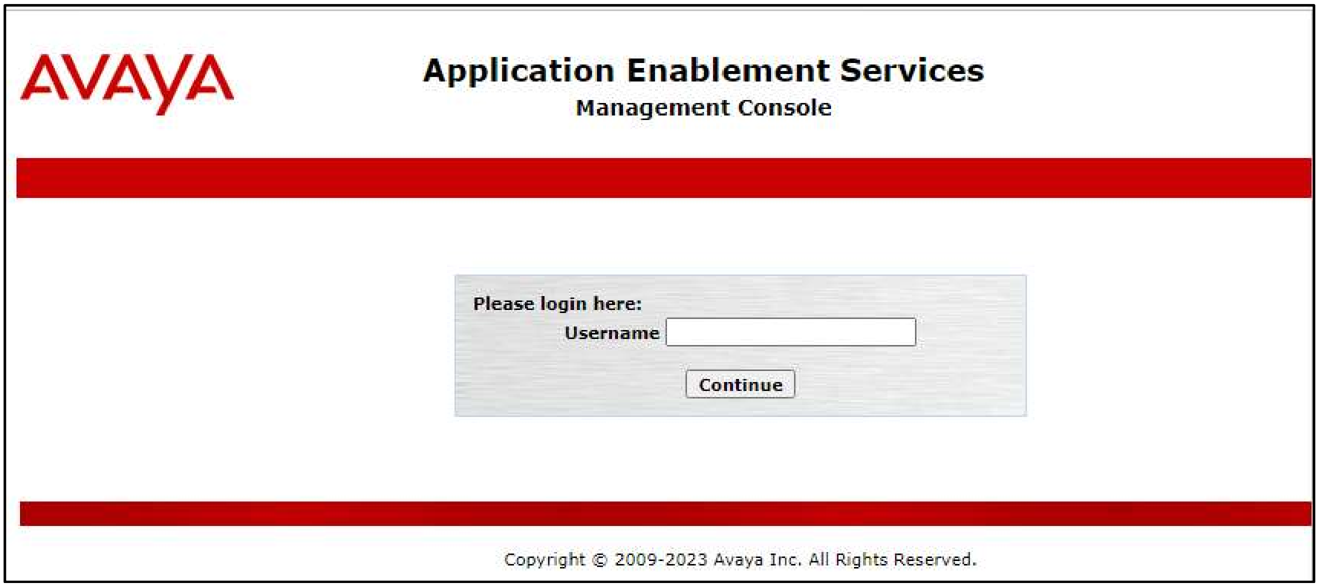
This section provides the procedures for configuring Application Enablement Services. The procedures include the following areas:

- Launch OAM interface
- Verify license
- Administer TSAPI link
- Administer TCP Settings
- Administer Uniphore User
- Administer security database
- Restart services
- Obtain Tlink name

6.1. Launch OAM Interface

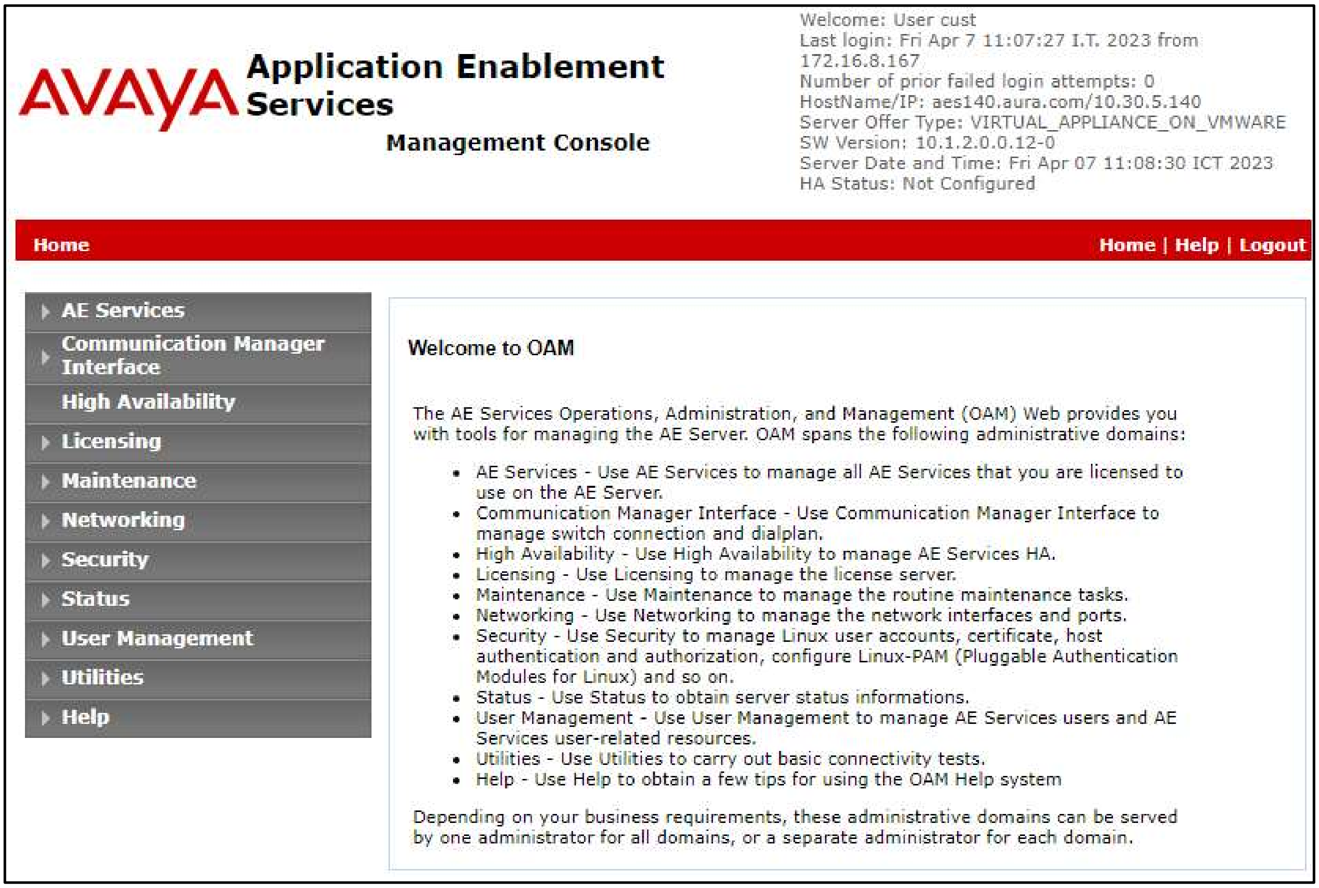
Access the OAM web-based interface by using the URL "https://ip-address" in an Internet browser window, where **ip-address** is the IP address of the Application Enablement Services server.

The **Please login here** screen is displayed. Log in using the appropriate credentials.



AVAYA
Application Enablement Services
Management Console
Please login here:
Username
Continue
Copyright © 2009-2023 Avaya Inc. All Rights Reserved.

The **Welcome to OAM** screen is displayed next.



Welcome: User cust
Last login: Fri Apr 7 11:07:27 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:08:30 ICT 2023
HA Status: Not Configured

Welcome to OAM

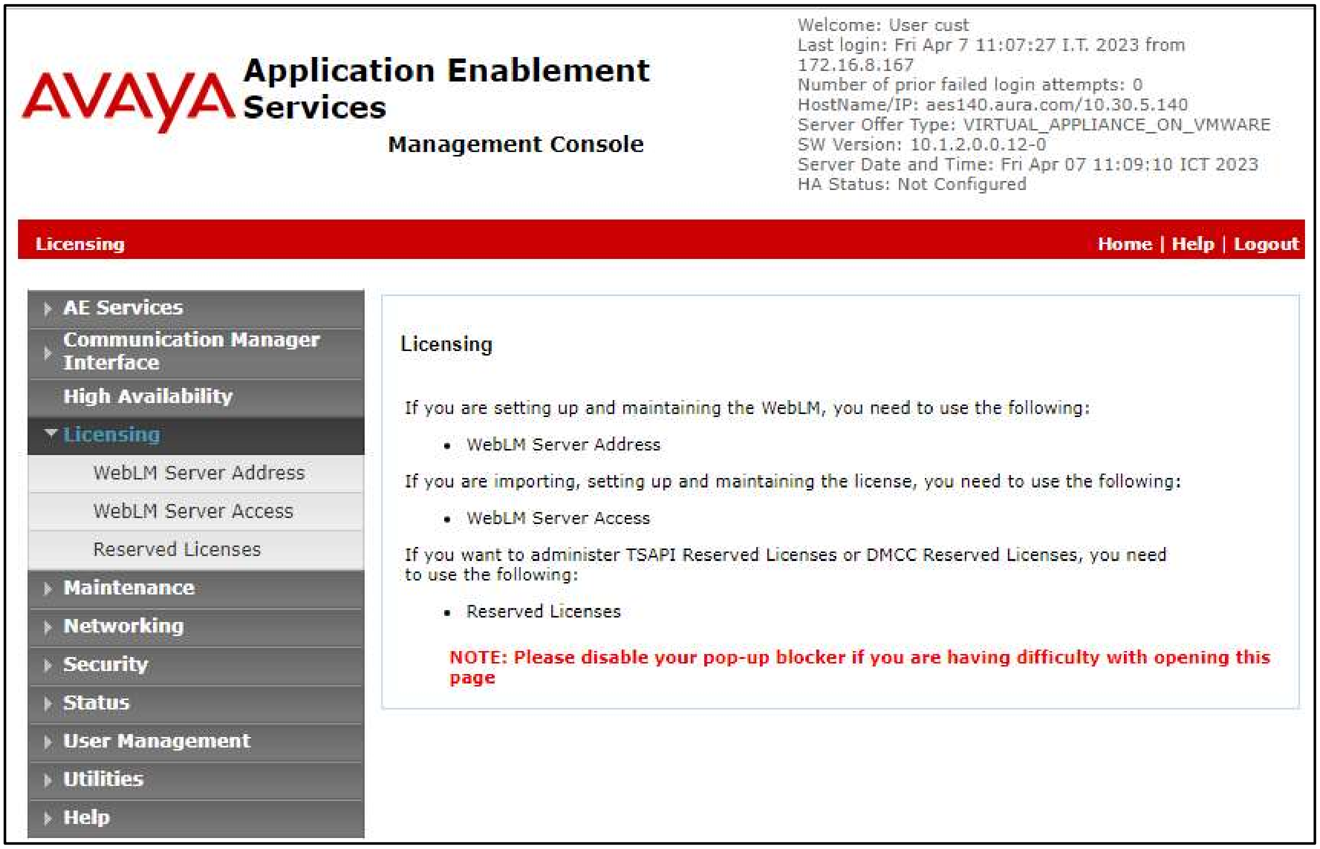
The AE Services Operations, Administration, and Management (OAM) Web provides you with tools for managing the AE Server. OAM spans the following administrative domains:

- AE Services - Use AE Services to manage all AE Services that you are licensed to use on the AE Server.
- Communication Manager Interface - Use Communication Manager Interface to manage switch connection and dialplan.
- High Availability - Use High Availability to manage AE Services HA.
- Licensing - Use Licensing to manage the license server.
- Maintenance - Use Maintenance to manage the routine maintenance tasks.
- Networking - Use Networking to manage the network interfaces and ports.
- Security - Use Security to manage Linux user accounts, certificate, host authentication and authorization, configure Linux-PAM (Pluggable Authentication Modules for Linux) and so on.
- Status - Use Status to obtain server status informations.
- User Management - Use User Management to manage AE Services users and AE Services user-related resources.
- Utilities - Use Utilities to carry out basic connectivity tests.
- Help - Use Help to obtain a few tips for using the OAM Help system

Depending on your business requirements, these administrative domains can be served by one administrator for all domains, or a separate administrator for each domain.

6.2. Verify License

Select **Licensing → WebLM Server Access** in the left pane, to display the applicable WebLM server login screen (not shown). Log in using the appropriate credentials and navigate to display installed licenses (not shown).



Welcome: User cust
Last login: Fri Apr 7 11:07:27 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:09:10 ICT 2023
HA Status: Not Configured

Licensing

If you are setting up and maintaining the WebLM, you need to use the following:

- WebLM Server Address

If you are importing, setting up and maintaining the license, you need to use the following:

- WebLM Server Access

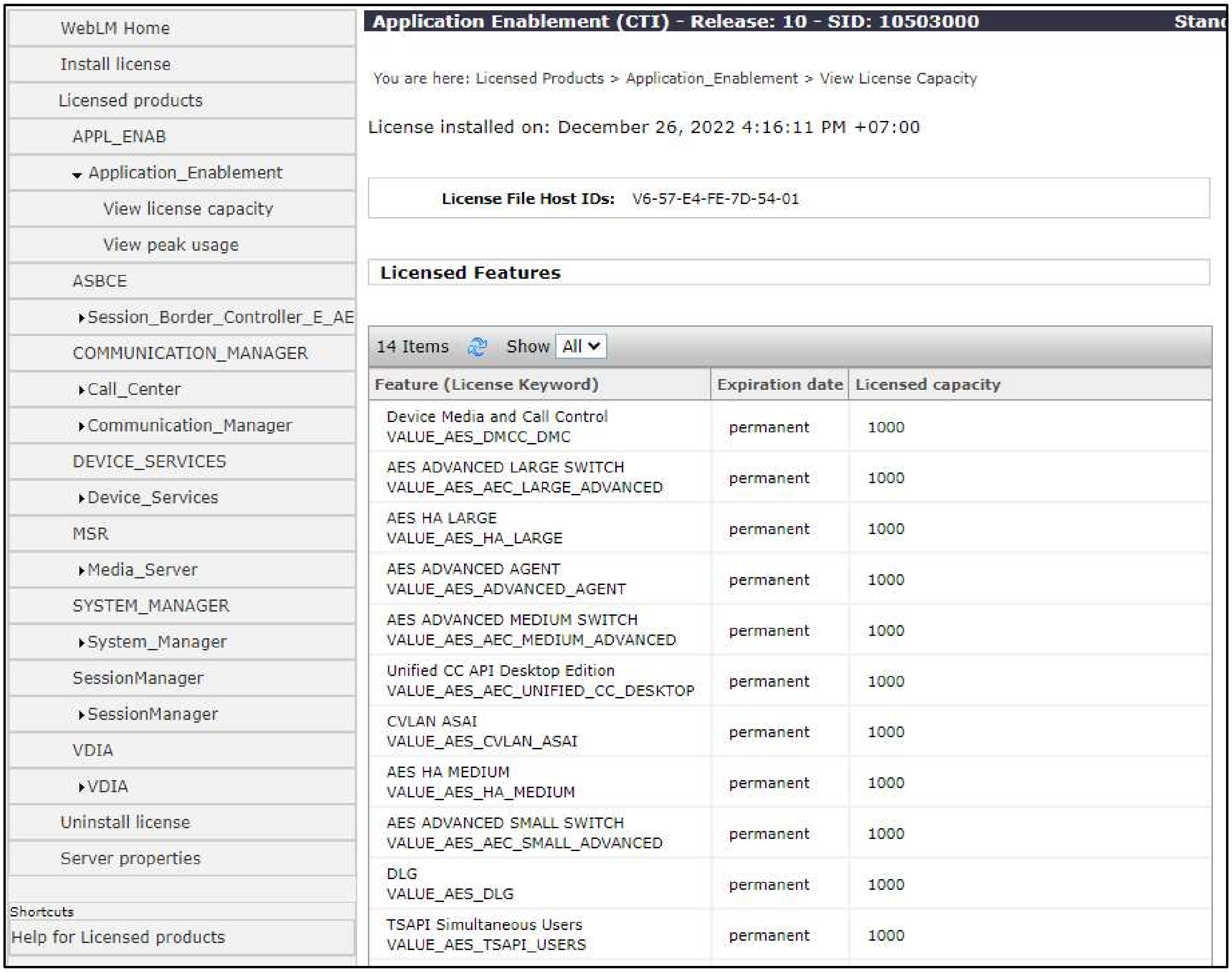
If you want to administer TSAPI Reserved Licenses or DMCC Reserved Licenses, you need to use the following:

- Reserved Licenses

NOTE: Please disable your pop-up blocker if you are having difficulty with opening this page

Select **Licensed products → APPL_ENAB → Application_Enablement** in the left pane, to display the **Licensed Features** screen in the right pane.

Verify that there are sufficient licenses for **TSAPI Simultaneous Users**, as shown below. Also verify that there is an applicable advanced switch license, in this case **AES ADVANCED LARGE SWITCH**.



Application Enablement (CTI) - Release: 10 - SID: 10503000 Stanc

You are here: Licensed Products > Application_Enablement > View License Capacity

License installed on: December 26, 2022 4:16:11 PM +07:00

License File Host IDs: V6-57-E4-FE-7D-54-01

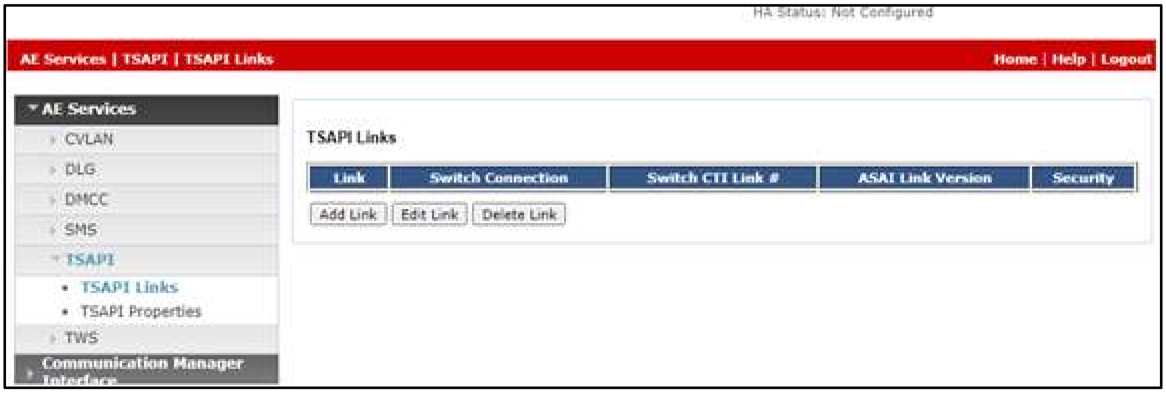
Licensed Features

14 Items Show All

Feature (License Keyword)	Expiration date	Licensed capacity
Device Media and Call Control VALUE_AES_DMCC_DMC	permanent	1000
AES ADVANCED LARGE SWITCH VALUE_AES_AEC_LARGE_ADVANCED	permanent	1000
AES HA LARGE VALUE_AES_HA_LARGE	permanent	1000
AES ADVANCED AGENT VALUE_AES_ADVANCED_AGENT	permanent	1000
AES ADVANCED MEDIUM SWITCH VALUE_AES_AEC_MEDIUM_ADVANCED	permanent	1000
Unified CC API Desktop Edition VALUE_AES_AEC_UNIFIED_CC_DESKTOP	permanent	1000
CVLAN ASAI VALUE_AES_CVLAN_ASAI	permanent	1000
AES HA MEDIUM VALUE_AES_HA_MEDIUM	permanent	1000
AES ADVANCED SMALL SWITCH VALUE_AES_AEC_SMALL_ADVANCED	permanent	1000
DLG VALUE_AES_DLG	permanent	1000
TSAPI Simultaneous Users VALUE_AES_TSAPI_USERS	permanent	1000

6.3. Administer TSAPI Link

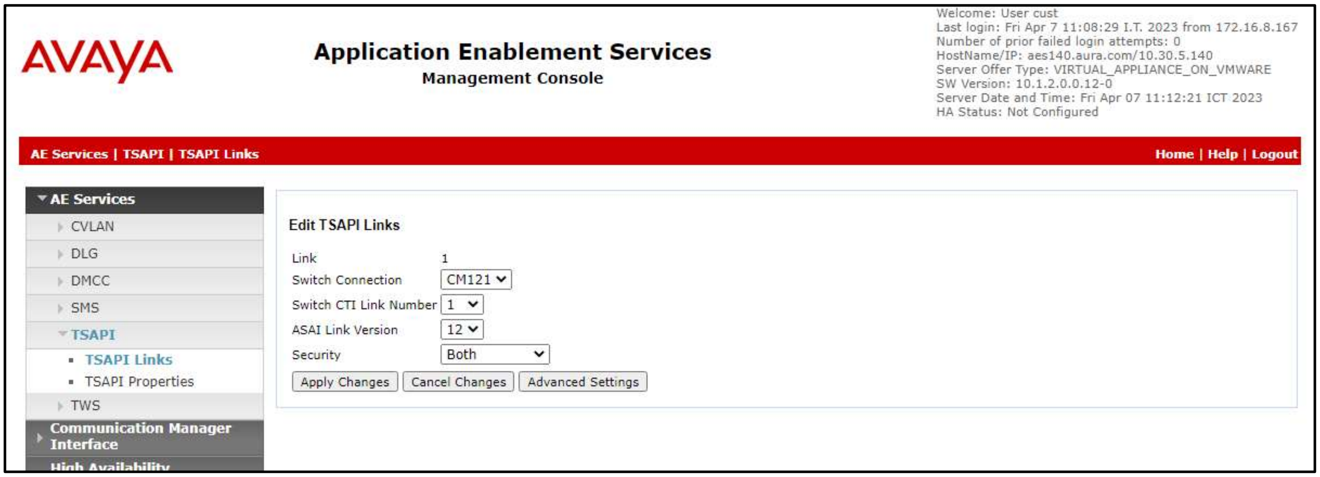
Select **AE Services → TSAPI → TSAPI Links** from the left pane of the **Management Console**, to administer a TSAPI link. The **TSAPI Links** screen is displayed, as shown below. Click **Add Link**.


HA Status: Not Configured
AE Services | TSAPI | TSAPI Links
Home | Help | Logout
AE Services
CVLAN
DLG
DMCC
SMS
TSAPI
TSAPI Links
TSAPI Properties
TWS
Communication Manager Interface

TSAPI Links

Link	Switch Connection	Switch CTI Link #	ASAI Link Version	Security

The **Add TSAPI Links** screen is displayed next. The **Link** field is only local to the Application Enablement Services server and may be set to any available number. For **Switch Connection**, select the relevant switch connection from the drop-down list. In this case, the existing switch connection **CM121** is selected. For **Switch CTI Link Number**, select the CTI link number from **Section 5.2**. Retain the default values in the remaining fields.



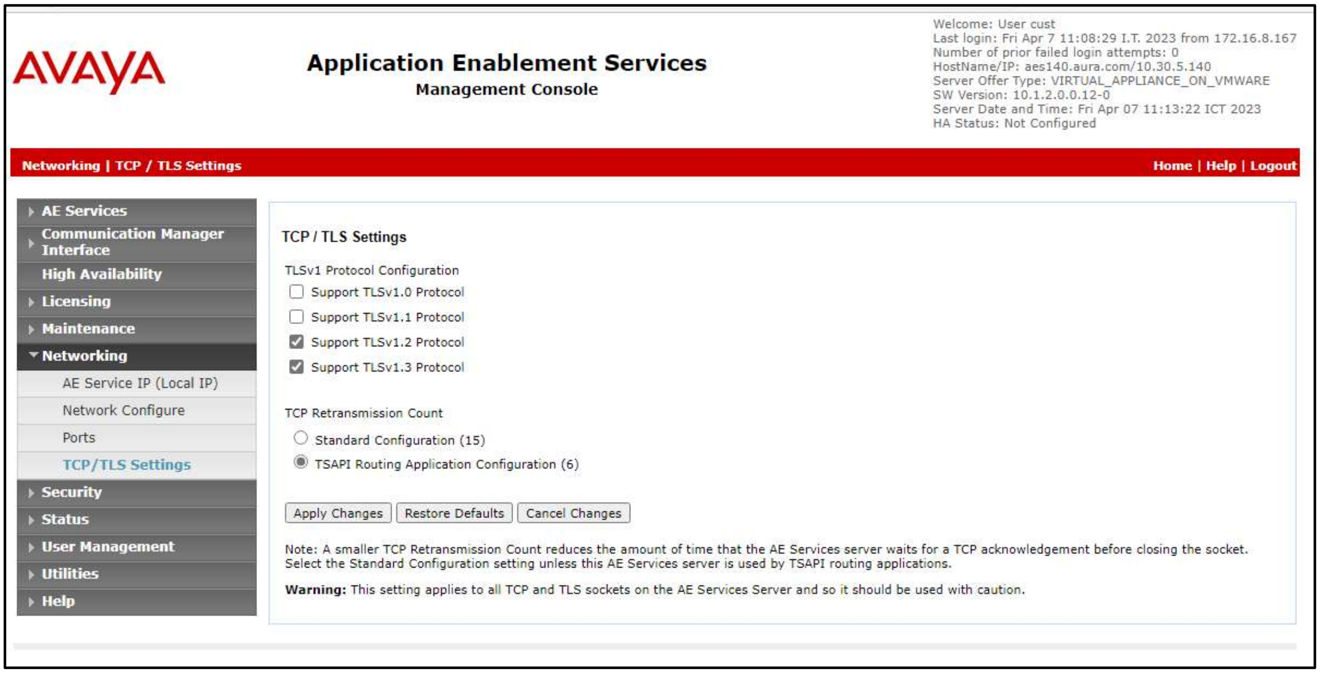
Welcome: User cust
Last login: Fri Apr 7 11:08:29 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:12:21 ICT 2023
HA Status: Not Configured

Edit TSAPI Links

Link	1
Switch Connection	CM121
Switch CTI Link Number	1
ASAI Link Version	12
Security	Both

6.4. Administer TCP Settings

Select **Networking → TCP/TLS Settings** from the left pane, to display the **TCP / TLS Settings** screen in the right pane. For **TCP Retransmission Count**, select **TSAPI Routing Application Configuration (6)**, as shown below.



Welcome: User cust
Last login: Fri Apr 7 11:08:29 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:13:22 ICT 2023
HA Status: Not Configured

TCP / TLS Settings

TLSv1 Protocol Configuration

□ Support TLSv1.0 Protocol
□ Support TLSv1.1 Protocol
☑ Support TLSv1.2 Protocol
☑ Support TLSv1.3 Protocol

TCP Retransmission Count

○ Standard Configuration (15)
● TSAPI Routing Application Configuration (6)

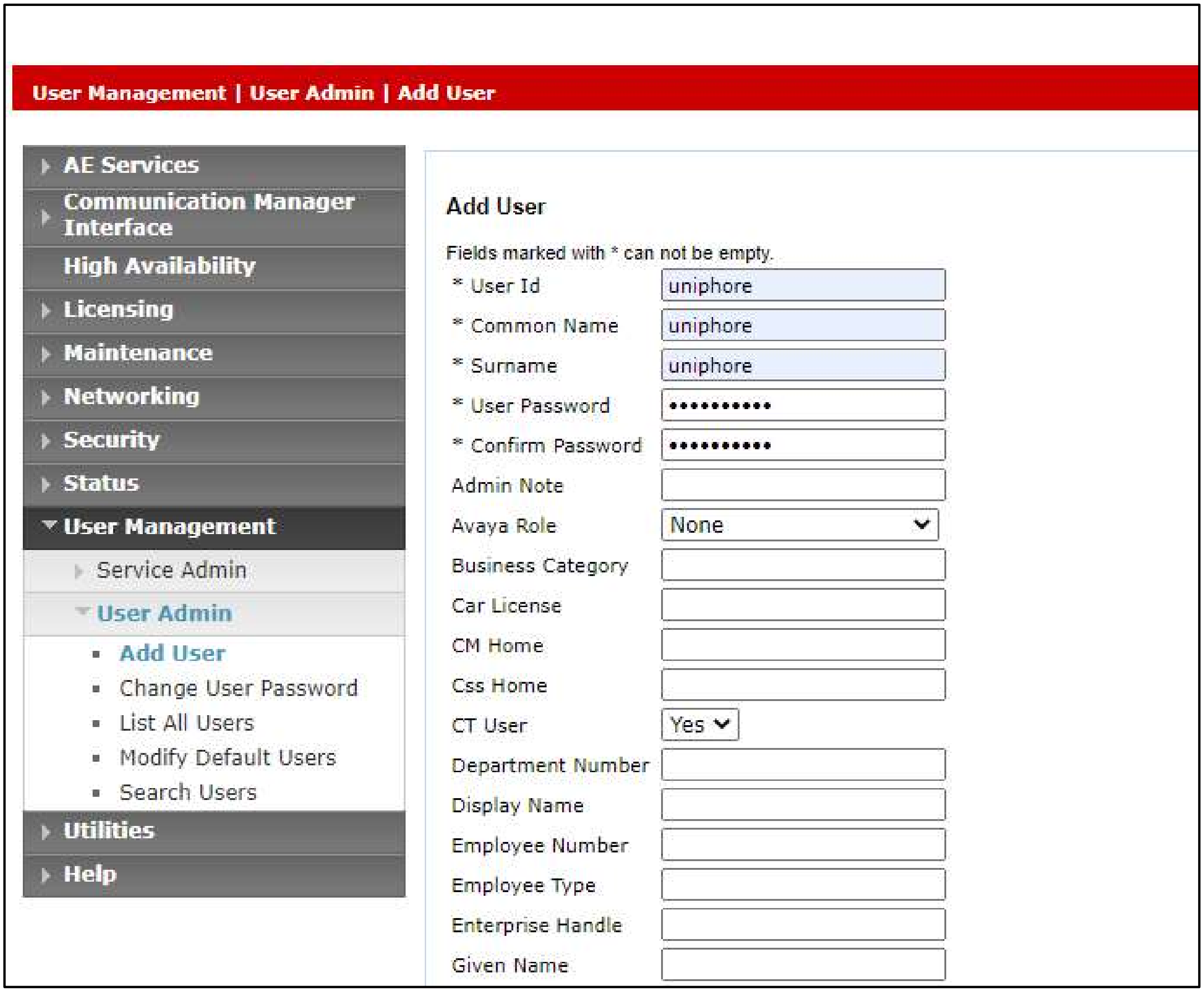
Note: A smaller TCP Retransmission Count reduces the amount of time that the AE Services server waits for a TCP acknowledgement before closing the socket. Select the Standard Configuration setting unless this AE Services server is used by TSAPI routing applications.

Warning: This setting applies to all TCP and TLS sockets on the AE Services Server and so it should be used with caution.

6.5. Administer Uniphore User

Select **User Management** → **User Admin** → **Add User** from the left pane, to display the **Add User** screen in the right pane.

Enter desired values for **User Id**, **Common Name**, **Surname**, **User Password**, and **Confirm Password**. For **CT User**, select **Yes** from the drop-down list. Retain the default value in the remaining fields.



Add User

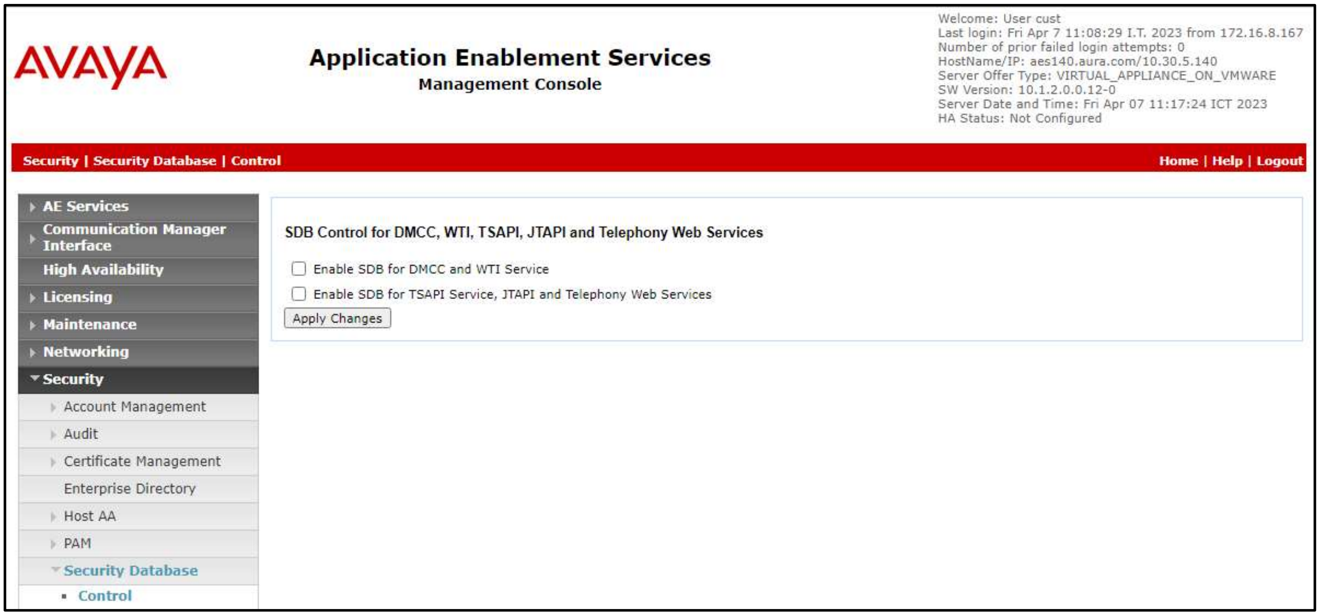
Fields marked with * can not be empty.

* User Id	uniphore
* Common Name	uniphore
* Surname	uniphore
* User Password	••••••••••
* Confirm Password	••••••••••
Admin Note	
Avaya Role	None
Business Category	
Car License	
CM Home	
Css Home	
CT User	Yes
Department Number	
Display Name	
Employee Number	
Employee Type	
Enterprise Handle	
Given Name	

6.6. Administer Security Database

Select **Security → Security Database → Control** from the left pane, to display the **SDB Control for DMCC, TSAPI, JTAPI and Telephony Web Services** screen in the right pane. Uncheck both fields below.

In the event that the security database is used by the customer with parameters already enabled, then follow reference **[3]** to configure access privileges for the uniphore user from **Section 6.5**.



Welcome: User cust
Last login: Fri Apr 7 11:08:29 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:17:24 ICT 2023
HA Status: Not Configured

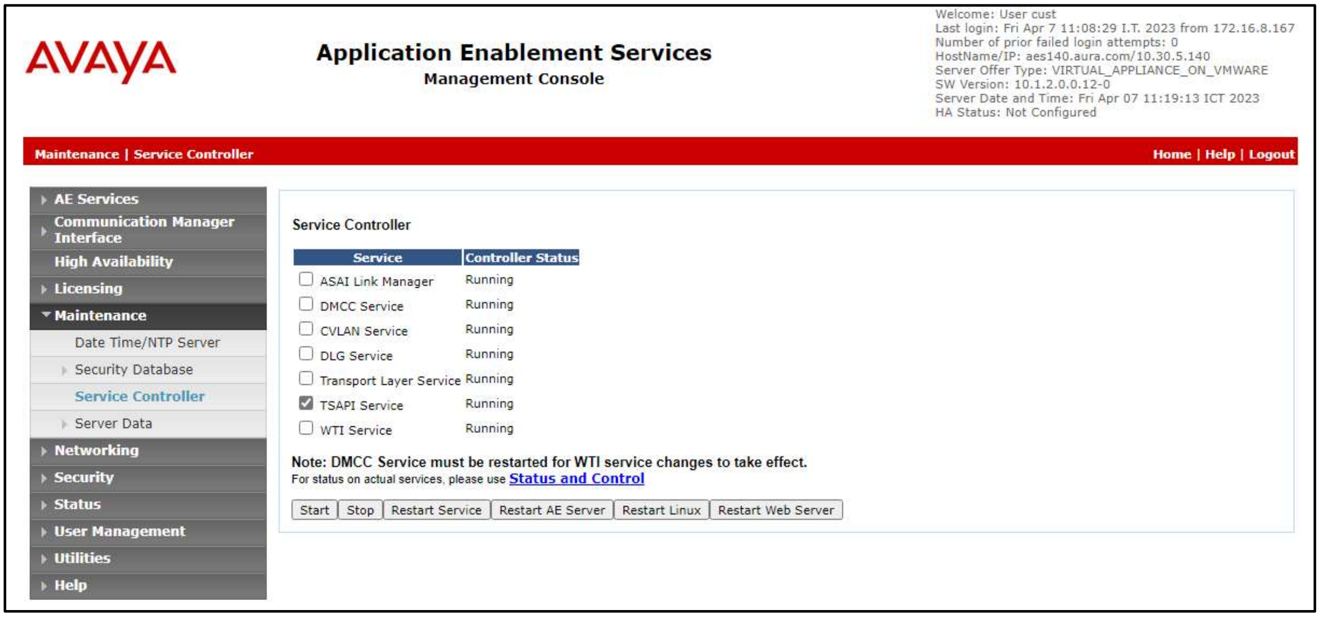
SDB Control for DMCC, WTI, TSAPI, JTAPI and Telephony Web Services

□ Enable SDB for DMCC and WTI Service

□ Enable SDB for TSAPI Service, JTAPI and Telephony Web Services

6.7. Restart Services

Select **Maintenance → Service Controller** from the left pane, to display the **Service Controller** screen in the right pane. Check **TSAPI Service** and click **Restart Service**.



Welcome: User cust
Last login: Fri Apr 7 11:08:29 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:19:13 ICT 2023
HA Status: Not Configured

Service Controller

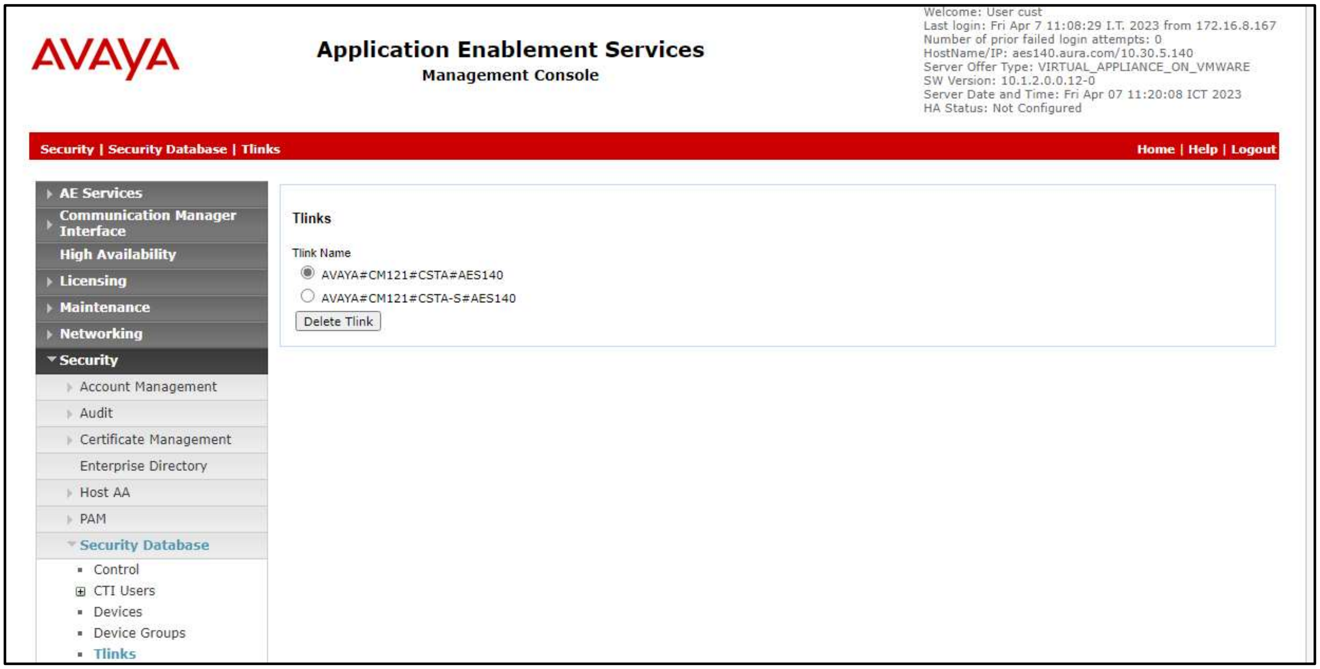
Service	Controller Status
☐ ASAI Link Manager	Running
☐ DMCC Service	Running
☐ CVLAN Service	Running
☐ DLG Service	Running
☐ Transport Layer Service	Running
☑ TSAPI Service	Running
☐ WTI Service	Running

Note: DMCC Service must be restarted for WTI service changes to take effect.
For status on actual services, please use Status and Control

6.8. Obtain Tlink Name

Select **Security** → **Security Database** → **Tlinks** from the left pane. The **Tlinks** screen shows a listing of the Tlink names. A new Tlink name is automatically generated for the TSAPI service. Locate the Tlink name associated with the relevant switch connection, which would use the name of the switch connection as part of the Tlink name. Make a note of the associated Tlink name, to be used later for configuring U-Assist and U-Analyze.

In this case, the associated Tlink name is **AVAYA#CM121#CSTA#AES140**. Note the use of the switch connection **CM121** from **Section 6.3** as part of the Tlink name.


Welcome: User cust
Last login: Fri Apr 7 11:08:29 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:20:08 ICT 2023
HA Status: Not Configured

Tlinks

Tlink Name
● AVAYA#CM121#CSTA#AES140
○ AVAYA#CM121#CSTA-S#AES140

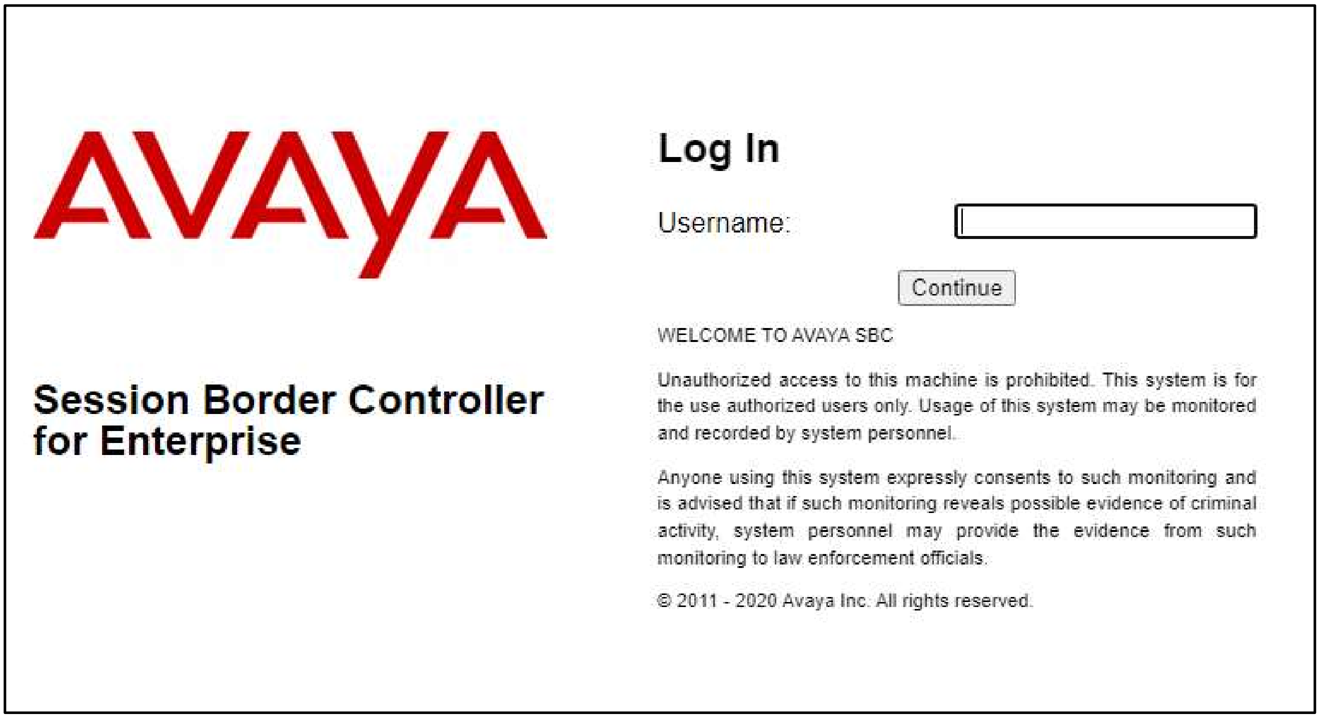
7. Configure Avaya Session Border Controller for Enterprise

This section provides the procedures for configuring SBCE. The procedures include the following areas:

- Launch web interface
- Administer SIP servers
- Administer routing
- Administer application rules
- Administer media rules
- Administer signaling rules
- Administer end point policy groups
- Administer recording profile
- Administer session policies
- Administer session flows
- Administer end point flows

7.1. Launch Web Interface

Access the SBCE web interface by using the URL “https://ip-address/sbc” in an Internet browser window, where “ip-address” is the IP address of the SBCE management interface. The screen below is displayed. Log in using the appropriate credentials.



WELCOME TO AVAYA SBC

Unauthorized access to this machine is prohibited. This system is for the use authorized users only. Usage of this system may be monitored and recorded by system personnel.

Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal activity, system personnel may provide the evidence from such monitoring to law enforcement officials.

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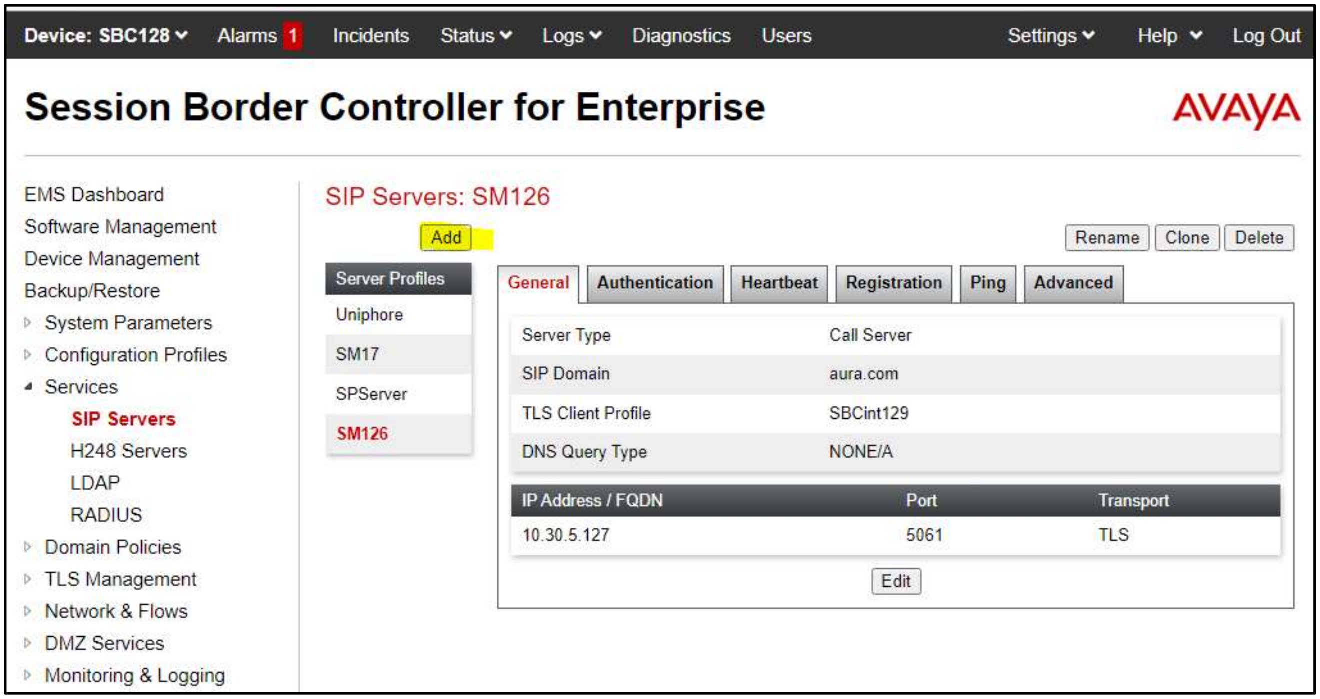
7.2. Administer SIP Servers

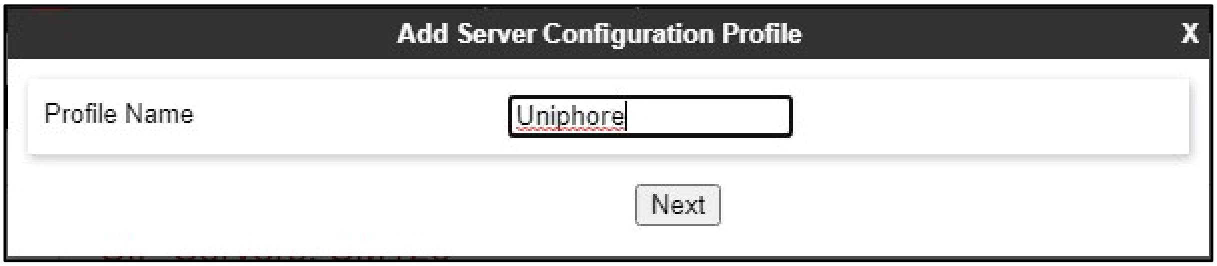
In the subsequent screen, select **Device** → **SBC128** from the top menu, followed by **Services → SIP Servers** from the left pane to display the existing SIP server profiles. Click Add to add a SIP server profile for Uniphore.



Server Type	Call Server
SIP Domain	aura.com
TLS Client Profile	SBCint129
DNS Query Type	NONE/A

IP Address / FQDN	Port	Transport
10.30.5.127	5061	TLS

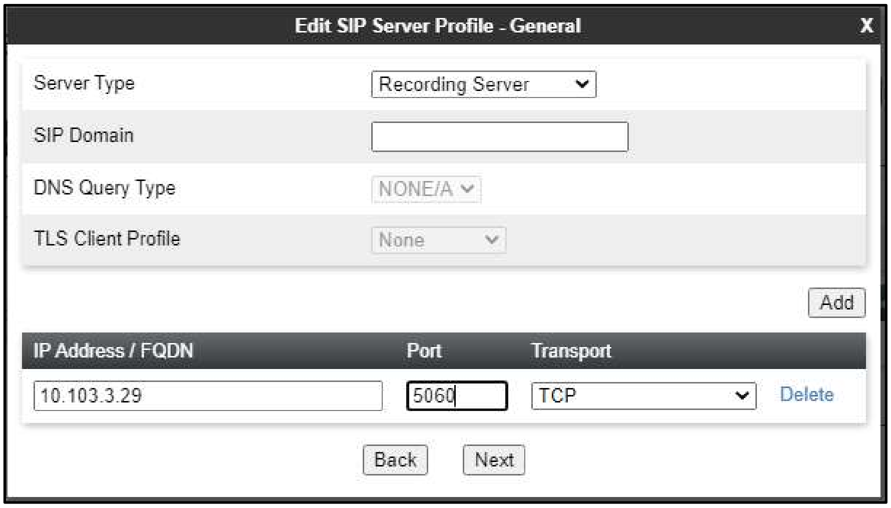
The **Add Server Configuration Profile** pop-up screen is displayed. Enter a desired **Profile Name** as shown below.



Profile Name: Uniphore

The **Edit SIP Server Profile – General** pop-up screen is displayed. Click **Add** to add an entry and enter the following values for the specified fields and retain the default values for the remaining fields.

- **Server Type:** "Recording Server"
- **IP Address / FQDN:** IP address of Uniphore server with the OrkAudio component.
- **Port:** "5060"
- **Transport:** "TCP"

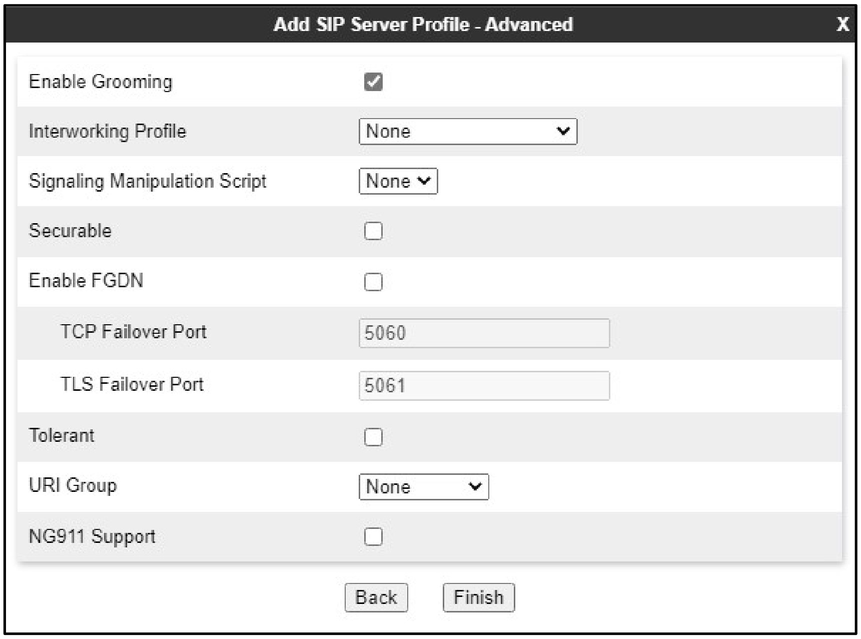


Edit SIP Server Profile - General

Server Type	Recording Server
SIP Domain	
DNS Query Type	NONE/A
TLS Client Profile	None

IP Address / FQDN	Port	Transport	
10.103.3.29	5060	TCP	Delete

Navigate to the **Add SIP Server Profile - Advanced** screen. Retain the check in **Enable Grooming** and the default values in the remaining fields.

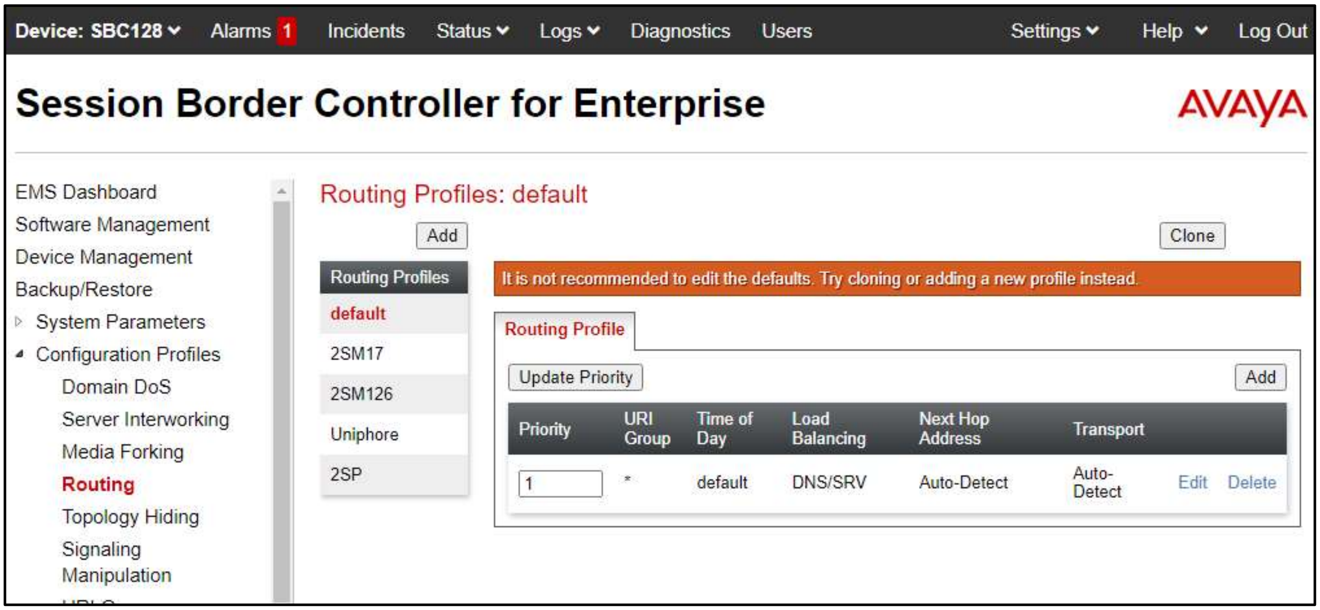


Add SIP Server Profile - Advanced

Enable Grooming	☑
Interworking Profile	None
Signaling Manipulation Script	None
Securable	□
Enable FGDN	□
TCP Failover Port	5060
TLS Failover Port	5061
Tolerant	□
URI Group	None
NG911 Support	□

7.3. Administer Routing

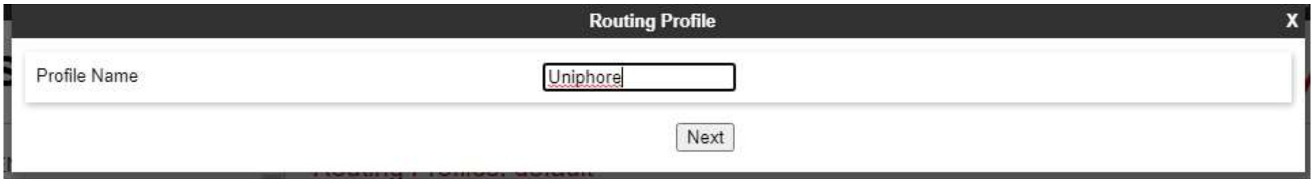
Select **Configuration Profiles → Routing** from the left pane to display the existing routing profiles. Click **Add** to add a routing profile for **Uniphore**.



It is not recommended to edit the defaults. Try cloning or adding a new profile instead.

Priority	URI Group	Time of Day	Load Balancing	Next Hop Address	Transport		
1	*	default	DNS/SRV	Auto-Detect	Auto-Detect	Edit	Delete

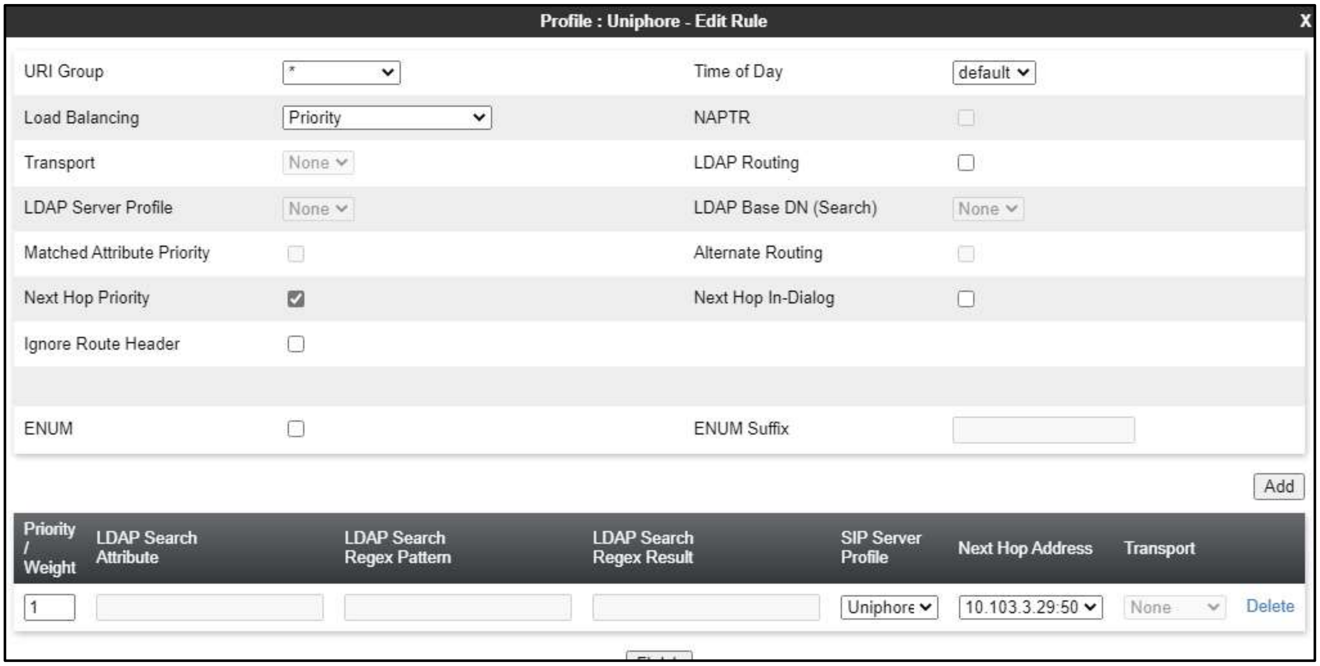
The **Routing Profile** pop-up screen is displayed. Enter a desired **Profile Name** as shown below.



Profile Name: Uniphore

The Routing Profile pop-up screen is updated. Click Add to add a next hop entry. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Priority / Weight:** The highest priority of “1”.
- **SIP Server Profile:** Select the Uniphore SIP server profile from **Section 7.2.**
- **Next Hop Address:** Retain the auto populated value.



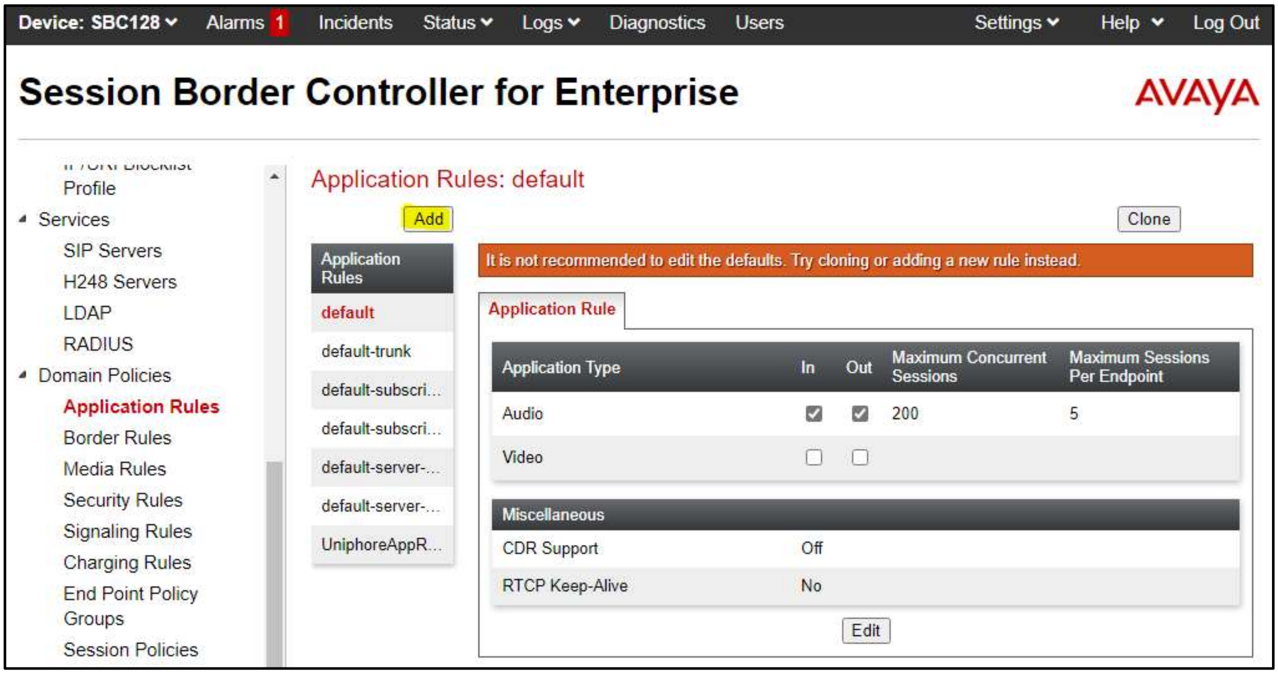
Profile : Uniphore - Edit Rule

URI Group	*	Time of Day	default
Load Balancing	Priority	NAPTR	□
Transport	None	LDAP Routing	□
LDAP Server Profile	None	LDAP Base DN (Search)	None
Matched Attribute Priority	□	Alternate Routing	□
Next Hop Priority	☑	Next Hop In-Dialog	□
Ignore Route Header	□		
ENUM	□	ENUM Suffix	

Priority / Weight	LDAP Search Attribute	LDAP Search Regex Pattern	LDAP Search Regex Result	SIP Server Profile	Next Hop Address	Transport	
1				Uniphore	10.103.3.29:50	None	Delete

7.4. Administer Application Rules

Select **Domain Policies → Application Rules** from the left pane to display the existing application rules. Click **Add** to add an application rule for **Uniphore**.



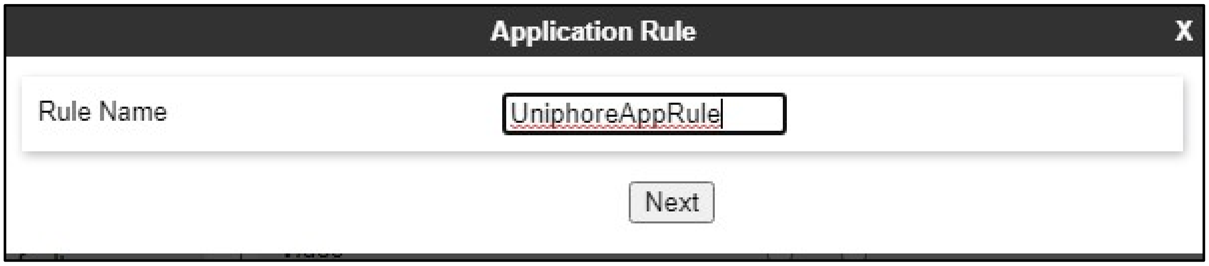
Application Rules: default

It is not recommended to edit the defaults. Try cloning or adding a new rule instead.

Application Type	In	Out	Maximum Concurrent Sessions	Maximum Sessions Per Endpoint
Audio	☑	☑	200	5
Video	□	□		

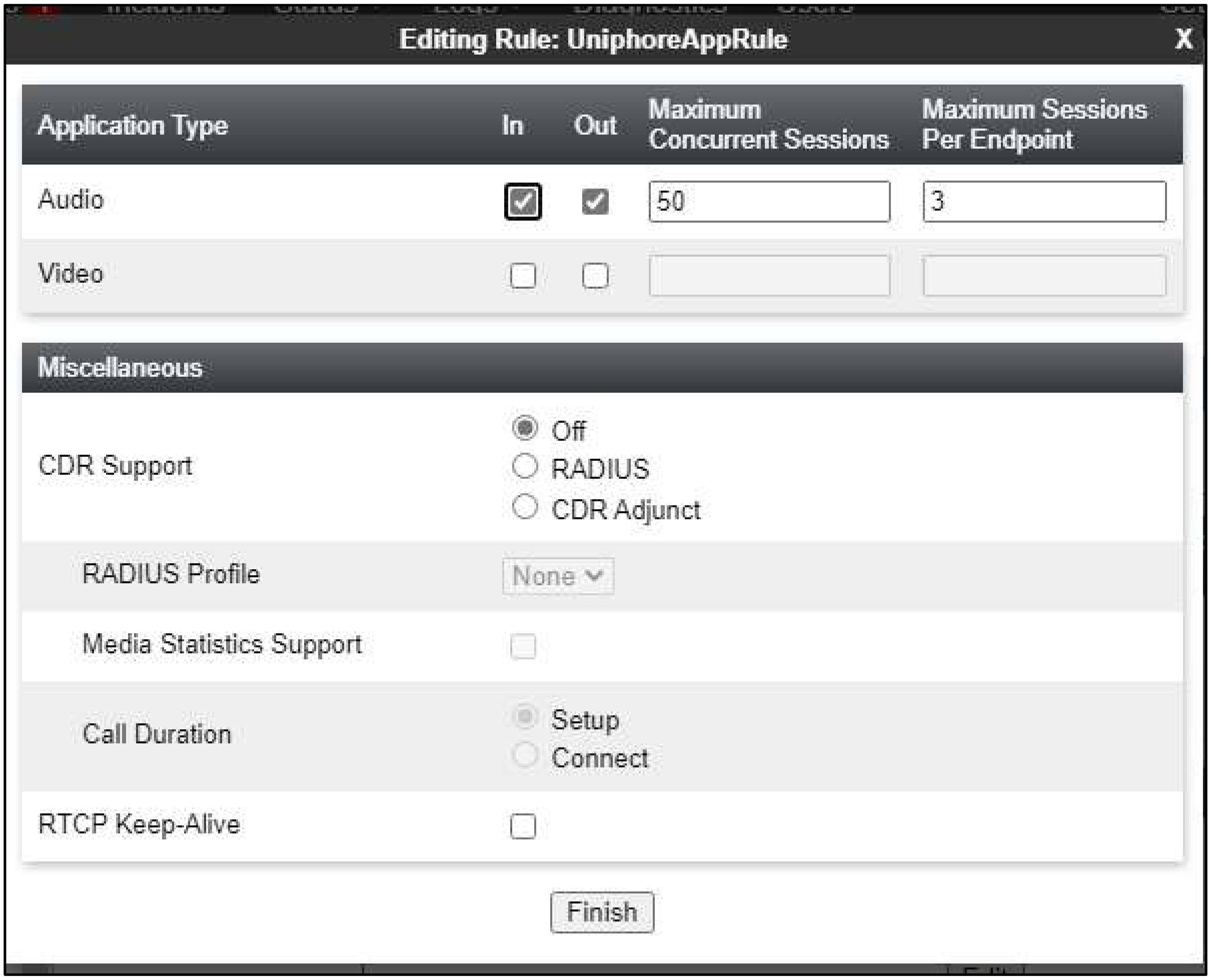
Miscellaneous	
CDR Support	Off
RTCP Keep-Alive	No

The **Application Rule** pop-up screen is displayed. Enter a desired **Rule Name** as shown below.



Rule Name: UniphoreAppRule

The **Application Rule** pop-up screen is updated. Check **Audio In** and **Audio Out**, and enter desired values for **Maximum Concurrent Sessions** and **Maximum Sessions Per Endpoint**, as shown below. Retain the default values in the remaining fields.



Editing Rule: UniphoreAppRule

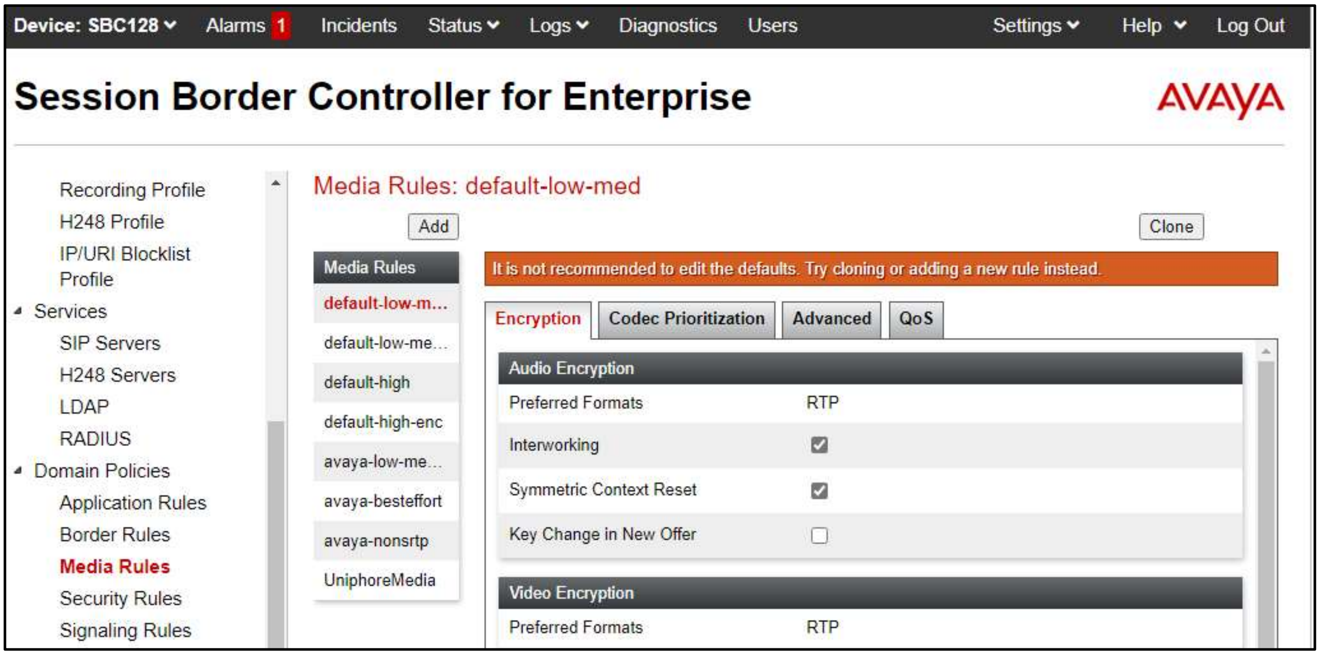
Application Type	In	Out	Maximum Concurrent Sessions	Maximum Sessions Per Endpoint
Audio	☑	☑	50	3
Video	□	□		

Miscellaneous

CDR Support	● Off ○ RADIUS ○ CDR Adjunct
RADIUS Profile	None
Media Statistics Support	□
Call Duration	● Setup ○ Connect
RTCP Keep-Alive	□

7.5 Administer Media Rules

Select **Domain Policies → Media Rules** from the left pane to display the existing media rules. Click **Add** to add a media rule for Uniphore.



Media Rules: default-low-med

It is not recommended to edit the defaults. Try cloning or adding a new rule instead.

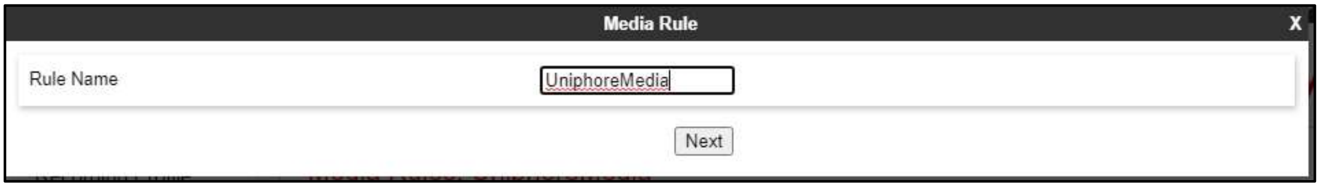
Audio Encryption

Preferred Formats	RTP
Interworking	☑
Symmetric Context Reset	☑
Key Change in New Offer	□

Video Encryption

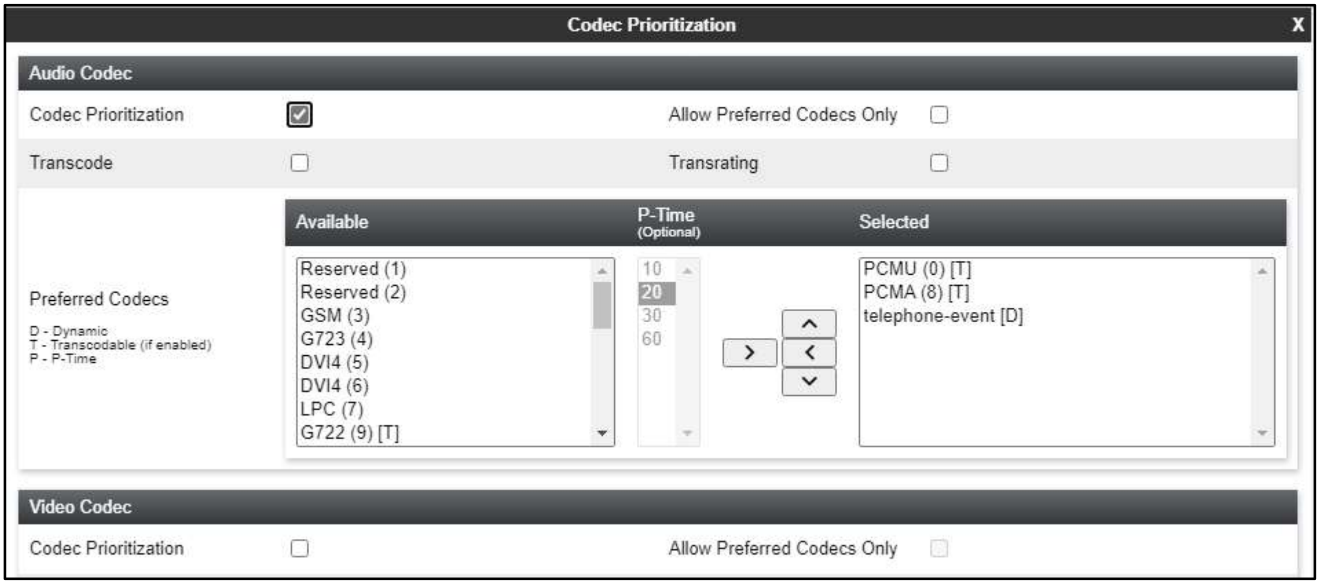
Preferred Formats	RTP

The **Media Rule** pop-up screen is displayed. Enter a desired **Rule Name** as shown below.



Rule Name	UniphoreMedia

The **Media Rule** pop-up screen is updated. Navigate to the **Audio Codec** page. Select the relevant codecs from the **Available** column to the **Selected** column, as shown below. Retain the default values in all remaining fields and pages.


Codec Prioritization

Audio Codec

Codec Prioritization ☑ Allow Preferred Codecs Only □

Transcode □ Transrating □

Preferred Codecs

D - Dynamic
T - Transcodable (if enabled)
P - P-Time

Available	P-Time (Optional)	Selected
Reserved (1) Reserved (2) GSM (3) G723 (4) DVI4 (5) DVI4 (6) LPC (7) G722 (9) [T]	10 20 30 60	PCMU (0) [T] PCMA (8) [T] telephone-event [D]

Video Codec

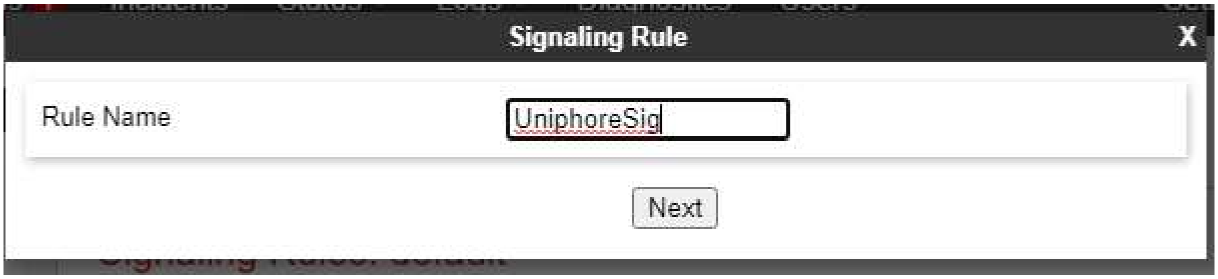
Codec Prioritization □ Allow Preferred Codecs Only □

7.6. Administer Signaling Rules

Select **Domain Policies** → **Signaling Rules** from the left pane to display the existing signaling rules.

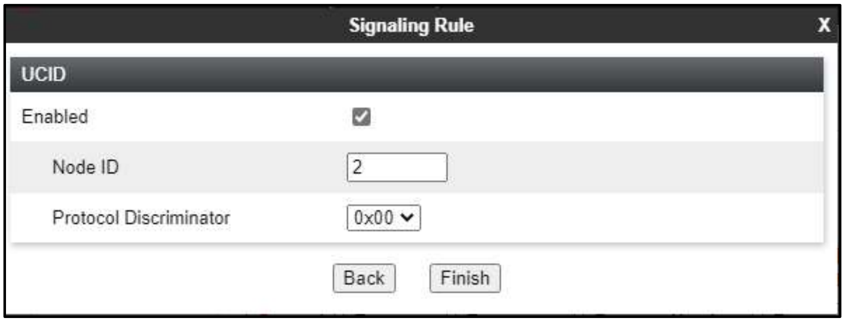
7.6.1. Uniphore Signaling Rule

Click **Add** to add a signaling rule for Uniphore.


Signaling Rule

Rule Name: UniphoreSig

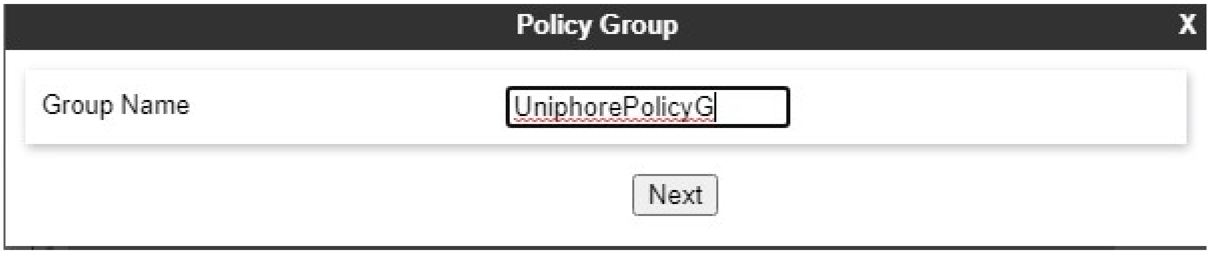
The Signaling Rule pop-up screen is updated. Navigate to the **UCID** page. Check **Enabled**. For **Node ID**, enter a unique number across the customer system, in this case “2”. Retain the default value in the remaining field.



Enabled	☑
Node ID	2
Protocol Discriminator	0x00

7.7. Administer End Point Policy Groups

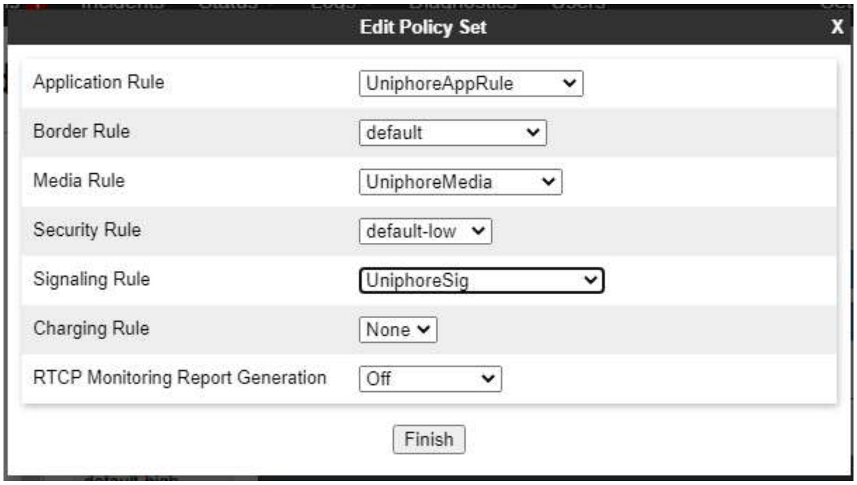
Select **Domain Policies → End Point Policy Groups** from the left pane to display the existing policy groups. Click **Add** to add a policy group for Uniphore.



Group Name: UniphorePolicyG

The Policy Group pop-up screen is updated. Enter the following values for the specified fields and retain the default values for the remaining fields.

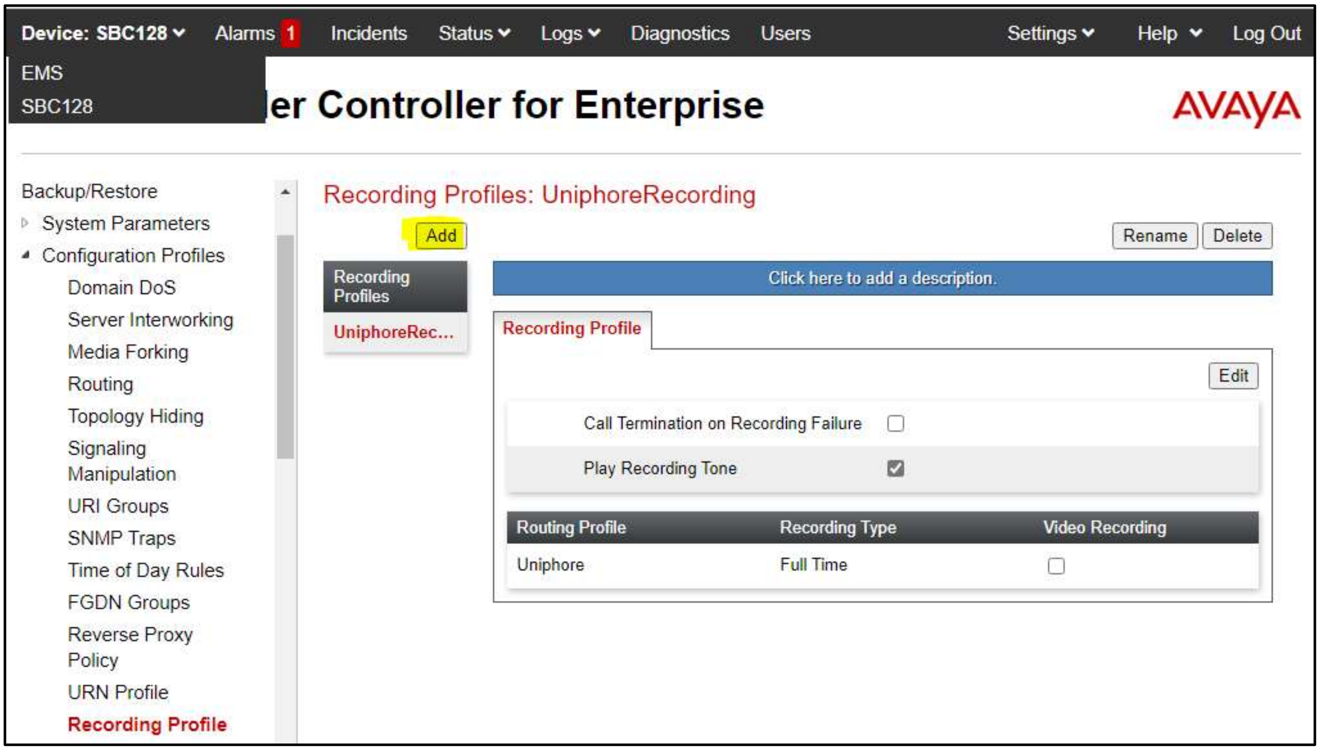
- **Application Rule**: Select the Uniphore application rule from **Section 7.4**.
- **Media Rule**: Select the Uniphore media rule from **Section 7.5**.
- **Signaling Rule**: Select the Uniphore signaling rule from **Section 7.6.1**.



Application Rule	UniphoreAppRule
Border Rule	default
Media Rule	UniphoreMedia
Security Rule	default-low
Signaling Rule	UniphoreSig
Charging Rule	None
RTCP Monitoring Report Generation	Off

7.8. Administer Recording Profile

Select **Configuration Profiles → Recording Profile** from the left pane to display the existing profiles. Click **Add** to add a recording profile for Uniphore.

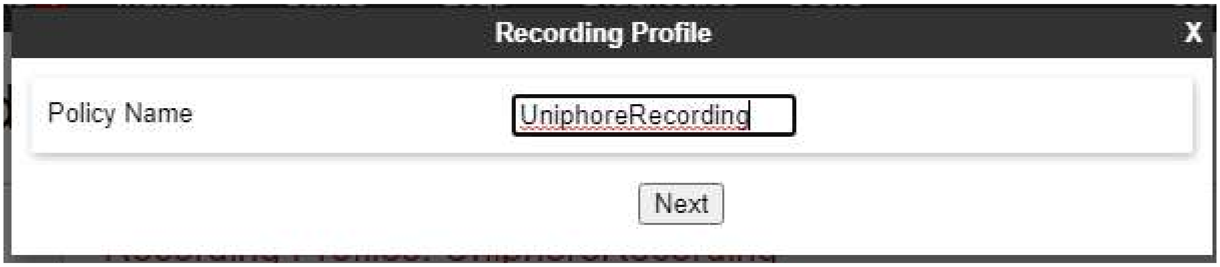


Recording Profiles: UniphoreRecording

Call Termination on Recording Failure	☐
Play Recording Tone	☑

Routing Profile	Recording Type	Video Recording
Uniphore	Full Time	☐

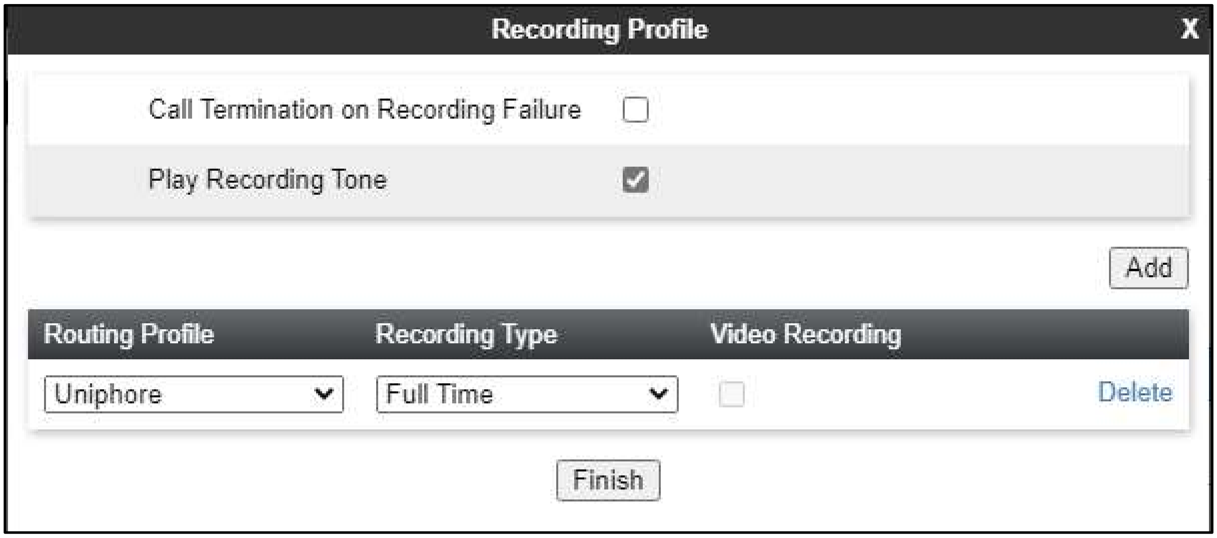
The Policy Group pop-up screen is displayed. Enter a desired **Group Name** as shown below.



Policy Name: UniphoreRecording

The Recording Profile pop-up screen is displayed. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Play Recording Tone:** Check this field is customer desires recording tone to be played.
- **Routing Profile:** Select the Uniphore routing profile from **Section 7.3.**
- **Recording Type:** "Full Time"



Recording Profile

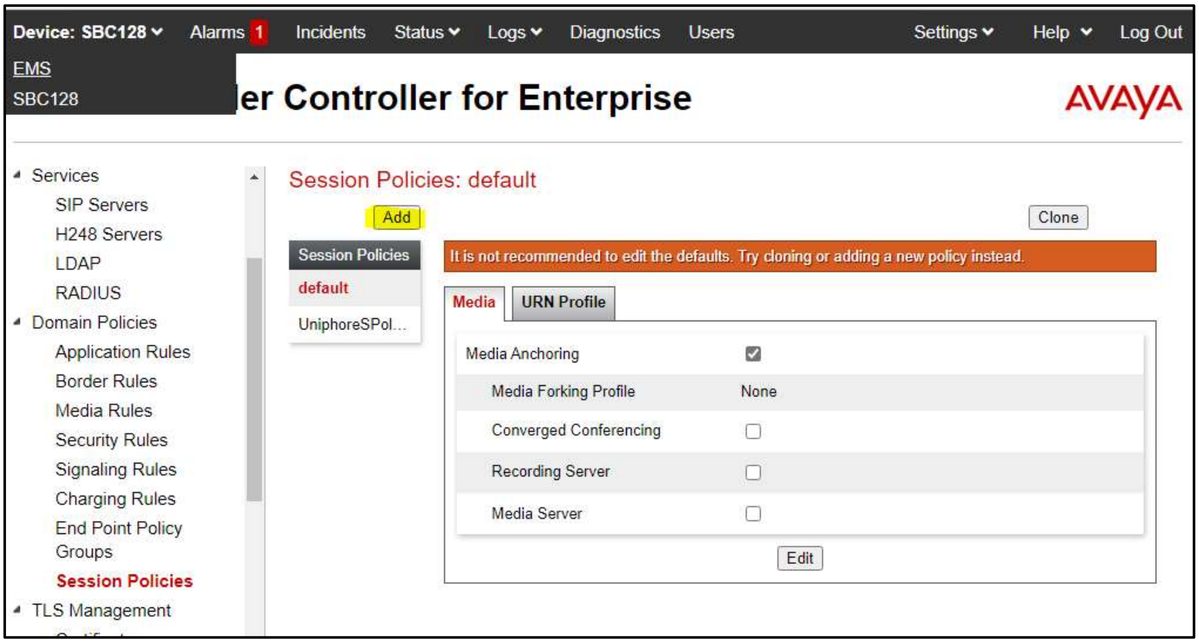
Call Termination on Recording Failure □

Play Recording Tone ☑

Routing Profile	Recording Type	Video Recording	
Uniphore	Full Time	□	Delete

7.9. Administer Session Policies

Select **Domain Policies → Session Policies** from the left pane to display the existing session policies. Click **Add** to add a session policy for Uniphore.



Session Policies: default

It is not recommended to edit the defaults. Try cloning or adding a new policy instead.

Media Anchoring ☑

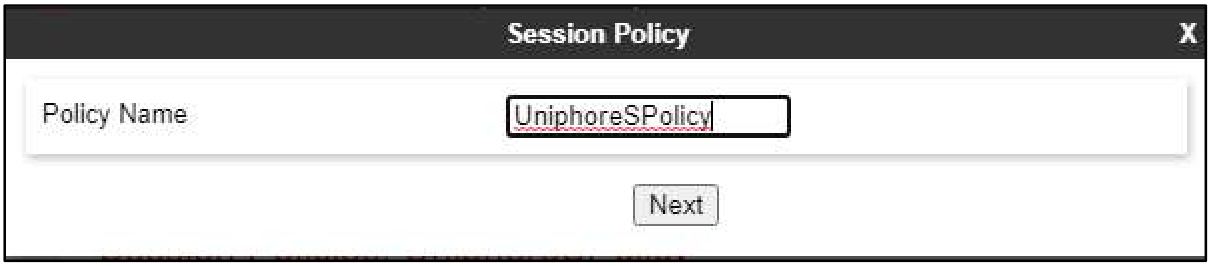
Media Forking Profile None

Converged Conferencing □

Recording Server □

Media Server □

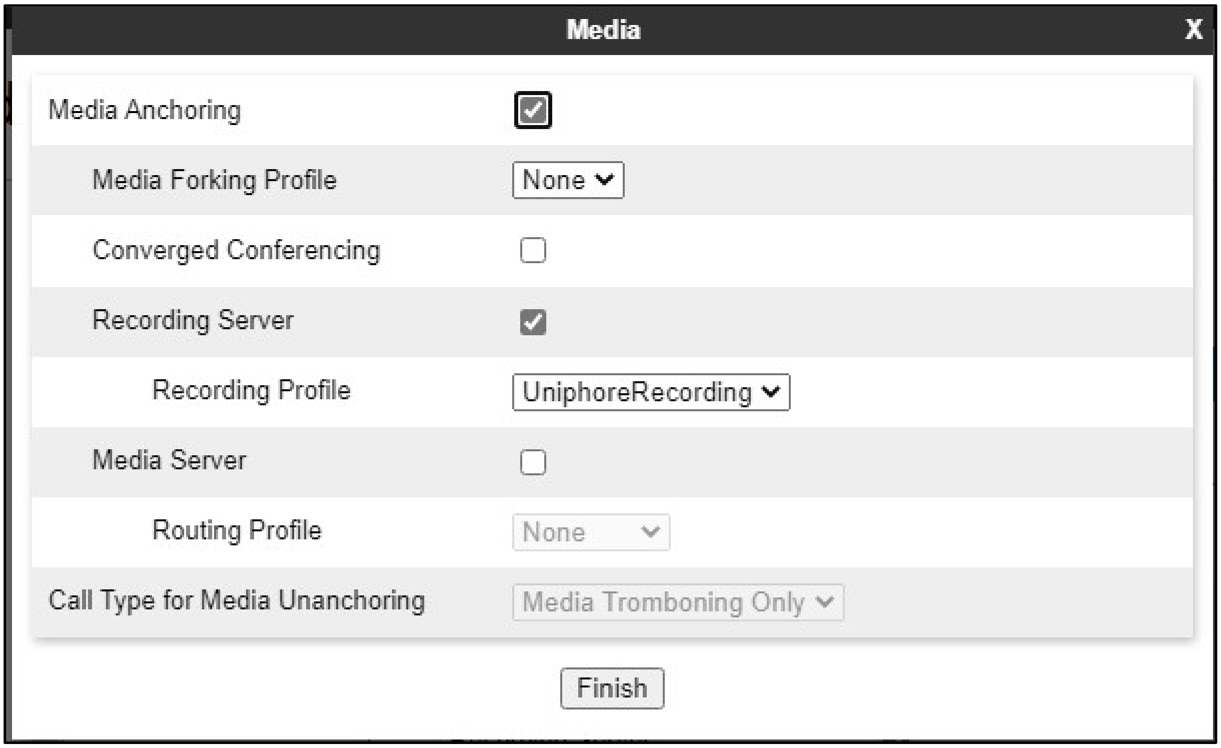
The Session Policy pop-up screen is displayed. Enter a desired Policy Name as shown below.



Policy Name: UniphoreSPolicy

The **Session Policy** pop-up screen is updated. Enter the following values for the specified fields and retain the default values for the remaining fields.

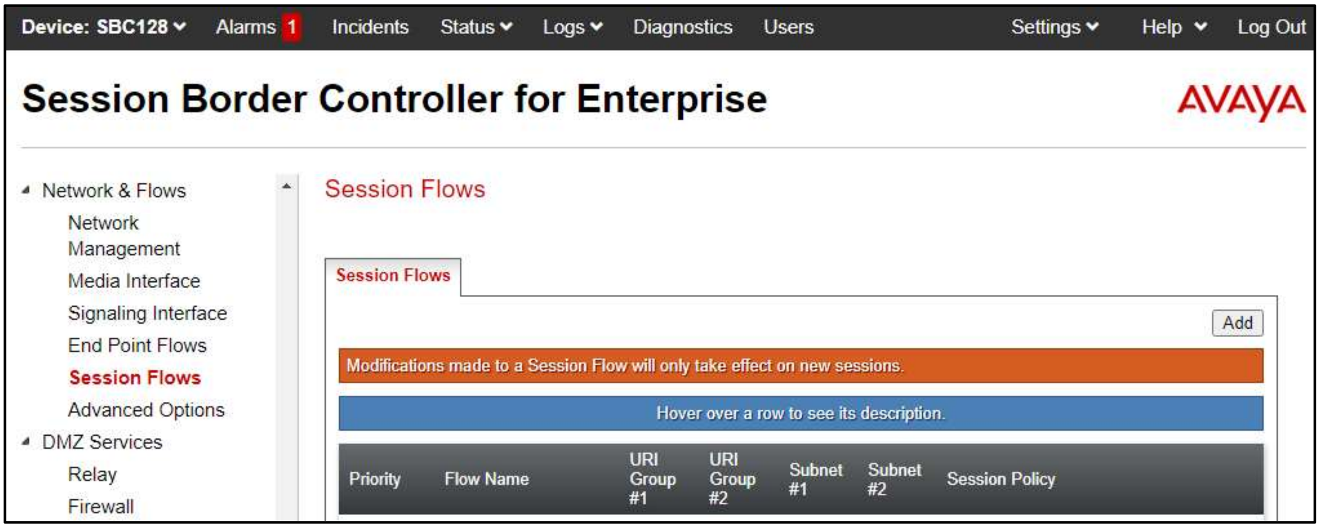
- **Media Anchoring**: Check this field.
- **Recording Server**: Check this field.
- **Recording Profile**: Select the Uniphore recording profile from **Section 7.8.**



Media Anchoring	☑
Media Forking Profile	None
Converged Conferencing	□
Recording Server	☑
Recording Profile	UniphoreRecording
Media Server	□
Routing Profile	None
Call Type for Media Unanchoring	Media Tromboning Only

7.10. Administer Session Flows

Select **Network & Flows** → **Session Flows** from the left pane to display the existing session flows. Click **Add** to add a session flow for Uniphore

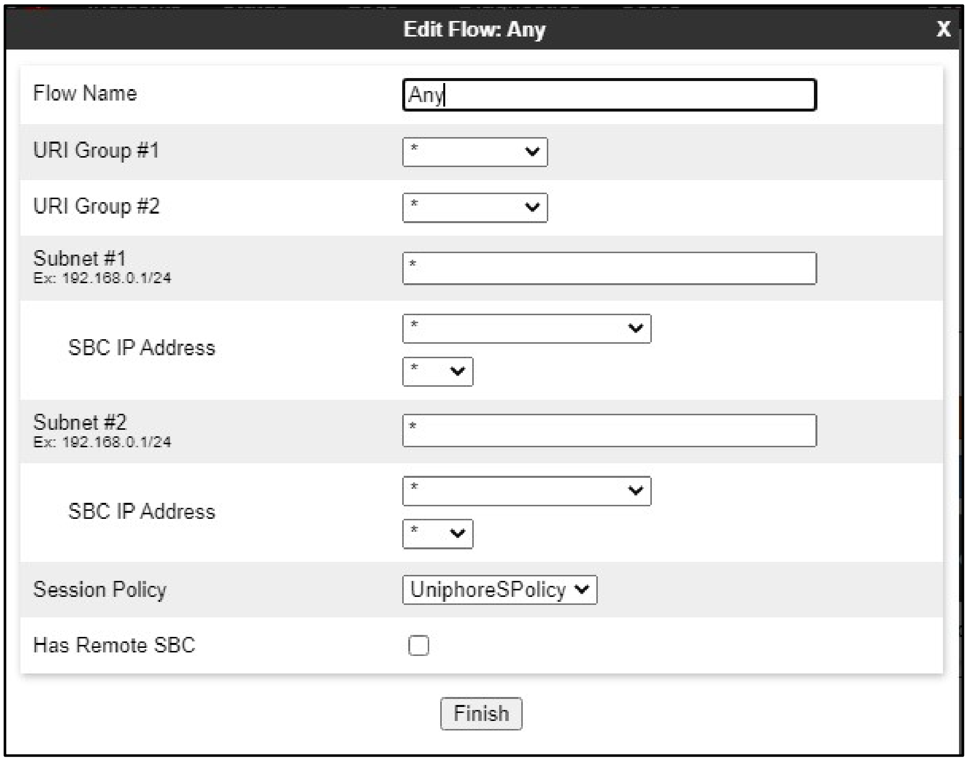


Modifications made to a Session Flow will only take effect on new sessions.

Hover over a row to see its description.

Priority	Flow Name	URI Group #1	URI Group #2	Subnet #1	Subnet #2	Session Policy

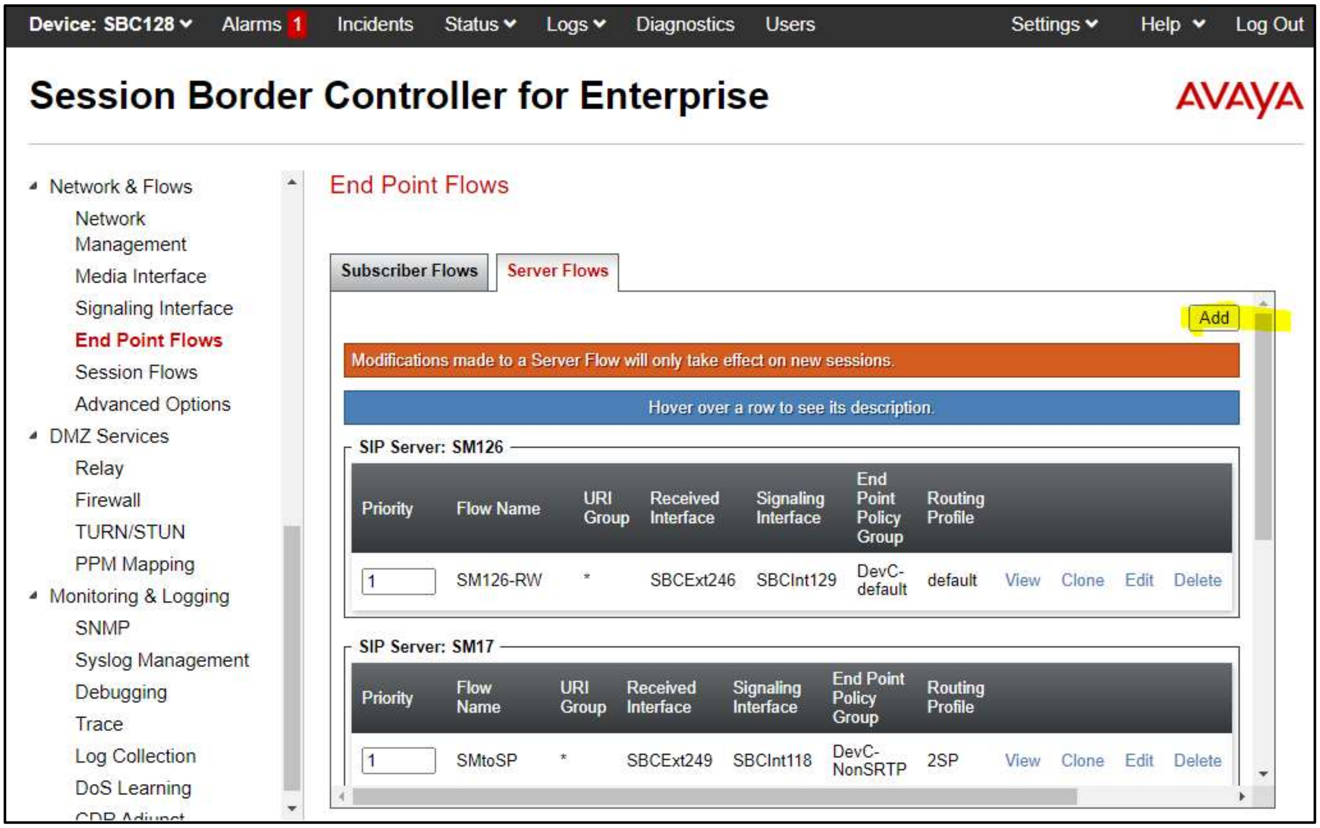
The **Add Flow** pop-up screen is displayed. For **Flow Name**, enter a desired name. For **Session Policy**, select the Uniphore session policy from **Section 7.9**. Retain the default values in the remaining fields.



Flow Name	Any
URI Group #1	*
URI Group #2	*
Subnet #1 Ex: 192.168.0.1/24	*
SBC IP Address	* *
Subnet #2 Ex: 192.168.0.1/24	*
SBC IP Address	* *
Session Policy	UniphoreSPolicy
Has Remote SBC	☐

7.11. Administer End Point Flows

Select **Network & Flows** → **End Point Flows** from the left pane. Select the **Server Flows** tab and click **Add** to add a server flow for Uniphore.



Modifications made to a Server Flow will only take effect on new sessions.

Hover over a row to see its description.

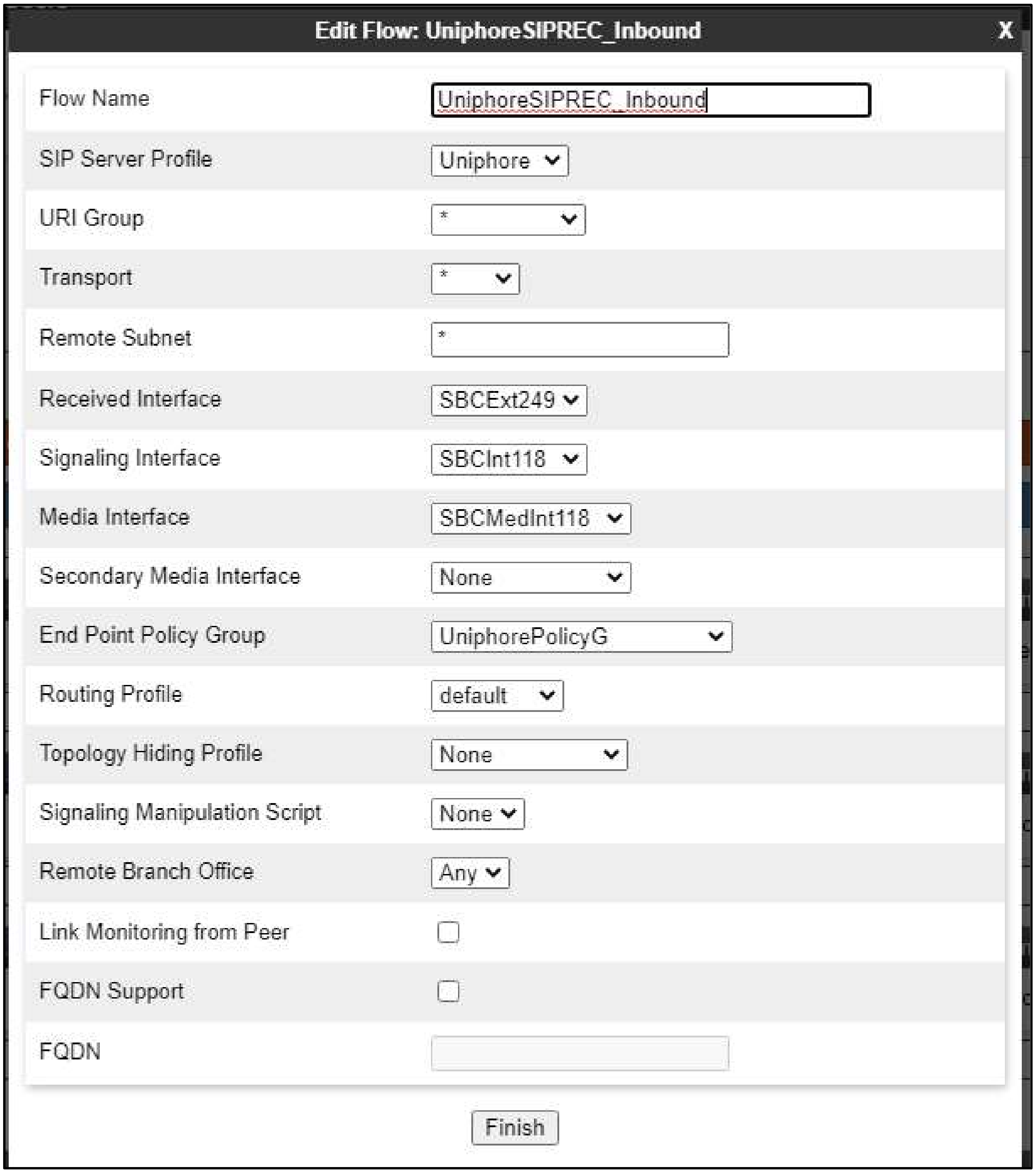
SIP Server: SM126

Priority	Flow Name	URI Group	Received Interface	Signaling Interface	End Point Policy Group	Routing Profile				
1	SM126-RW	*	SBCExt246	SBCInt129	DevC-default	default	View	Clone	Edit	Delete

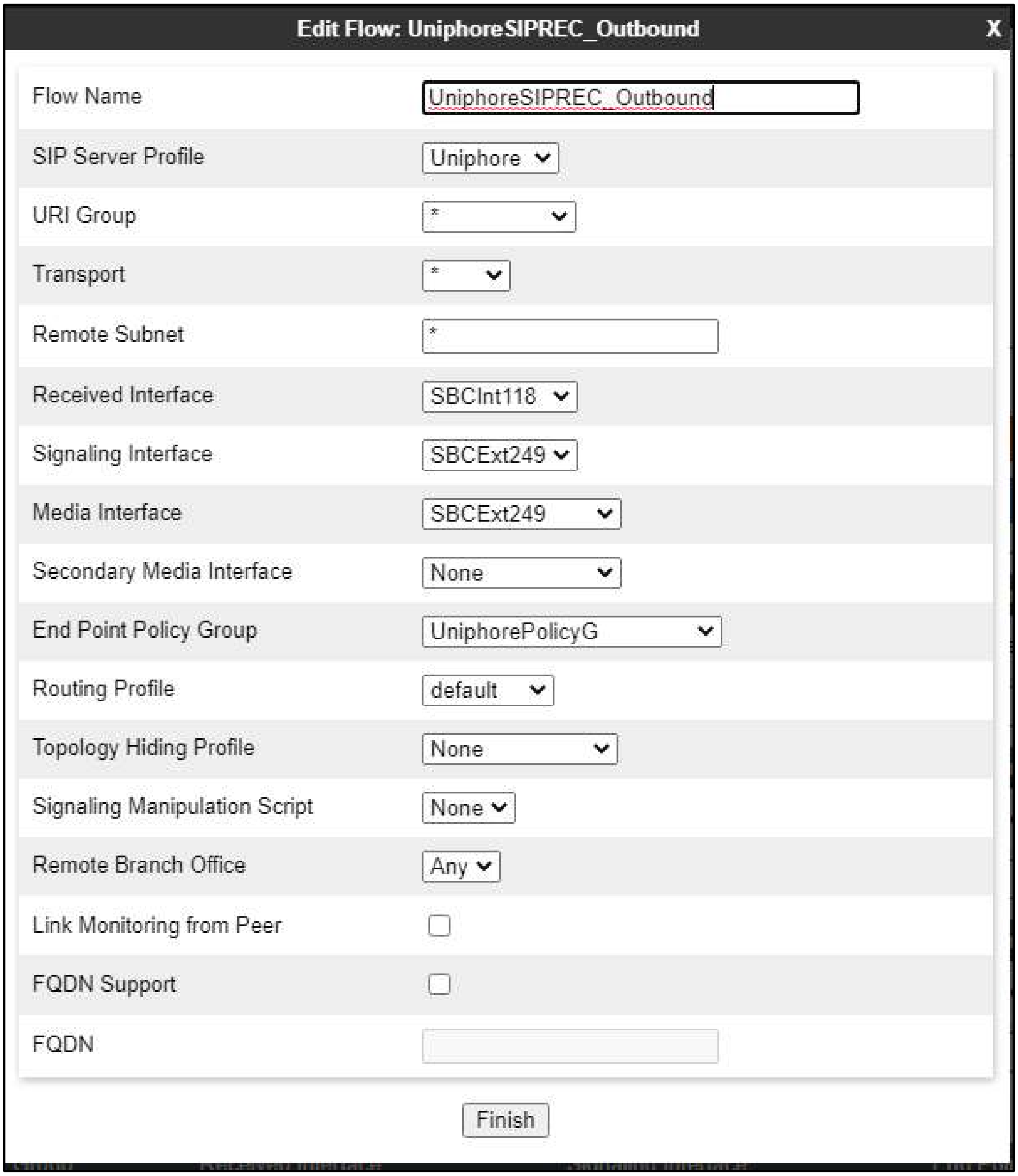
SIP Server: SM17

Priority	Flow Name	URI Group	Received Interface	Signaling Interface	End Point Policy Group	Routing Profile				
1	SMtoSP	*	SBCExt249	SBCInt118	DevC-NonSRTP	2SP	View	Clone	Edit	Delete

The Add Flow pop-up screen is displayed. Enter the following values for the specified fields and retain the default values for the remaining fields.



Flow Name	UniphoreSIPREC_Inbound
SIP Server Profile	Uniphore
URI Group	*
Transport	*
Remote Subnet	*
Received Interface	SBCExt249
Signaling Interface	SBCInt118
Media Interface	SBCMedInt118
Secondary Media Interface	None
End Point Policy Group	UniphorePolicyG
Routing Profile	default
Topology Hiding Profile	None
Signaling Manipulation Script	None
Remote Branch Office	Any
Link Monitoring from Peer	□
FQDN Support	□
FQDN	



Edit Flow: UniphoreSIPREC_Outbound

Flow Name	UniphoreSIPREC_Outbound
SIP Server Profile	Uniphore
URI Group	*
Transport	*
Remote Subnet	*
Received Interface	SBCInt118
Signaling Interface	SBCExt249
Media Interface	SBCExt249
Secondary Media Interface	None
End Point Policy Group	UniphorePolicyG
Routing Profile	default
Topology Hiding Profile	None
Signaling Manipulation Script	None
Remote Branch Office	Any
Link Monitoring from Peer	□
FQDN Support	□
FQDN	

8. Configure Uniphore U-Assist/U-Analyzer Subsystems

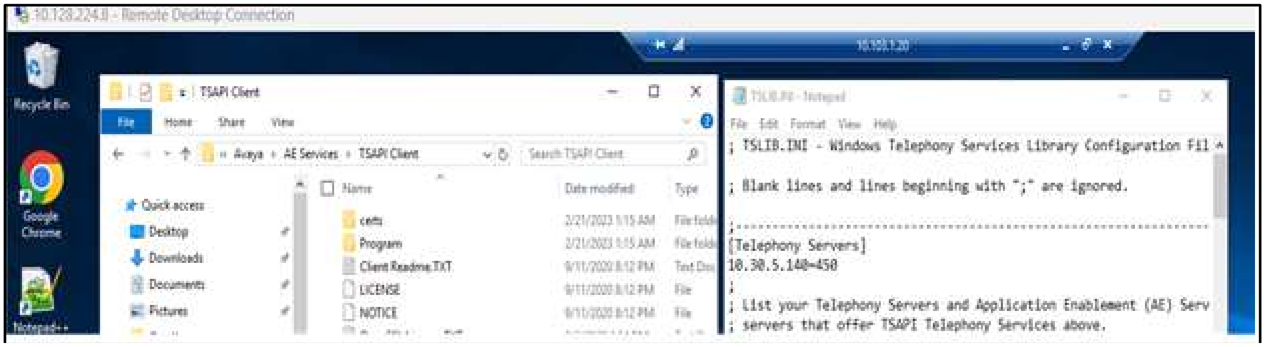
This section provides the procedures for configuring Uassist/Uanalyze. The procedures include the following areas:

- Administer Avaya AES Client
- Administer OrkAvayaTsapi
- Administer Audio Logger
- Administer Uassist/Uanalyze
- Create New User in Keycloak Server

The installation and configuration of Uassist and Uanalyze were performed by Uniphore Services. The procedural steps are presented in these Application Notes for informational purposes. Prior to configuration, an organizational name is assumed to be pre-configured.

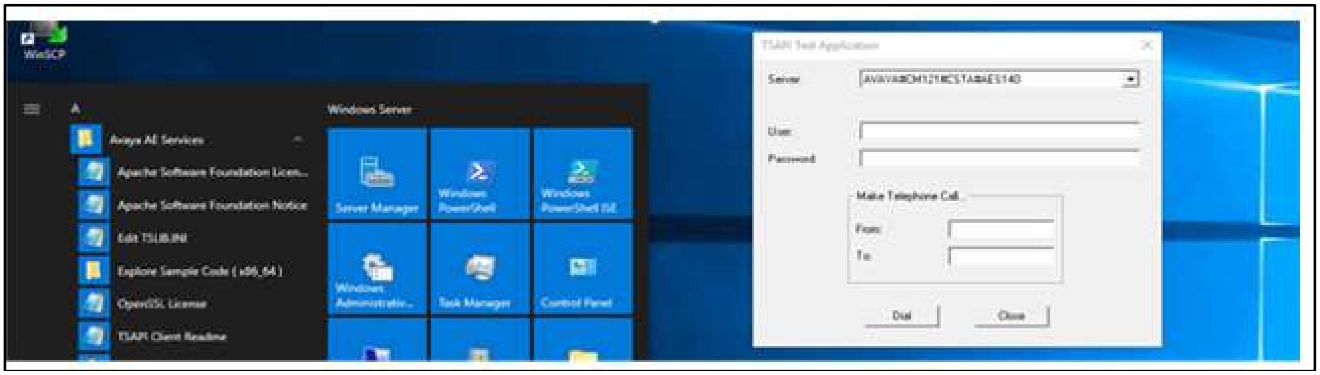
8.1. Administer Avaya AES Client

Navigate to Avaya AES TSAPI install directory and configure Avaya AES Server/Telephony Server (10.30.5.140) in TSLIB.INI file.



```
; TSLIB.INI - Windows Telephony Services Library Configuration Fil

; Blank lines and lines beginning with ";" are ignored.

;---------------------------------------------------------------------
[Telephony Servers]
10.30.5.140=450
;
; List your Telephony Servers and Application Enablement (AE) Serv
; servers that offer TSAPI Telephony Services above.
```

Validate TSAPI configuration using TSAPI test tool from **START→AE Services→TSAPI Test** and validate Tlink is populated.



Server AVAYA#CM121#CSTA#AES140

User

Password

From

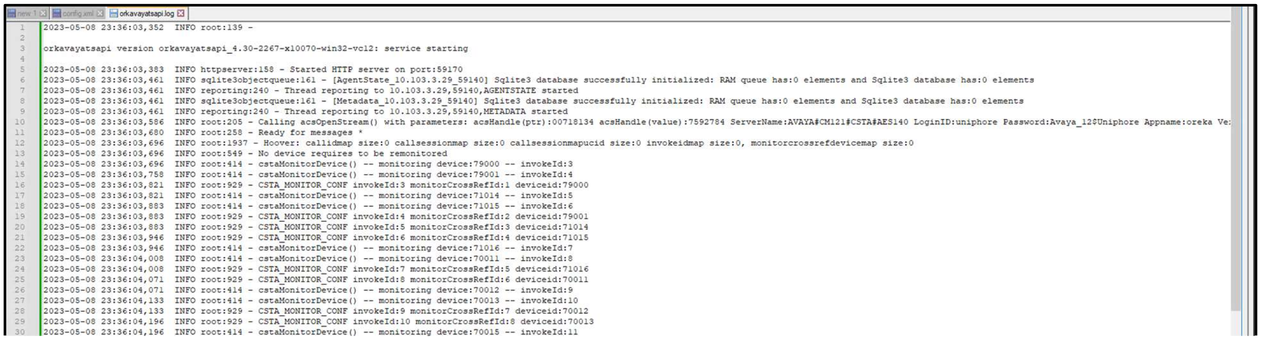
To

8.2. Administer OrkAvayaTsapi

From the Uassist Windows server running the OrkAvayaTsapi component, navigate to the **C:\Program Files (x86)\OrkAvayaTsapi** directory and edit the **config** file shown below. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **TrackerHostname:** “x:y” where “x” is IP address of this server and “y” is port “59140”.
- **CtiServer:** The Tlink name from **Section 6.8**.
- **Login:** The Uniphore user credential from **Section 6.5**.
- **Password:** The Uniphore user credential from **Section 6.5**.
- **DeviceList:** Extension of skill groups and agent stations to monitor from **Section 5**.

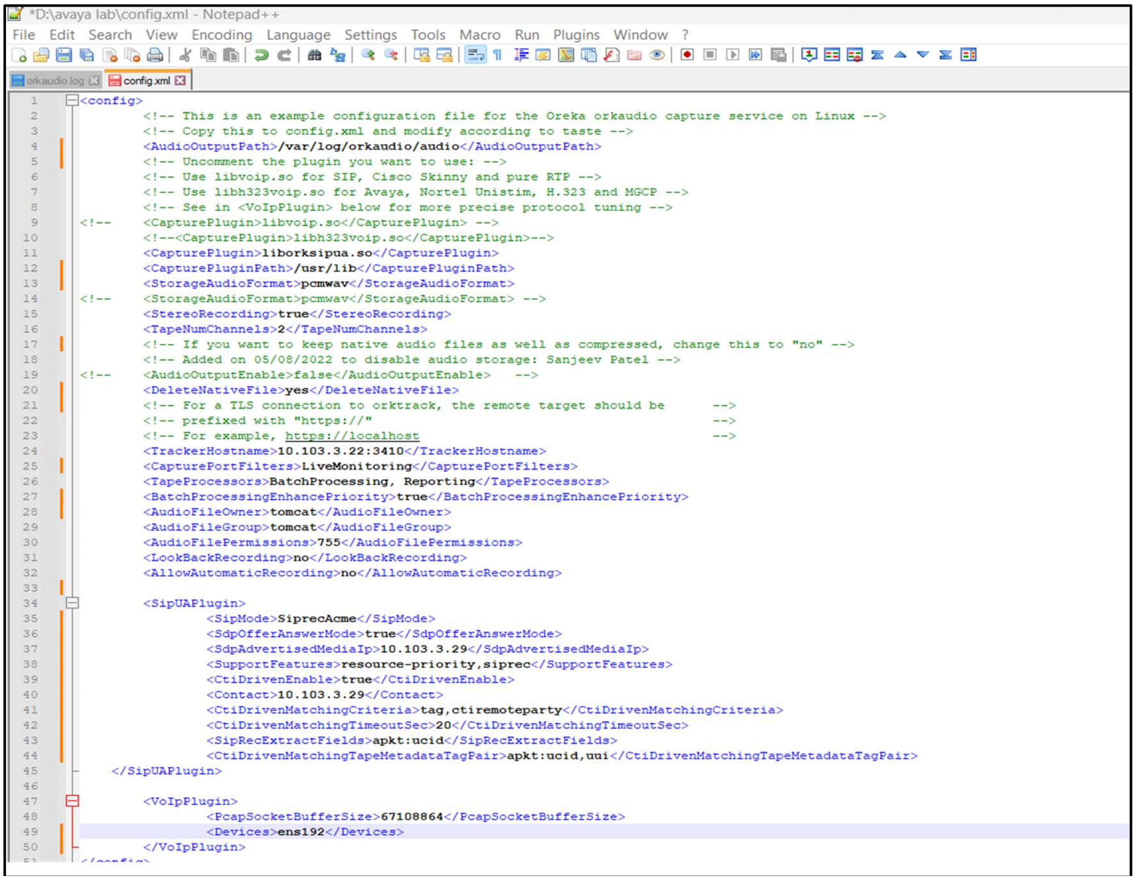
Add the **AgentTrackingEnable** parameter and set to “true” as shown below.



```
2023-05-08 23:36:03,352  INFO root:139 -

orkavayatsapi version orkavayatsapi_4.30-2267-x10070-win32-vc12: service starting

2023-05-08 23:36:03,383  INFO httpserver:158 - Started HTTP server on port:59170
2023-05-08 23:36:03,461  INFO sqlite3objectqueue:161 - [AgentState_10.103.3.29_59140] Sqlite3 database successfully initialized: RAM queue has:0 elements and Sqlite3 database has:0 elements
2023-05-08 23:36:03,461  INFO reporting:240 - Thread reporting to 10.103.3.29,59140,AGENTSTATE started
2023-05-08 23:36:03,461  INFO sqlite3objectqueue:161 - [Metadata_10.103.3.29_59140] Sqlite3 database successfully initialized: RAM queue has:0 elements and Sqlite3 database has:0 elements
2023-05-08 23:36:03,461  INFO reporting:240 - Thread reporting to 10.103.3.29,59140,METADATA started
2023-05-08 23:36:03,586  INFO root:205 - Calling acsOpenStream() with parameters: acsHandle(ptr):00718134 acsHandle(value):7592784 ServerName:AVAYA#CM121#CSTA#AES140 LoginID:uniphore Password:Avaya_12$Uniphore Appname:oreka Ve
2023-05-08 23:36:03,680  INFO root:258 - Ready for messages *
2023-05-08 23:36:03,696  INFO root:1937 - Hoover: callidmap size:0 callsessionmap size:0 callsessionmapucid size:0 invokeidmap size:0, monitorcrossrefdevicemap size:0
2023-05-08 23:36:03,696  INFO root:549 - No device requires to be remonitored
2023-05-08 23:36:03,696  INFO root:414 - cstaMonitorDevice() -- monitoring device:79000 -- invokeId:3
2023-05-08 23:36:03,758  INFO root:414 - cstaMonitorDevice() -- monitoring device:79001 -- invokeId:4
2023-05-08 23:36:03,821  INFO root:929 - CSTA_MONITOR_CONF invokeId:3 monitorCrossRefId:1 deviceid:79000
2023-05-08 23:36:03,821  INFO root:414 - cstaMonitorDevice() -- monitoring device:71014 -- invokeId:5
2023-05-08 23:36:03,883  INFO root:414 - cstaMonitorDevice() -- monitoring device:71015 -- invokeId:6
2023-05-08 23:36:03,883  INFO root:929 - CSTA_MONITOR_CONF invokeId:4 monitorCrossRefId:2 deviceid:79001
2023-05-08 23:36:03,883  INFO root:929 - CSTA_MONITOR_CONF invokeId:5 monitorCrossRefId:3 deviceid:71014
2023-05-08 23:36:03,946  INFO root:929 - CSTA_MONITOR_CONF invokeId:6 monitorCrossRefId:4 deviceid:71015
2023-05-08 23:36:03,946  INFO root:414 - cstaMonitorDevice() -- monitoring device:71016 -- invokeId:7
2023-05-08 23:36:04,008  INFO root:414 - cstaMonitorDevice() -- monitoring device:70011 -- invokeId:8
2023-05-08 23:36:04,008  INFO root:929 - CSTA_MONITOR_CONF invokeId:7 monitorCrossRefId:5 deviceid:71016
2023-05-08 23:36:04,071  INFO root:929 - CSTA_MONITOR_CONF invokeId:8 monitorCrossRefId:6 deviceid:70011
2023-05-08 23:36:04,071  INFO root:414 - cstaMonitorDevice() -- monitoring device:70012 -- invokeId:9
2023-05-08 23:36:04,133  INFO root:414 - cstaMonitorDevice() -- monitoring device:70013 -- invokeId:10
2023-05-08 23:36:04,133  INFO root:929 - CSTA_MONITOR_CONF invokeId:9 monitorCrossRefId:7 deviceid:70012
2023-05-08 23:36:04,196  INFO root:929 - CSTA_MONITOR_CONF invokeId:10 monitorCrossRefId:8 deviceid:70013
2023-05-08 23:36:04,196  INFO root:414 - cstaMonitorDevice() -- monitoring device:70015 -- invokeId:11
```

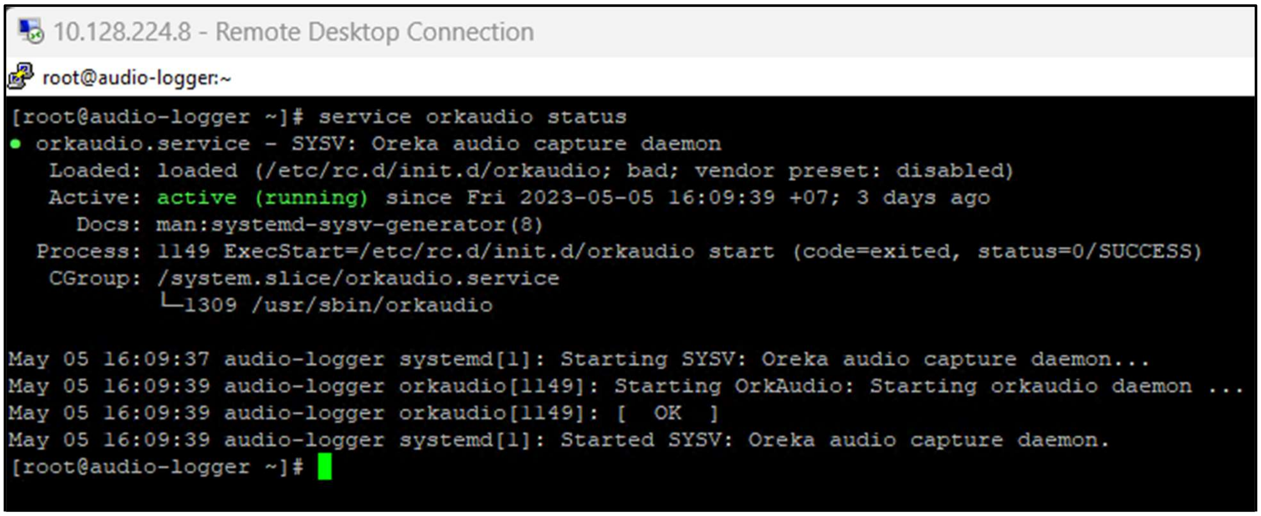
8.3. Administer OrkAudio

Navigate to Orkaudio Install directory and make necessary changes in the **config.xml** file to capture RTP packet and match to the SIP based on CTI events.


*D:\avaya lab\config.xml - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
orkaudio.log
config.xml

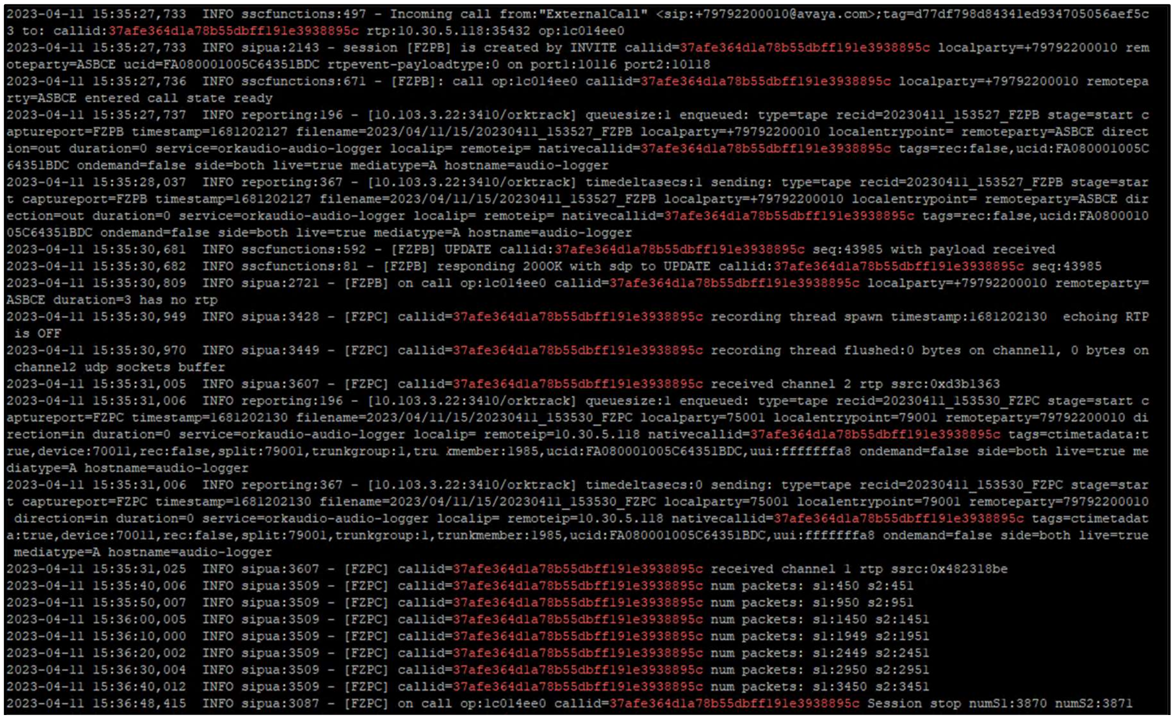
```xml
<config>
        <!-- This is an example configuration file for the Oreka orkaudio capture service on Linux -->
        <!-- Copy this to config.xml and modify according to taste -->
        <AudioOutputPath>/var/log/orkaudio/audio</AudioOutputPath>
        <!-- Uncomment the plugin you want to use: -->
        <!-- Use libvoip.so for SIP, Cisco Skinny and pure RTP -->
        <!-- Use libh323voip.so for Avaya, Nortel Unistim, H.323 and MGCP -->
        <!-- See in <VoIpPlugin> below for more precise protocol tuning -->
<!--    <CapturePlugin>libvoip.so</CapturePlugin> -->
        <!--<CapturePlugin>libh323voip.so</CapturePlugin>-->
        <CapturePlugin>liborksipua.so</CapturePlugin>
        <CapturePluginPath>/usr/lib</CapturePluginPath>
        <StorageAudioFormat>pcmwav</StorageAudioFormat>
<!--    <StorageAudioFormat>pcmwav</StorageAudioFormat> -->
        <StereoRecording>true</StereoRecording>
        <TapeNumChannels>2</TapeNumChannels>
        <!-- If you want to keep native audio files as well as compressed, change this to "no" -->
        <!-- Added on 05/08/2022 to disable audio storage: Sanjeev Patel -->
<!--    <AudioOutputEnable>false</AudioOutputEnable>   -->
        <DeleteNativeFile>yes</DeleteNativeFile>
        <!-- For a TLS connection to orktrack, the remote target should be      -->
        <!-- prefixed with "https://"                                           -->
        <!-- For example, https://localhost                                     -->
        <TrackerHostname>10.103.3.22:3410</TrackerHostname>
        <CapturePortFilters>LiveMonitoring</CapturePortFilters>
        <TapeProcessors>BatchProcessing, Reporting</TapeProcessors>
        <BatchProcessingEnhancePriority>true</BatchProcessingEnhancePriority>
        <AudioFileOwner>tomcat</AudioFileOwner>
        <AudioFileGroup>tomcat</AudioFileGroup>
        <AudioFilePermissions>755</AudioFilePermissions>
        <LookBackRecording>no</LookBackRecording>
        <AllowAutomaticRecording>no</AllowAutomaticRecording>

        <SipUAPlugin>
                <SipMode>SiprecAcme</SipMode>
                <SdpOfferAnswerMode>true</SdpOfferAnswerMode>
                <SdpAdvertisedMediaIp>10.103.3.29</SdpAdvertisedMediaIp>
                <SupportFeatures>resource-priority,siprec</SupportFeatures>
                <CtiDrivenEnable>true</CtiDrivenEnable>
                <Contact>10.103.3.29</Contact>
                <CtiDrivenMatchingCriteria>tag,ctiremoteparty</CtiDrivenMatchingCriteria>
                <CtiDrivenMatchingTimeoutSec>20</CtiDrivenMatchingTimeoutSec>
                <SipRecExtractFields>apkt:ucid</SipRecExtractFields>
                <CtiDrivenMatchingTapeMetadataTagPair>apkt:ucid,uui</CtiDrivenMatchingTapeMetadataTagPair>
    </SipUAPlugin>

        <VoIpPlugin>
                <PcapSocketBufferSize>67108864</PcapSocketBufferSize>
                <Devices>ens192</Devices>
        </VoIpPlugin>
</config>
```

Start **orkaudio** service and make sure its active and running successfully.



```
[root@audio-logger ~]# service orkaudio status
● orkaudio.service - SYSV: Oreka audio capture daemon
   Loaded: loaded (/etc/rc.d/init.d/orkaudio; bad; vendor preset: disabled)
   Active: active (running) since Fri 2023-05-05 16:09:39 +07; 3 days ago
     Docs: man:systemd-sysv-generator(8)
  Process: 1149 ExecStart=/etc/rc.d/init.d/orkaudio start (code=exited, status=0/SUCCESS)
   CGroup: /system.slice/orkaudio.service
           └─1309 /usr/sbin/orkaudio

May 05 16:09:37 audio-logger systemd[1]: Starting SYSV: Oreka audio capture daemon...
May 05 16:09:39 audio-logger orkaudio[1149]: Starting OrkAudio: Starting orkaudio daemon ...
May 05 16:09:39 audio-logger orkaudio[1149]: [  OK  ]
May 05 16:09:39 audio-logger systemd[1]: Started SYSV: Oreka audio capture daemon.
[root@audio-logger ~]# 
```

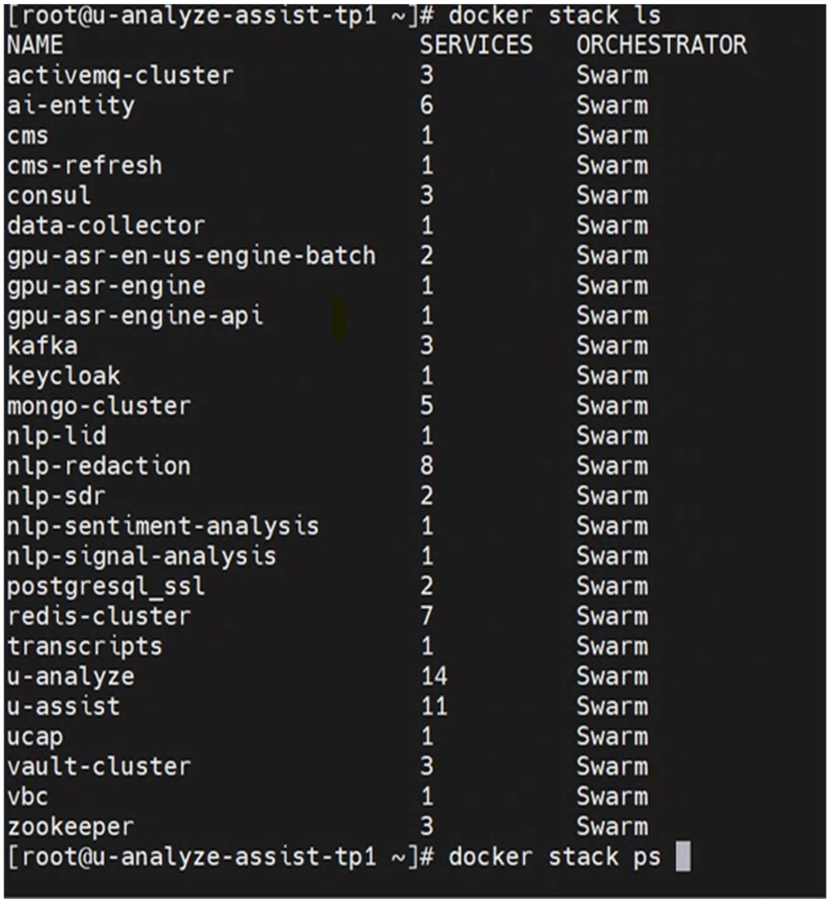
Validate incoming calls and corresponding sip INVITE from SBC, CTI events and rtp packets being streamed after match happens between SBC and CTI events (ctimetadata: true) Subsystems.



```
2023-04-11 15:35:27,733  INFO sscfunctions:497 - Incoming call from:"ExternalCall" <sip:+79792200010@avaya.com>;tag=d77df798d84341ed934705056aef5c
3 to: callid:37afe364d1a78b55dbff191e3938895c rtp:10.30.5.118:35432 op:1c014ee0
2023-04-11 15:35:27,733  INFO sipua:2143 - session [FZPB] is created by INVITE callid=37afe364d1a78b55dbff191e3938895c localparty=+79792200010 rem
oteparty=ASBCE ucid=FA080001005C64351BDC rtpevent-payloadtype:0 on port1:10116 port2:10118
2023-04-11 15:35:27,736  INFO sscfunctions:671 - [FZPB]: call op:1c014ee0 callid=37afe364d1a78b55dbff191e3938895c localparty=+79792200010 remotepa
rty=ASBCE entered call state ready
2023-04-11 15:35:27,737  INFO reporting:196 - [10.103.3.22:3410/orktrack] queuesize:1 enqueued: type=tape recid=20230411_153527_FZPB stage=start c
apturereport=FZPB timestamp=1681202127 filename=2023/04/11/15/20230411_153527_FZPB localparty=+79792200010 localentrypoint= remoteparty=ASBCE direct
ion=out duration=0 service=orkaudio-audio-logger localip= remoteip= nativecallid=37afe364d1a78b55dbff191e3938895c tags=rec:false,ucid:FA080001005C
64351BDC ondemand=false side=both live=true mediatype=A hostname=audio-logger
2023-04-11 15:35:28,037  INFO reporting:367 - [10.103.3.22:3410/orktrack] timedeltasecs:1 sending: type=tape recid=20230411_153527_FZPB stage=star
t capturereport=FZPB timestamp=1681202127 filename=2023/04/11/15/20230411_153527_FZPB localparty=+79792200010 localentrypoint= remoteparty=ASBCE dir
ection=out duration=0 service=orkaudio-audio-logger localip= remoteip= nativecallid=37afe364d1a78b55dbff191e3938895c tags=rec:false,ucid:FA0800010
05C64351BDC ondemand=false side=both live=true mediatype=A hostname=audio-logger
2023-04-11 15:35:30,681  INFO sscfunctions:592 - [FZPB] UPDATE callid:37afe364d1a78b55dbff191e3938895c seq:43985 with payload received
2023-04-11 15:35:30,682  INFO sscfunctions:81 - [FZPB] responding 200OK with sdp to UPDATE callid:37afe364d1a78b55dbff191e3938895c seq:43985
2023-04-11 15:35:30,809  INFO sipua:2721 - [FZPB] on call op:1c014ee0 callid=37afe364d1a78b55dbff191e3938895c localparty=+79792200010 remoteparty=
ASBCE duration=3 has no rtp
2023-04-11 15:35:30,949  INFO sipua:3428 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c recording thread spawn timestamp:1681202130  echoing RTP
 is OFF
2023-04-11 15:35:30,970  INFO sipua:3449 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c recording thread flushed:0 bytes on channel1, 0 bytes on
 channel2 udp sockets buffer
2023-04-11 15:35:31,005  INFO sipua:3607 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c received channel 2 rtp ssrc:0xd3b1363
2023-04-11 15:35:31,006  INFO reporting:196 - [10.103.3.22:3410/orktrack] queuesize:1 enqueued: type=tape recid=20230411_153530_FZPC stage=start c
apturereport=FZPC timestamp=1681202130 filename=2023/04/11/15/20230411_153530_FZPC localparty=75001 localentrypoint=79001 remoteparty=79792200010 di
rection=in duration=0 service=orkaudio-audio-logger localip= remoteip=10.30.5.118 nativecallid=37afe364d1a78b55dbff191e3938895c tags=ctimetadata:t
rue,device:70011,rec:false,split:79001,trunkgroup:1,tru xmember:1985,ucid:FA080001005C64351BDC,uui:fffffffa8 ondemand=false side=both live=true me
diatype=A hostname=audio-logger
2023-04-11 15:35:31,006  INFO reporting:367 - [10.103.3.22:3410/orktrack] timedeltasecs:0 sending: type=tape recid=20230411_153530_FZPC stage=star
t capturereport=FZPC timestamp=1681202130 filename=2023/04/11/15/20230411_153530_FZPC localparty=75001 localentrypoint=79001 remoteparty=79792200010
 direction=in duration=0 service=orkaudio-audio-logger localip= remoteip=10.30.5.118 nativecallid=37afe364d1a78b55dbff191e3938895c tags=ctimetadat
a:true,device:70011,rec:false,split:79001,trunkgroup:1,trunkmember:1985,ucid:FA080001005C64351BDC,uui:fffffffa8 ondemand=false side=both live=true
 mediatype=A hostname=audio-logger
2023-04-11 15:35:31,025  INFO sipua:3607 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c received channel 1 rtp ssrc:0x482318be
2023-04-11 15:35:40,006  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:450 s2:451
2023-04-11 15:35:50,007  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:950 s2:951
2023-04-11 15:36:00,005  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:1450 s2:1451
2023-04-11 15:36:10,000  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:1949 s2:1951
2023-04-11 15:36:20,002  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:2449 s2:2451
2023-04-11 15:36:30,004  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:2950 s2:2951
2023-04-11 15:36:40,012  INFO sipua:3509 - [FZPC] callid=37afe364d1a78b55dbff191e3938895c num packets: s1:3450 s2:3451
2023-04-11 15:36:48,415  INFO sipua:3087 - [FZPC] on call op:1c014ee0 callid=37afe364d1a78b55dbff191e3938895c Session stop numS1:3870 numS2:3871
```

8.4. Administer Uassist and Uanalyze

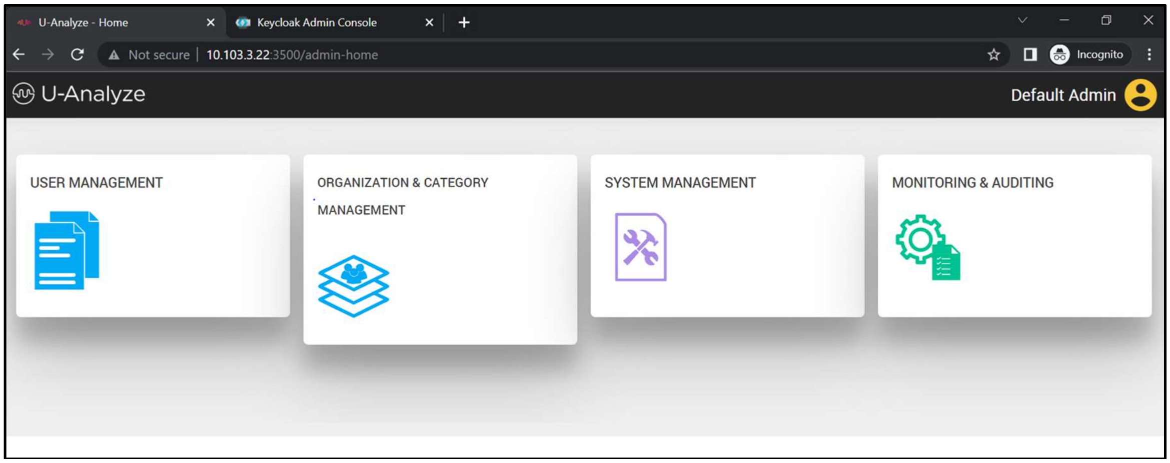
Once Uniphore team installs U-Assist and U-Analyze, validate docker swarm and make sure that all the services are properly configured and they are up and running on their respective nodes.



```
[root@u-analyze-assist-tp1 ~]# docker stack ls
NAME                          SERVICES   ORCHESTRATOR
activemq-cluster              3          Swarm
ai-entity                     6          Swarm
cms                           1          Swarm
cms-refresh                   1          Swarm
consul                        3          Swarm
data-collector                1          Swarm
gpu-asr-en-us-engine-batch    2          Swarm
gpu-asr-engine                1          Swarm
gpu-asr-engine-api            1          Swarm
kafka                         3          Swarm
keycloak                      1          Swarm
mongo-cluster                 5          Swarm
nlp-lid                       1          Swarm
nlp-redaction                 8          Swarm
nlp-sdr                       2          Swarm
nlp-sentiment-analysis        1          Swarm
nlp-signal-analysis           1          Swarm
postgresql_ssl                2          Swarm
redis-cluster                 7          Swarm
transcripts                   1          Swarm
u-analyze                     14         Swarm
u-assist                      11         Swarm
ucap                          1          Swarm
vault-cluster                 3          Swarm
vbc                           1          Swarm
zookeeper                     3          Swarm
[root@u-analyze-assist-tp1 ~]# docker stack ps
```

Admin dashboard is the landing page when the Admin logs into UAssist/U-Analyze. From the dashboard, Admin can navigate and manage the users and business rules:

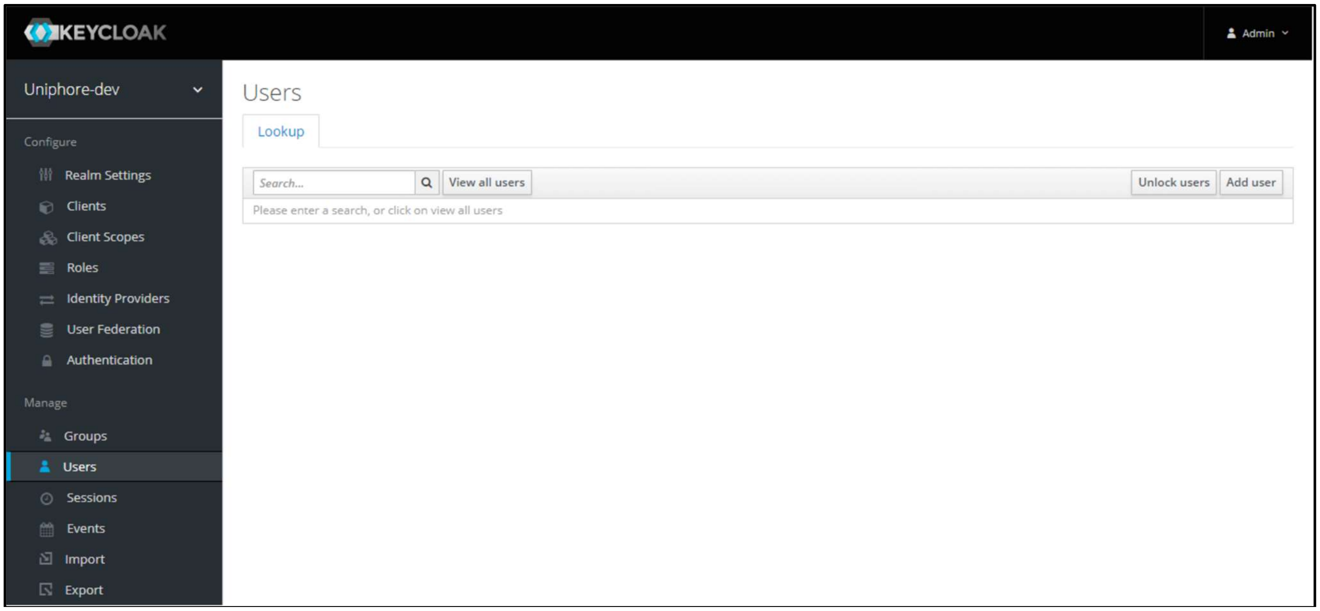
- **User Management:** Provide fine grade access control to users to access various features of the applications and grant entitlements to Organizations and Categories. The entitlements, features and permissions are defined in profiles and these profiles are assigned to users.
- **Organization & Category Management**: Setup organization and categories.
- **System Management**: Setup machine properties, file collection and system properties
- **Monitoring & Auditing**: Monitor the progress of processing of Audio Calls and keep track of potential security breaches or internal misuses of information.



8.5. Create New User in Keycloak Server

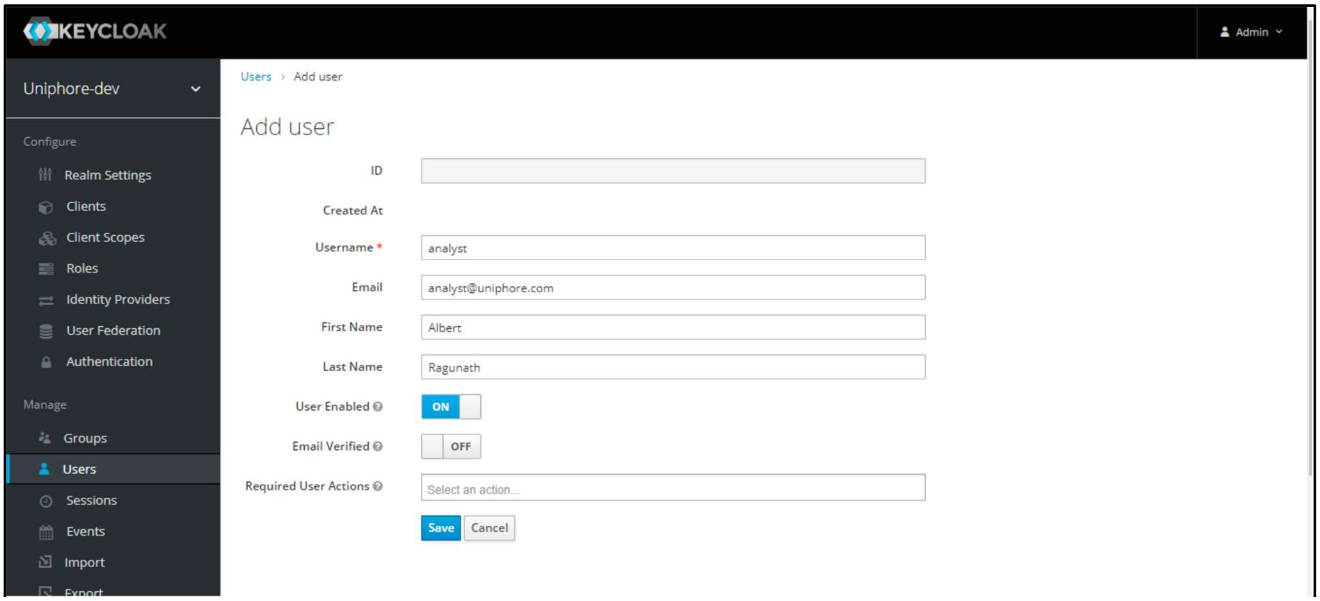
This section describes how to create and manage users in Keycloak server.

- Click **Users** from left menu.



Please enter a search, or click on view all users

- Click **Add** user button

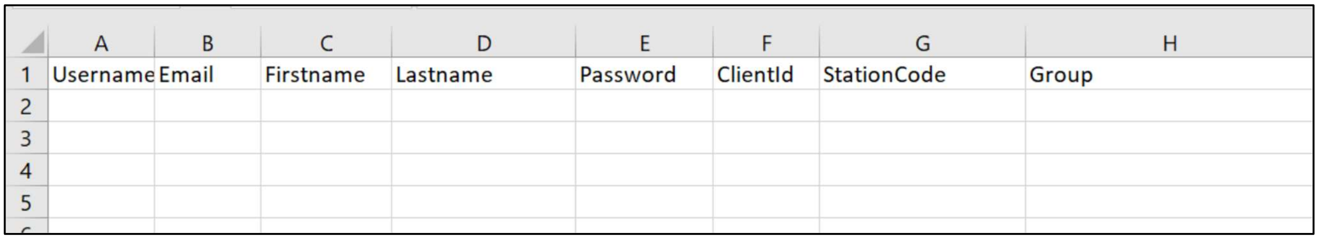


ID	
Created At	
Username *	analyst
Email	analyst@uniphore.com
First Name	Albert
Last Name	Ragunath
User Enabled	ON
Email Verified	OFF
Required User Actions	Select an action...

8.5.1. Create Bulk Users

One can also create bulk users by importing users from excel sheet. Below are the details required for CSV file (except StationCode, all fields are mandatory):

- Username
- Email
- Firstname
- Lastname
- Password
- ClientId (usercrmid)
- StationCode
- Group



	A	B	C	D	E	F	G	H
1	Username	Email	Firstname	Lastname	Password	ClientId	StationCode	Group
2								
3								
4								
5								

9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Manager, Application Enablement Services, U-Assist and U-Analyze.

9.1. Verify Avaya Aura® Communication Manager

On Communication Manager, verify status of the administered CTI link by using the **status aesvcs cti-link** command. Verify that the **Service State** is "established" for the CTI link number administered in **Section 5.2**. as **s**hown below.

```
status aesvcs cti-link

                          AE SERVICES CTI LINK STATUS

CTI   Version  Mnt   AE Services      Service       Msgs     Msgs
Link           Busy  Server           State         Sent     Rcvd

1     12       no    aes140           established   1523       1523
```

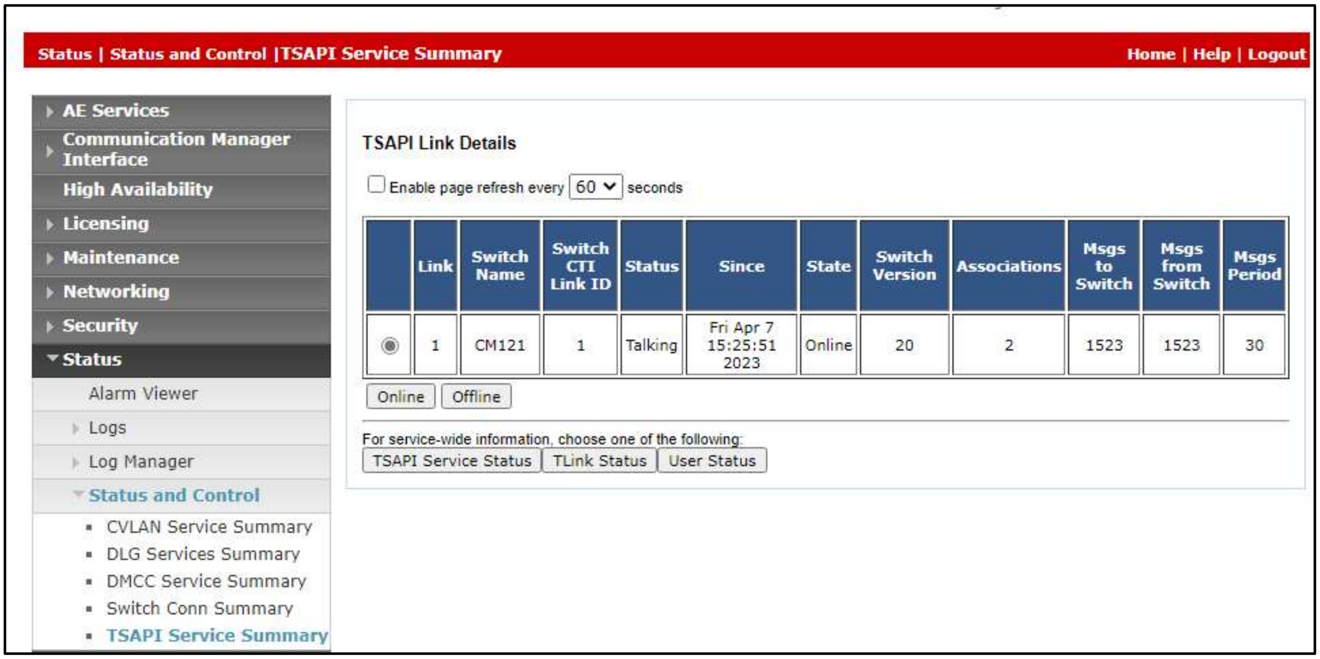
Enter the command **list agent-loginID** verify that agents **70011** and **70012** are logged-in to extension **75011** and **75012**.

```
  list agent-loginID
                                AGENT LOGINID
  Login ID     Name           Extension     Dir Agt  AAS/AUD        COR Ag Pr SO
                  Skil/Lv Skil/Lv Skil/Lv Skil/Lv Skil/Lv Skil/Lv Skil/Lv Skil/Lv

  75000         UniphoreAgent1   70010                             1   lvl
                   1/01   /       /       /       /       /       /

  75001         UniphoreAgent2   70011                             1   lvl
                   1/01   /       /       /       /       /       /.

  75002         UniphoreAgent3   70012                             1   lvl
                   1/01   /       /       /       /       /       /
```

9.2. Verify Avaya Aura® Application Enablement Services

On Application Enablement Services, verify the status of the TSAPI link by selecting **Status → Status and Control → TSAPI Service Summary** from the left pane. The **TSAPI Link Details** screen is displayed.

Verify the **Status** is "Talking" for the TSAPI link administered in **Section 6.3**. and that the **Associations** column reflects the number of agents that are logged in.



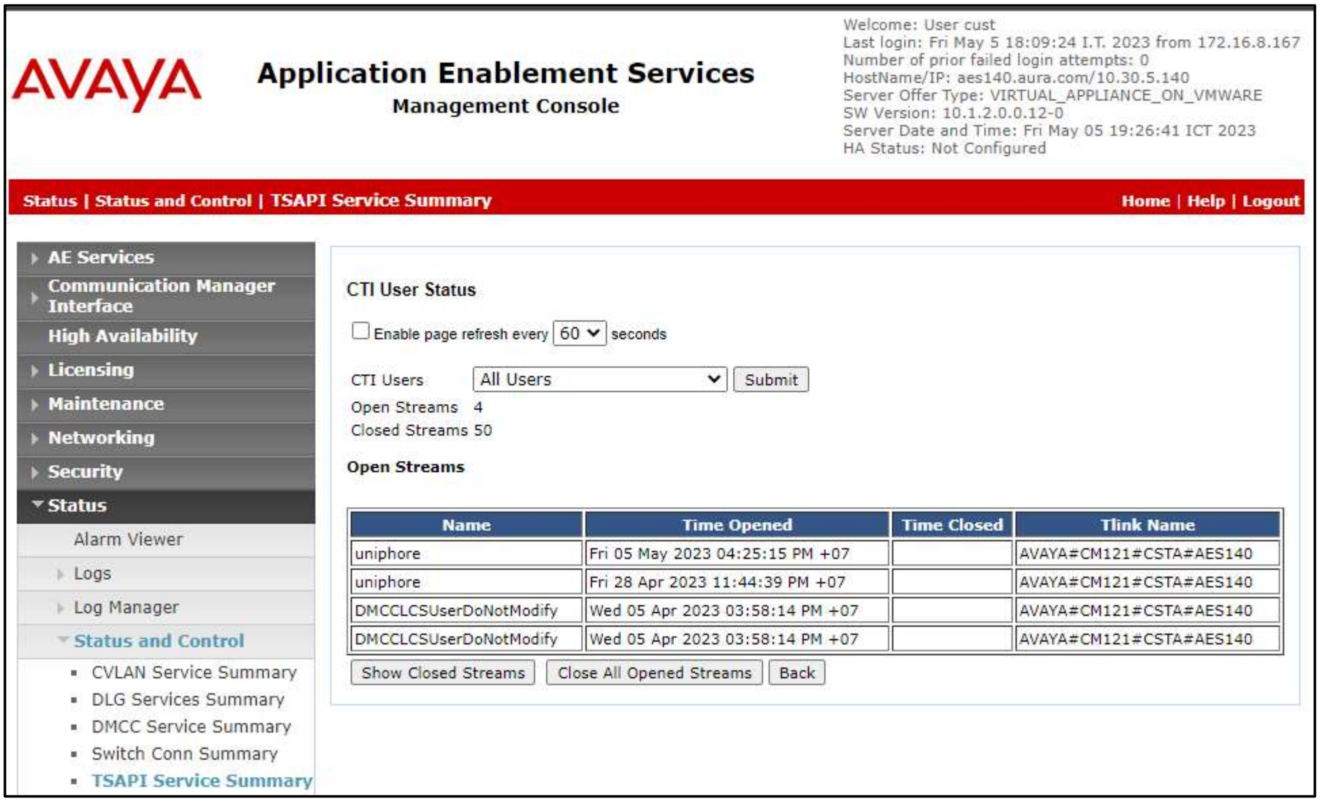
TSAPI Link Details

☐ Enable page refresh every 60 seconds

	Link	Switch Name	Switch CTI Link ID	Status	Since	State	Switch Version	Associations	Msgs to Switch	Msgs from Switch	Msgs Period
●	1	CM121	1	Talking	Fri Apr 7 15:25:51 2023	Online	20	2	1523	1523	30

For service-wide information, choose one of the following:

Verify the CTI user status by selecting **Status → Status and Control → TSAPI Service Summary → CTI User Status**. The **Open Streams** section of this page displays open stream created by the **uniphore** user with the **Tlink**.



Welcome: User cust
Last login: Fri May 5 18:09:24 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri May 05 19:26:41 ICT 2023
HA Status: Not Configured

CTI User Status

☐ Enable page refresh every 60 seconds

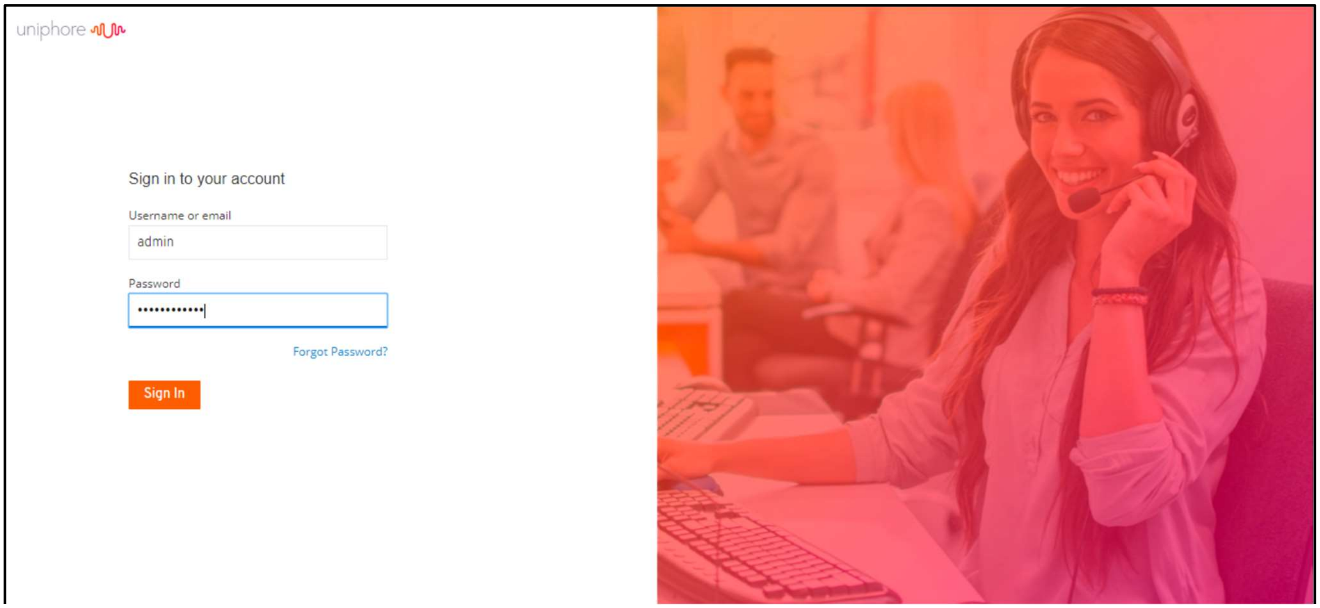
CTI Users: All Users
Open Streams 4
Closed Streams 50

Open Streams

Name	Time Opened	Time Closed	Tlink Name
uniphore	Fri 05 May 2023 04:25:15 PM +07		AVAYA#CM121#CSTA#AES140
uniphore	Fri 28 Apr 2023 11:44:39 PM +07		AVAYA#CM121#CSTA#AES140
DMCCLCSUserDoNotModify	Wed 05 Apr 2023 03:58:14 PM +07		AVAYA#CM121#CSTA#AES140
DMCCLCSUserDoNotModify	Wed 05 Apr 2023 03:58:14 PM +07		AVAYA#CM121#CSTA#AES140

9.3. Verify Uniphore U-Assist Real-time Transcription

From an agent PC, launch an Internet browser window and enter the URL “http://ip-address/login” where “ip-address” is the IP address of the Real Intent server with the UI component. Log in using an agent user credential from **Section 8.5**.

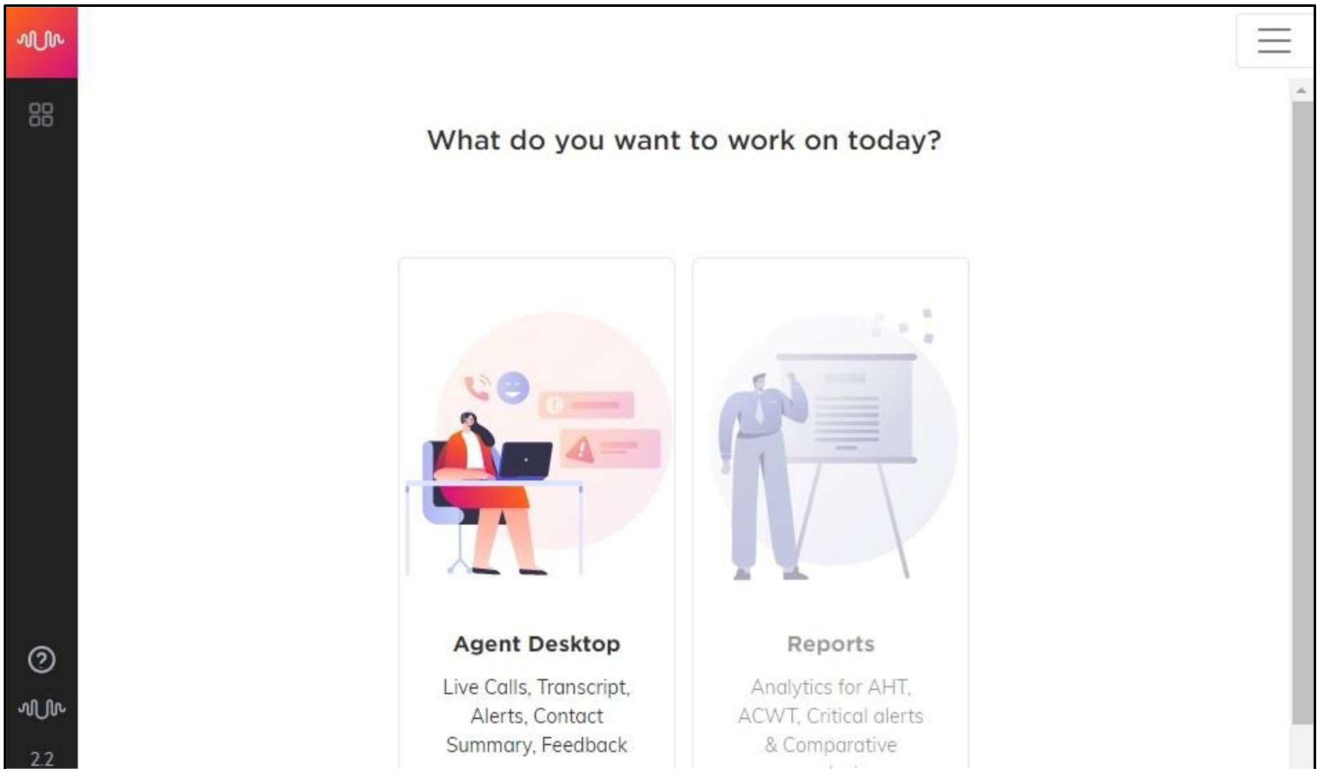


Sign in to your account

Username or email: admin

Password: ••••••••••••

The screen below is displayed. Click on **Agent Desktop**.



What do you want to work on today?

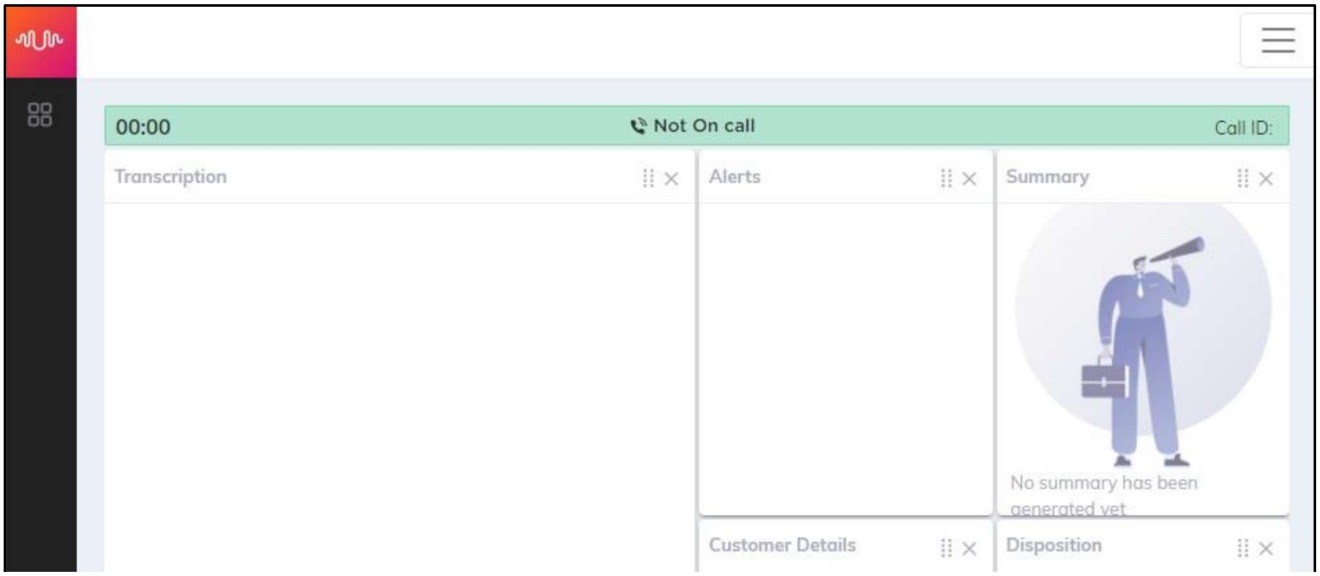
Agent Desktop

Live Calls, Transcript, Alerts, Contact Summary, Feedback

Reports

Analytics for AHT, ACWT, Critical alerts & Comparative

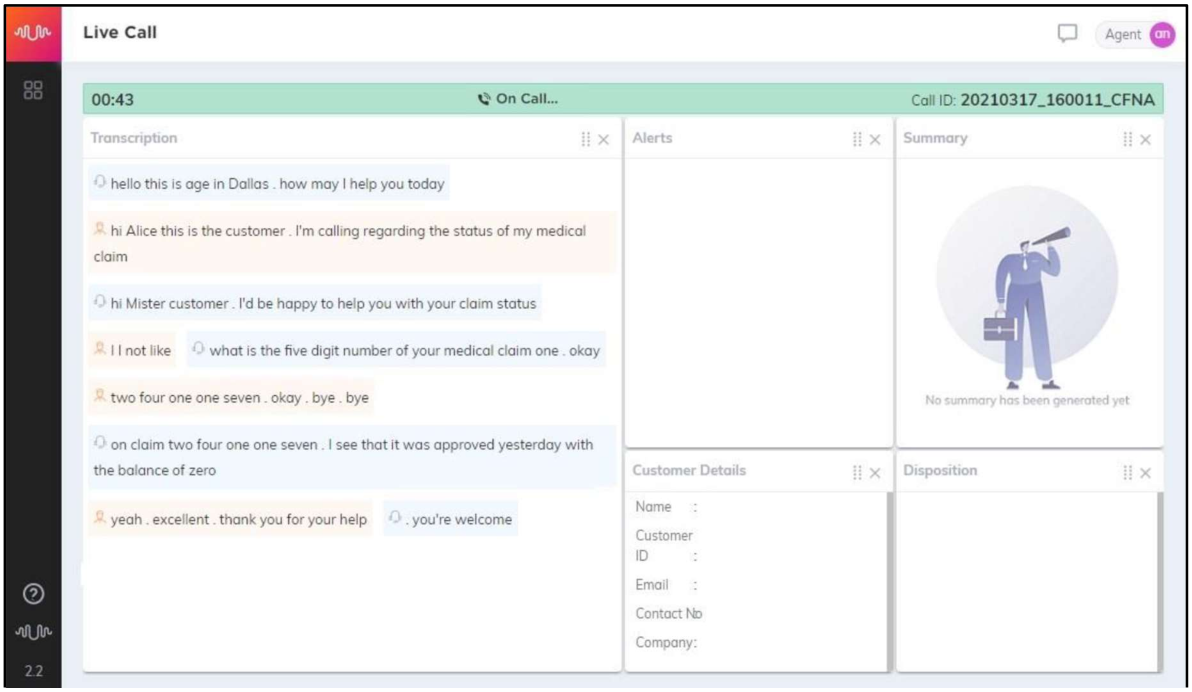
The screen below is displayed next.



00:00 ☎ Not On call Call ID:

No summary has been generated yet

Establish an ACD call with this agent. Verify that the screen is updated to reflect **On Call**, and that conversation text appears in the **Transcription** area as shown below.



Live Call

00:43 On Call... Call ID: 20210317_160011_CFNA

Transcription

- hello this is age in Dallas . how may I help you today
- hi Alice this is the customer . I'm calling regarding the status of my medical claim
- hi Mister customer . I'd be happy to help you with your claim status
- I I not like
- what is the five digit number of your medical claim one . okay
- two four one one seven . okay . bye . bye
- on claim two four one one seven . I see that it was approved yesterday with the balance of zero
- yeah . excellent . thank you for your help
- . you're welcome

Alerts

Summary

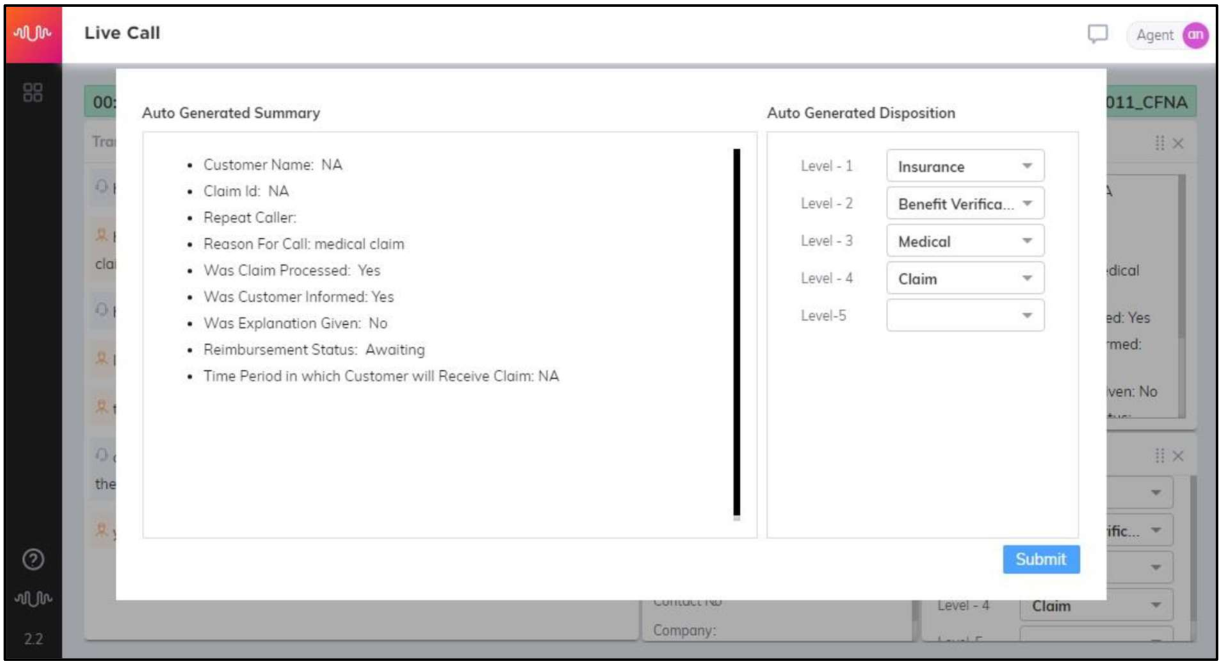
No summary has been generated yet

Customer Details

Name :
Customer ID :
Email :
Contact No
Company:

Disposition

Complete the active ACD call. Verify that the screen is updated with a pop-up box containing **Auto Generated Summary** and **Auto Generated Disposition** for the agent to review, update, and submit, as shown below.



Live Call

Auto Generated Summary

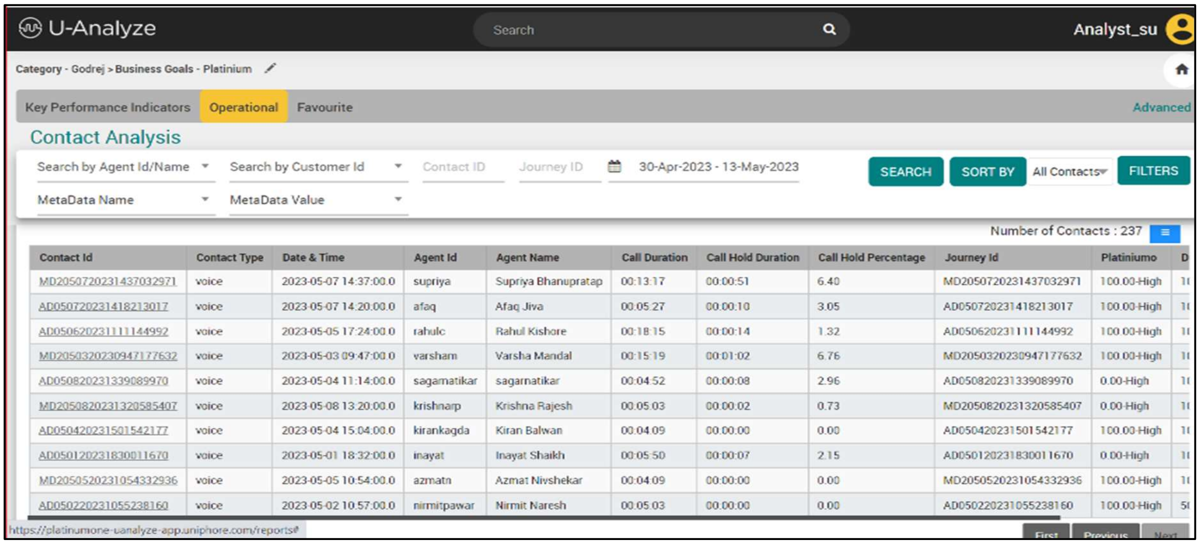
- Customer Name: NA
- Claim Id: NA
- Repeat Caller:
- Reason For Call: medical claim
- Was Claim Processed: Yes
- Was Customer Informed: Yes
- Was Explanation Given: No
- Reimbursement Status: Awaiting
- Time Period in which Customer will Receive Claim: NA

Auto Generated Disposition

Level - 1	Insurance
Level - 2	Benefit Verifica...
Level - 3	Medical
Level - 4	Claim
Level-5	

9.4. Verify U-Analyze

Login U-Analyze dashboard follow **Section 8.4**, select UI-bulk-calls processing.



Category - Godrej > Business Goals - Platinium

Contact Analysis

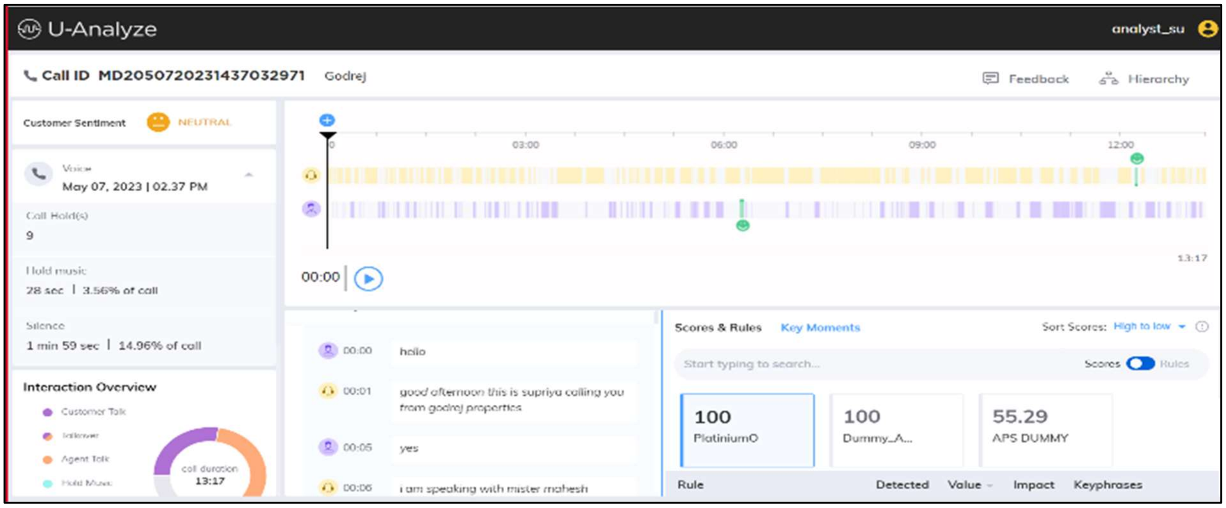
30-Apr-2023 - 13-May-2023

Number of Contacts : 237

Contact Id	Contact Type	Date & Time	Agent Id	Agent Name	Call Duration	Call Hold Duration	Call Hold Percentage	Journey Id	Platiniumo	D
MD2050720231437032971	voice	2023-05-07 14:37:00.0	supriya	Supriya Bhanupratap	00:13:17	00:00:51	6.40	MD2050720231437032971	100.00-High	1
AD050720231418213017	voice	2023-05-07 14:20:00.0	afaq	Afaq Jiva	00:05:27	00:00:10	3.05	AD050720231418213017	100.00-High	1
AD050620231111144992	voice	2023-05-05 17:24:00.0	rahulc	Rahul Kishore	00:18:15	00:00:14	1.32	AD050620231111144992	100.00-High	1
MD2050320230947177632	voice	2023-05-03 09:47:00.0	varsham	Varsha Mandal	00:15:19	00:01:02	6.76	MD2050320230947177632	100.00-High	1
AD050820231339089970	voice	2023-05-04 11:14:00.0	sagarnatikar	sagarnatikar	00:04:52	00:00:08	2.96	AD050820231339089970	0.00-High	1
MD2050820231320585407	voice	2023-05-08 13:20:00.0	krishnarp	Krishna Rajesh	00:05:03	00:00:02	0.73	MD2050820231320585407	0.00-High	1
AD050420231501542177	voice	2023-05-04 15:04:00.0	kirankagda	Kiran Balwan	00:04:09	00:00:00	0.00	AD050420231501542177	100.00-High	1
AD050120231830011670	voice	2023-05-01 18:32:00.0	inayat	Inayat Shaikh	00:05:50	00:00:07	2.15	AD050120231830011670	0.00-High	1
MD2050520231054332936	voice	2023-05-05 10:54:00.0	azmatn	Azmat Nivshekar	00:04:09	00:00:00	0.00	MD2050520231054332936	100.00-High	1
AD050220231055238160	voice	2023-05-02 10:57:00.0	nirmitpawar	Nirmit Naresh	00:05:03	00:00:00	0.00	AD050220231055238160	100.00-High	5

https://platinumone-uanalyze-app.uniphore.com/reports#

Verify that new Call Transcript and Summary:



Call ID MD2050720231437032971 Godrej

Customer Sentiment NEUTRAL

Voice
May 07, 2023 | 02.37 PM

Call Hold(s)
9

Hold music
28 sec | 3.56% of call

Silence
1 min 59 sec | 14.96% of call

Interaction Overview

call duration
13:17

00:00 hello

00:01 good afternoon this is supriya calling you from godrej properties

00:05 yes

00:06 i am speaking with mister mahesh

Sort Scores: High to low

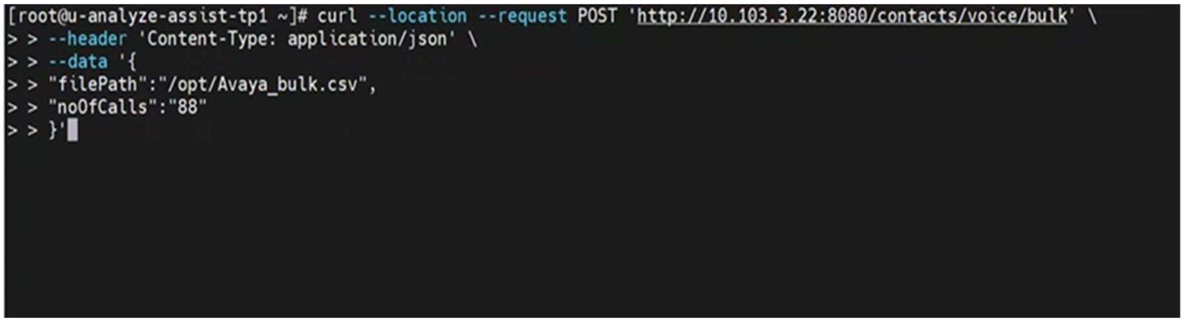
100
PlatiniumO

100
Dummy_A...

55.29
APS DUMMY

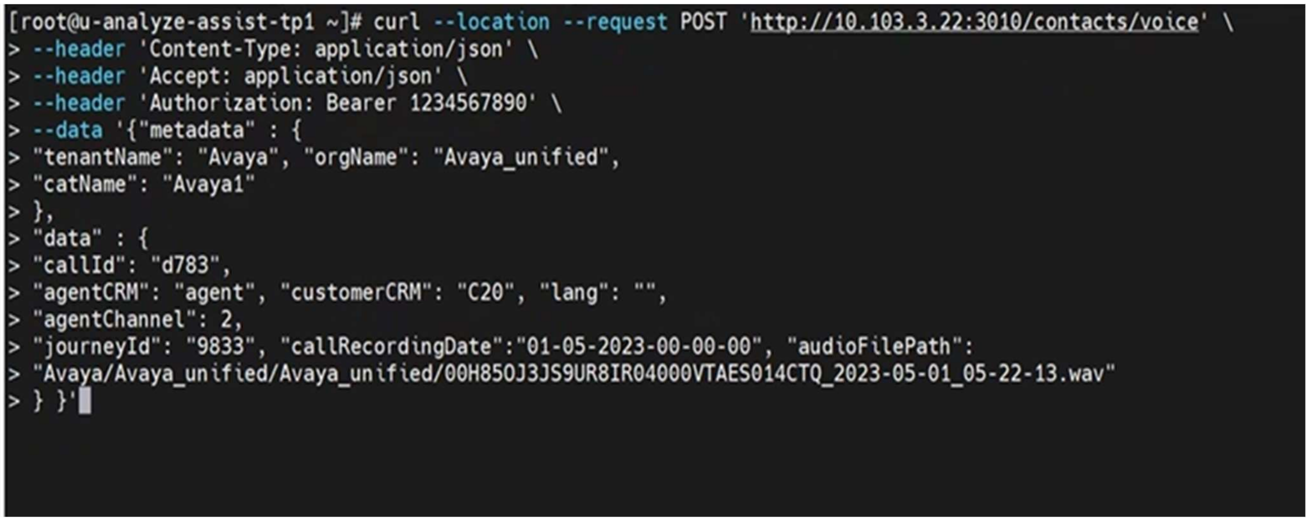
9.5. Verify utility for bulk call processing.

Connect to U-Analyze server via SSH, using command below to verify call processing on U-Analyze



```
[root@u-analyze-assist-tp1 ~]# curl --location --request POST 'http://10.103.3.22:8080/contacts/voice/bulk' \
> > --header 'Content-Type: application/json' \
> > --data '{
> > "filePath":"/opt/Avaya_bulk.csv",
> > "noOfCalls":"88"
> > }'
```

Using curl Command for single-call processing:



```
[root@u-analyze-assist-tp1 ~]# curl --location --request POST 'http://10.103.3.22:3010/contacts/voice' \
> --header 'Content-Type: application/json' \
> --header 'Accept: application/json' \
> --header 'Authorization: Bearer 1234567890' \
> --data '{"metadata" : {
> "tenantName": "Avaya", "orgName": "Avaya_unified",
> "catName": "Avaya1"
> },
> "data" : {
> "callId": "d783",
> "agentCRM": "agent", "customerCRM": "C20", "lang": "",
> "agentChannel": 2,
> "journeyId": "9833", "callRecordingDate":"01-05-2023-00-00-00", "audioFilePath":
> "Avaya/Avaya_unified/Avaya_unified/00H850J3JS9UR8IR04000VTAES014CTQ_2023-05-01_05-22-13.wav"
> } }'
```

10. Conclusion

These Application Notes describe the configuration steps required for the Uniphore U-Assist to successfully interoperate with Avaya Aura® Communication Manager 10.1 and Avaya Aura® Application Enablement Services 10.1. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

11. Additional References

This section references the Avaya and Uniphore product documentation that are relevant to these Application Notes.

Product documentation for Avaya products may be found at *http://support.avaya.com*.

1. *Administering Avaya Aura® Communication Manager,* Release 10.1.x, Issue 5, Mar 2023
2. *Administering Avaya Aura® Session Manager*, Release 10.1.x, Issue 5, Feb 2023
3. *Administering Avaya Aura® Application Enablement Services,* Release 10.1.x, Issue 5, Feb 2023
4. *Administering Avaya Aura® System Manager,* Release 10.1, Issue 8, Feb 2023.

Documentation for Uniphore products may be found at https://www.uniphore.com/

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.