Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Avaya Aura® Communication Manager R6.3 and Avaya Aura® Application Enablement Services R6.3 to interoperate with Speech Technology Centre Smart Logger II v8.4 using Multiple Device Registration – Issue 1.0

Abstract

These Application Notes describe the configuration steps for the Speech Technology Centre Smart Logger II solution with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services. Speech Technology Centre Smart Logger II is a voice recording solution which can be used to record voice streams for Avaya telephony.

Readers should pay attention to section 2, in particular the scope of testing as outlined in Section 2.1 as well as the 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 at the Avaya Solution and Interoperability Test Lab.

1. Introduction

The purpose of this document is to describe the compliance testing carried out using the Multiple Device Registration recording method on Speech Technology Centre Smart Logger II with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services. It includes a description of the configuration of both the Avaya and the Speech Technology Centre solutions, a description of the tests that were performed and a summary of the results of those tests.

Speech Technology Centre Smart Logger II is a voice recording system which can be used to record the voice stream of Avaya telephony endpoints. In this compliance test, it uses Avaya Aura® Communication Manager's Multiple Device Registration feature via the Avaya Aura® Application Enablement Services (AES) Device, Media, and Call Control (DMCC) interface to capture the audio and call details for call recording. Speech Technology Centre Smart Logger II uses the Avaya Aura® Application Enablement Services DMCC service to register extensions on Avaya Aura® Communication Manager that are to be recorded. When the extension registered by Speech Technology Centre Smart Logger II receives an event pertaining to the start of a call, Speech Technology Centre Smart Logger II receives/records the RTP media stream to and from the extension.

2. General Test Approach and Test results

The interoperability compliance test evaluated the ability of Smart Logger II to carry out call recording in a variety of scenarios using DMCC with AES and Communication Manager. The test approach was to verify that the calls placed and recorded using the Smart Logger II with Avaya solution functioned correctly with good audio quality.

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.

2.1. Interoperability Compliance Testing

The interoperability compliance test included both feature functionality and serviceability testing. The feature functionality testing focused on placing and recording calls in different call scenarios to ensure good quality audio recordings. The serviceability testing focused on verifying the ability of Smart Logger II to recover from disconnection and reconnection of the Avaya solution. Other areas of focus included the recording of calls in following scenarios:

- Basic calls to/from Extensions
- Basic calls to/from Agents
- Basic calls to Hunt Groups (Skills)
- Calls to/from the PSTN
- Hold/Retrieve
- Blind and Supervised Transfers
- Conference Calls

Note: Bridged appearances or EC500 was not tested during compliance testing. At the request of Speech Technology Centre SIP endpoints were not monitored.

2.2. Test Results

Tests were performed to ensure full interoperability of Speech Technology Centre Smart Logger II with Communication Manager and AES (using Multiple Registrations). The tests were all functional in nature and performance testing was not included. All the test cases passed successfully with the following observation:

- Due to disk write caching on the Smart Logger II server OS, calls in progress for a short time are lost when the power to the recorder was disconnected. This can be addressed with a freeware disk caching utility used to amend the rate at which data is committed to the hard drive.

2.3. Support

Technical support can be obtained for the Speech Technology Centre Smart Logger II solution as follows:

- Email: support@speechpro.com
- Website: www.speechpro.com
- Phone: +7-812-331-0665

3. Reference Configuration

Figure 1 illustrates the network configuration used during compliance testing. The Avaya solution consists of Communication Manager, System Manager, Session Manager, AES and an Avaya G430 Gateway. The Communication Manager is configured to communicate to the Smart Logger II server via the Application Enablement Services. Smart Logger II records voice conversations from telephones registered to the Communication Manager (Communication Manager extensions). The TSAPI and DMCC services provided by AES are used to monitor call activity and capture voice streams associated with the Communication Manager extensions.

When a call is recorded, the Smart Logger II system uses the Communication Manager Multiple Registrations feature to initiate monitoring for calls which it wishes to record. The voice stream for such calls is received via the LAN interface to the Communication Manager. A Smart Logger II Client is configured to allow users to replay the recorded calls which are stored on the Smart Logger II Server.

Note: The Smart Logger II Client was configured on the Smart Logger II Server during compliance testing, but may also be installed on a separate PC.

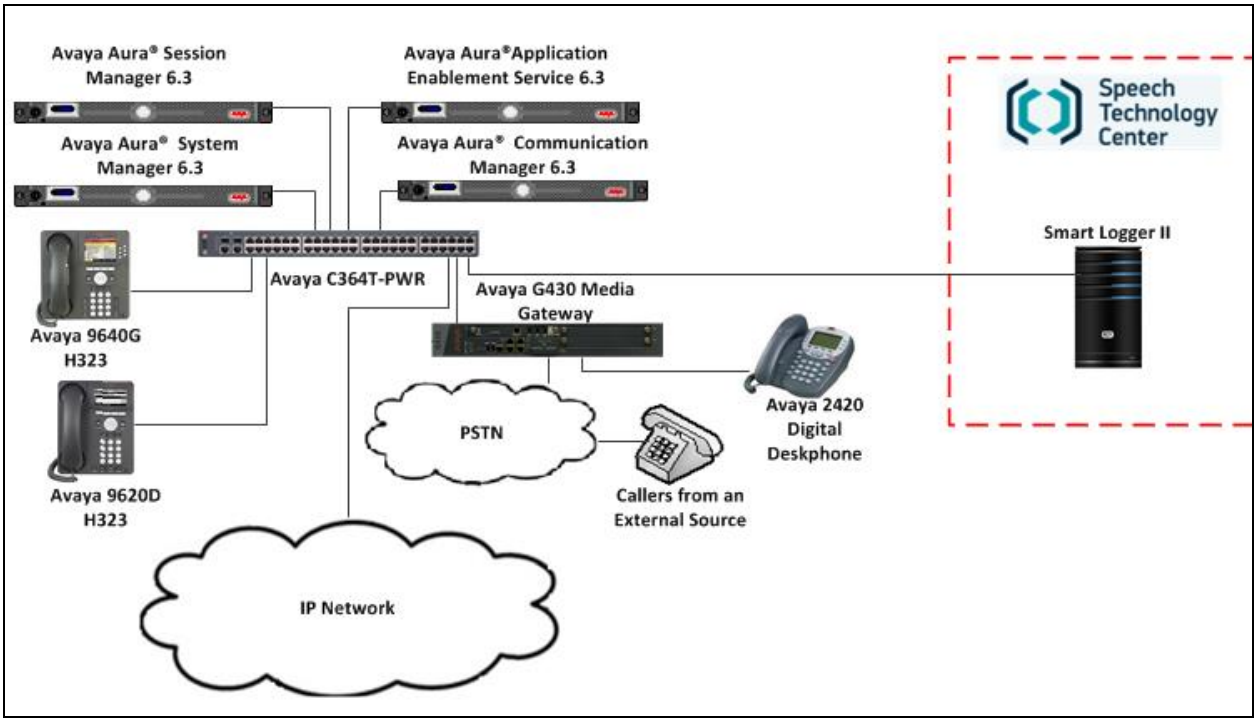


Figure 1: Avaya and Speech Technology Centre Reference Configuration

4. Equipment and Software Validated

The hardware and associated software used for the compliance test is listed below.

Avaya Equipment	Software Version
Avaya Aura® Communication Manager	R6.3 Build R016x.03.0.124.0
Avaya Aura® Session Manager	R6.3.7 Software Update 6.3.7.0.637008
Avaya Aura® System Manager	R6.3.7 Build 6.3.0.8.5682-6.3.8.-3204 Update 6.3.7.7.2275
Avaya Aura® Application Enablement Services	R6.3 Build 6.3.0.0.212-0
Avaya G430 Media Gateway Module MM710 (DSP MP20)	Version 36.7.0/1 Version HW04 FW021
Avaya Media Gateway DSP module	MP20 FW 132
Avaya 96xx IP phones 9640G 9620D Avaya 2420 Digital phone	 3.1.05S 3.1.01S Rel 6.0, FWV 6
Speech Technology Centre Equipment	**Software Version**
Windows 2008 Server R2 Enterprise SP1 (64 bit)	STC Smart Logger II Avaya DMCC Recorder package 8.4.2050 STC Smart Logger II CTI Analyzer package 8.4.2042 Smart Logger II client 8.4.2183.2612 Microsoft SQL Express 2008 Microsoft .Net Framework 4.0

Table 1: Hardware and Software Version Numbers

5. Configure Avaya Aura® Communication Manager

Configuration and verification operations on the Communication Manager illustrated in this section were all performed using Avaya Site Administrator Emulation Mode. The information provided in this section describes the configuration of the Communication Manager for this solution. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**.

It is implied a working system is already in place. The configuration operations described in this section can be summarized as follows: (Note: during compliance testing all inputs not highlighted in bold were left as default).

- Verify System Parameters Customer Options
- Verify System Parameters Features
- Configure Service Observe
- Configure Target Stations to be Recorded
- Configure Hunt Group
- Configure Agents
- Create Node Name for Avaya Aura® Application Enablement Services
- Create CTI Link to Avaya Aura® Application Enablement Services
- Configure IP Services

5.1. Verify System Parameters Customer Options

Use the **display system-parameters customer-options** command to verify that Communication Manager has permissions for features illustrated in these Application Notes. Those items shown in **bold** indicate required values or minimum capacity requirements. If these are not met in the configuration, please contact an Avaya representative for further assistance.

On **Page 2** the **Maximum Concurrently Registered IP Stations** must be sufficient to support the total number of IP stations.

```
   display system-parameters customer-options                    Page   2 of  11
                                OPTIONAL FEATURES

IP PORT CAPACITIES                                          USED
                     Maximum Administered H.323 Trunks: 12000 14
          Maximum Concurrently Registered IP Stations: 18000 5
               Maximum Administered Remote Office Trunks: 12000 0
Maximum Concurrently Registered Remote Office Stations: 18000 0
              Maximum Concurrently Registered IP eCons: 414   0
  Max Concur Registered Unauthenticated H.323 Stations: 100   0
                       Maximum Video Capable Stations: 41000 1
                   Maximum Video Capable IP Softphones: 18000 4
                       Maximum Administered SIP Trunks: 24000 120
  Maximum Administered Ad-hoc Video Conferencing Ports: 24000 0
   Maximum Number of DS1 Boards with Echo Cancellation: 522   0
                            Maximum TN2501 VAL Boards: 128   0
                    Maximum Media Gateway VAL Sources: 250   0
           Maximum TN2602 Boards with 80 VoIP Channels: 128   0
          Maximum TN2602 Boards with 320 VoIP Channels: 128   0
   Maximum Number of Expanded Meet-me Conference Ports: 300   0
```

On **Page 3**, ensure that **Computer Telephony Adjunct Links?** is set to **y** as shown below.

```
   display system-parameters customer-options                    Page   3 of  11
                                OPTIONAL FEATURES

        Abbreviated Dialing Enhanced List? y          Audible Message Waiting? y
            Access Security Gateway (ASG)? n              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? n                       DCS (Basic)? y
            ASAI Link Core Capabilities? n                DCS Call Coverage? y
            ASAI Link Plus Capabilities? n               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
```

On **Page 4, IP Stations** must be set to **y**.

```
display system-parameters customer-options                      Page   4 of  11
                               OPTIONAL FEATURES

   Emergency Access to Attendant? y                             IP Stations? y
            Enable 'dadmin' Login? y
            Enhanced Conferencing? y                      ISDN Feature Plus? n
                  Enhanced EC500? y       ISDN/SIP Network Call Redirection? y
    Enterprise Survivable Server? n                         ISDN-BRI Trunks? y
       Enterprise Wide Licensing? n                               ISDN-PRI? y
              ESS Administration? y              Local Survivable Processor? n
         Extended Cvg/Fwd Admin? y                   Malicious Call Trace? y
     External Device Alarm Admin? y                Media Encryption Over IP? n
  Five Port Networks Max Per MCC? n     Mode Code for Centralized Voice Mail? n
                Flexible Billing? n
   Forced Entry of Account Codes? y                Multifrequency Signaling? y
      Global Call Classification? y          Multimedia Call Handling (Basic)? y
            Hospitality (Basic)? y       Multimedia Call Handling (Enhanced)? y
 Hospitality (G3V3 Enhancements)? y                Multimedia IP SIP Trunking? y
                      IP Trunks? y
           IP Attendant Consoles? y
```

5.2. Verify System Parameters Features

Expert Agent Selection is used for the configuration and routing of calls to ACD Agents. Use **change system-parameters features** command and on **Page 11** of the system-parameters features form, set **Expert Agent Selection (EAS) Enabled?** to **y**.

```
change system-parameters features                               Page  11 of  20
                     FEATURE-RELATED SYSTEM PARAMETERS
CALL CENTER SYSTEM PARAMETERS
  EAS
        Expert Agent Selection (EAS) Enabled? y
       Minimum Agent-LoginID Password Length:
         Direct Agent Announcement Extension:                  Delay:
    Message Waiting Lamp Indicates Status For: station

  VECTORING
                  Converse First Data Delay: 0      Second Data Delay: 2
              Converse Signaling Tone (msec): 100         Pause (msec): 70
                   Prompting Timeout (secs): 10
                Interflow-qpos EWT Threshold: 2
   Reverse Star/Pound Digit For Collect Step? n
         Available Agent Adjustments for BSR? n
                           BSR Tie Strategy: 1st-found
  Store VDN Name in Station's Local Call Log? n
  SERVICE OBSERVING
             Service Observing: Warning Tone? y     or Conference Tone? n
 Service Observing/SSC Allowed with Exclusion? n
            Allow Two Observers in Same Call? n           IP Attendant Consoles? y
```

5.3. Configure Service Observe

For the purposes of Multiple Device Registration, Service Observe must be enabled for the Class of Restriction to which the Target Stations will be assigned. Use the **change cor 1** command and enter the following:

- **Can Be Service Observed?** Enter **y**
- **Can Be A Service Observer?** Enter **y**

```
change cor 1                                                Page   1 of  23
                            CLASS OF RESTRICTION

              COR Number: 1
         COR Description: COR1

                     FRL: 0                                APLT? y
  Can Be Service Observed? y           Calling Party Restriction: none
Can Be A Service Observer? y            Called Party Restriction: none
        Time of Day Chart: 1       Forced Entry of Account Codes? y
         Priority Queuing? n                Direct Agent Calling? n
    Restriction Override: none       Facility Access Trunk Test? n
    Restricted Call List? n                 Can Change Coverage? n

           Access to MCT? y            Fully Restricted Service? n
Group II Category For MFC: 7           Hear VDN of Origin Annc.? n
         Send ANI for MFE? n            Add/Remove Agent Skills? n
            MF ANI Prefix:             Automatic Charge Display? n
Hear System Music on Hold? y   PASTE (Display PBX Data on Phone)? n
                        Can Be Picked Up By Directed Call Pickup? n
                                    Can Use Directed Call Pickup? n
                                    Group Controlled Restriction: inactive
```

5.4. Configure Target Stations to be Recorded

Each Station to be monitored must have **IP Softphone** set to **y** on **page 1** and **Multimedia Mode** set to **enhanced** on **page 2**. The example below shows the configuration of an IP station 1015 (note, TDM stations are configured in the same way). Note the **Security Code** as this will be required by Smart Logger II system in **Section 7.1.2**

Page 1

```
display station 1015                                    Page   1 of   5
                                  STATION

Extension: 1015                       Lock Messages? n              BCC: 0
     Type: 9620                       Security Code: 123456          TN: 1
     Port: S00028                   Coverage Path 1:                COR: 1
     Name: 1015 H323 Ext            Coverage Path 2:                COS: 1
                                    Hunt-to Station:               Tests? y
STATION OPTIONS
                                         Time of Day Lock Table:
             Loss Group: 19          Personalized Ringing Pattern: 1
                                               Message Lamp Ext: 1015
           Speakerphone: 2-way              Mute Button Enabled? y
        Display Language: english
 Survivable GK Node Name:
          Survivable COR: internal             Media Complex Ext:
   Survivable Trunk Dest? y                         IP SoftPhone? y

                                           IP Video Softphone? n
                              Short/Prefixed Registration Allowed: default

                                           Customizable Labels? y
```

Page 2

```
display station 1015                                    Page   2 of   5
                                  STATION
FEATURE OPTIONS
           LWC Reception: spe              Auto Select Any Idle Appearance? n
          LWC Activation? y                         Coverage Msg Retrieval? y
  LWC Log External Calls? n                               Auto Answer: none
            CDR Privacy? n                          Data Restriction? n
   Redirect Notification? y                   Idle Appearance Preference? n
 Per Button Ring Control? n                  Bridged Idle Line Preference? n
   Bridged Call Alerting? y                      Restrict Last Appearance? y
  Active Station Ringing: single
                                                      EMU Login Allowed? n
       H.320 Conversion? n          Per Station CPN - Send Calling Number?
      Service Link Mode: as-needed                    EC500 State: enabled
        Multimedia Mode: enhanced                Audible Message Waiting? n
    MWI Served User Type:                      Display Client Redirection? n
            AUDIX Name:                       Select Last Used Appearance? n
                                                Coverage After Forwarding? s
                                                  Multimedia Early Answer? n
 Remote Softphone Emergency Calls: as-on-local Direct IP-IP Audio Connections? y
  Emergency Location Ext: 1015          Always Use? n IP Audio Hairpinning? n
```

5.5. Configure Hunt Group

For the purposes of recording agents, a skilled hunt group must be added. Agents who log in to this skill will be recorded. Using the **add hunt-group next** command and enter the following:

- **Group Name** Enter a group name for identification purposes (**Smart Logger**)
- **Group Extension** Enter an extension number that is valid in the dialplan (**1030**)
- **ACD?** Enter **y**
- **Queue?** Enter **y**
- **Vector?** Enter **y**

Note the **Group Number**. As it is required in **Section 5.6**.

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

           Group Number: 5                                 ACD? y
             Group Name: Smart Logger                    Queue? y
        Group Extension: 1030                          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:
```

Navigate to **Page 2,** set **Skill** to **y.**

```
add hunt-group next                                          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
```

5.6. Configure Agents

Each Agent requires a **Login ID**, **Name** and **Password**. Shown below is the configuration of Agent1.

```
add agent-loginID 1031                                    Page   1 of   3
                                AGENT LOGINID

               Login ID: 1031                                    AAS? n
                   Name: Agent1                                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
                                           AUDIX Name for Messaging:

                                      LoginID for ISDN/SIP Display? n
                                                          Password: 123456
                                              Password (enter again): 123456
                                                       Auto Answer: station
                                                 MIA Across Skills: system
                                            ACW Agent Considered Idle: 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
```

Navigate to **Page 2**, set **5** for the Skill Number (**SN**), and the appropriate Skill Level (**SL)** (i.e. **1**) During compliance testing the Skill Number (Hunt Group) number was 5, as configured in **Section 5.5**.

```
add agent-loginID 1031                                    Page   2 of   3
                                AGENT LOGINID
     Direct Agent Skill:                                Service Objective? n
Call Handling Preference: skill-level                 Local Call Preference? n

    SN   RL SL          SN   RL SL          SN   RL SL          SN   RL SL
 1: 5       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:
```

5.7. Create Node Name for Avaya Aura® Application Enablement Services

A Node Name needs to be created to associate Communication Manager with AES. Use the **change node-names ip** command and enter an informative name (**AES63RP**) and the IP address of the **AES** (**10.10.16.210**).

Note the **procr** IP address as it is required in **Section 7.1.1**.

```
display node-names ip
                                  IP NODE NAMES
    Name                 IP Address
AES63RP                10.10.16.210
CM62                   10.10.16.142
IPO                    10.10.60.30
IP_Buffer              10.10.60.71
Kofax                  10.10.60.56
Matties_62             10.10.60.14
NovaBox                10.10.16.232
RDTT                   10.10.60.50
SM63RPSIG              10.10.16.214
default                0.0.0.0
procr                  10.10.16.211
procr6                 ::




( 12 of 12   administered node-names were displayed )
Use 'list node-names' command to see all the administered node-names
Use 'change node-names ip xxx' to change a node-name 'xxx' or add a node-name
```

5.8. Create CTI Link to the Aura® Application Enablement Services

A CTI Link needs to be created to enable Communication Manager to interoperate with AES. Use the **add cti-link next** command and enter the following:

- **Extension** Enter any unused **Extension** (**1999**)
- **Type** Enter **ADJ-IP**
- **Name** Enter the AES node name (**AES63RP** as created in **Section 5.7**)

Note: during compliance testing cti link 1 was added.

```
add cti-link next                                              Page   1 of   3
                                  CTI LINK
 CTI Link: 1
Extension: 1999
     Type: ADJ-IP
                                                                    COR: 1
     Name: aes63rp
```

5.9. Configure IP Services

To configure the AES link use the **change ip-services** command and enter the following:

On Page 1

- **Service Type** Enter **AESVCS**
- **Enabled** Enter **y**
- **Local Node** Enter **procr**
- **Local Port** Enter **8765**

```
change ip-services                                          Page   1 of   4

                                  IP SERVICES
 Service      Enabled      Local        Local        Remote       Remote
  Type                     Node         Port         Node         Port
AESVCS         y       procr            8765
CDR1                   procr            0        IP_Buffer       9000
CDR2                   procr            0        RDTT            9000
```

Navigate to **Page 4** and enter the following:

- **Server ID** Enter **1**
- **AE Services Server** Enter **AES63RP** (The node created in **section 5.7**)
- **Password** Enter a password. This password will be used in **Section 6.3** to enable AES to communicate with Communication Manager.
- **Enabled** Enter **y**

Press **f3** button to save the new settings.

```
change ip-services                                          Page   4 of   4
                          AE Services Administration

   Server ID    AE Services       Password          Enabled     Status
                   Server
      1:       aes63rp           Avayapassword123      y        in use
      2:
      3:
      4:
      5:
      6:
      7:
      8:
      9:
     10:
     11:
     12:
     13:
     14:
     15:
     16:
```

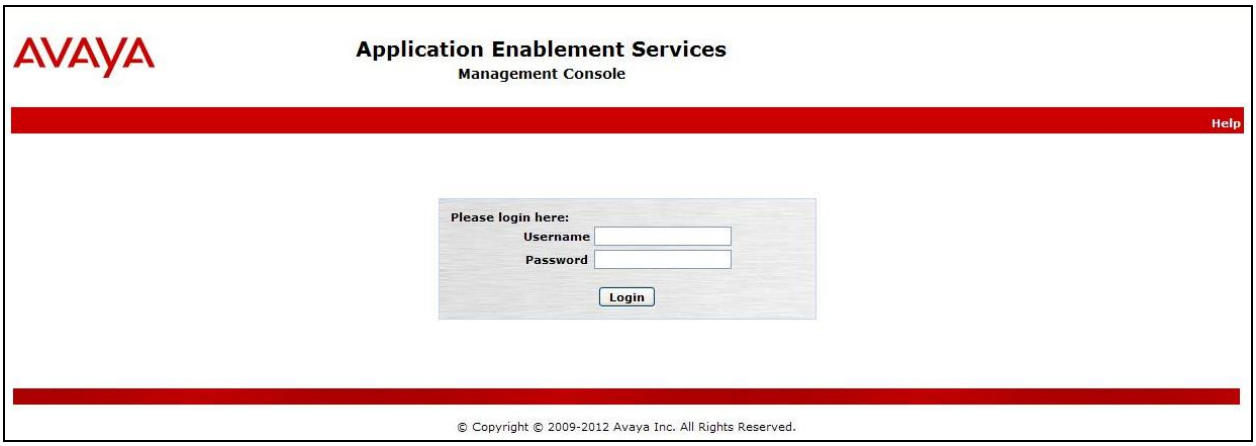
6. Configure Avaya Aura® Application Enablement Services

This section provides the procedures for configuring AES. It is implied a working AES is already in place and the Security Database (SDB) is configured. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**. The configuration operations described in this section can be summarized as follows:

- Logging into Avaya Aura® Application Enablement Services
- Verify Avaya Aura® Application Enablement Services License
- Create Avaya Aura® Communication Manager Switch Connection
- Create CTI User
- Enable CTI User
- Configure DMCC Port
- Restart DMCC Service

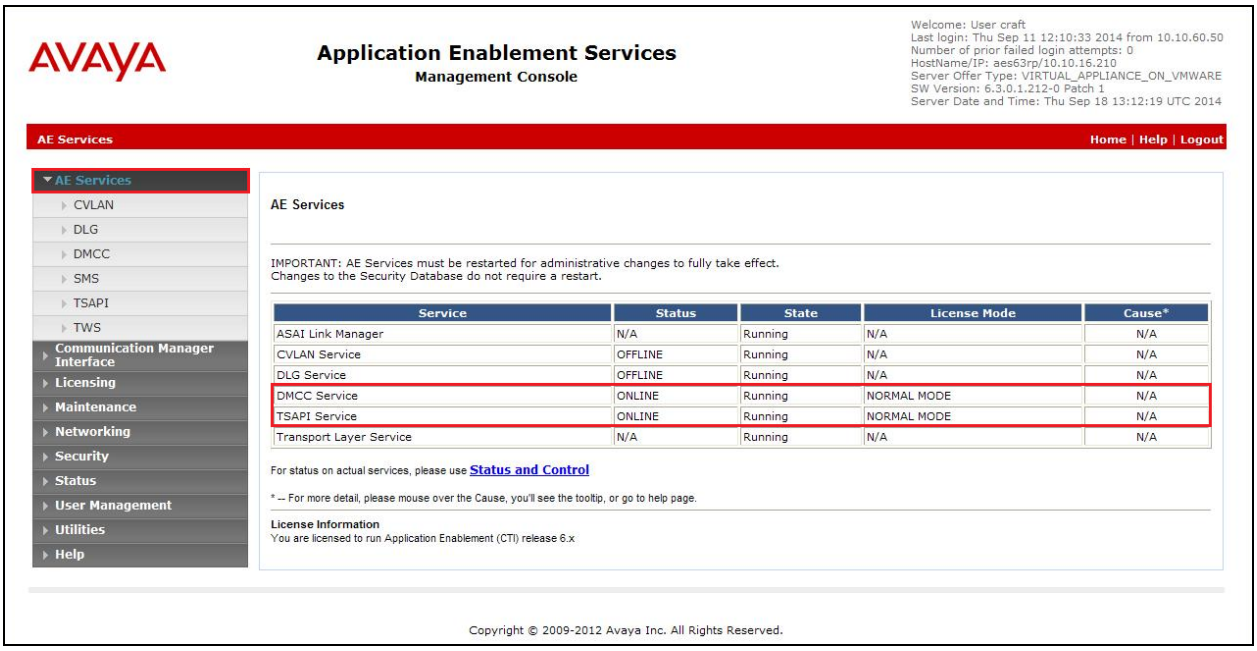
6.1. Logging into Avaya Aura® Application Enablement Services

To access the OAM web-based interface of the AES Server use the URL **http://x.x.x.x,** where **x. x. x. x** is the IP address of the AES Server. The **Management console** is displayed. Log in using the appropriate credentials.



6.2. Verify Avaya Aura® Application Enablement Services License

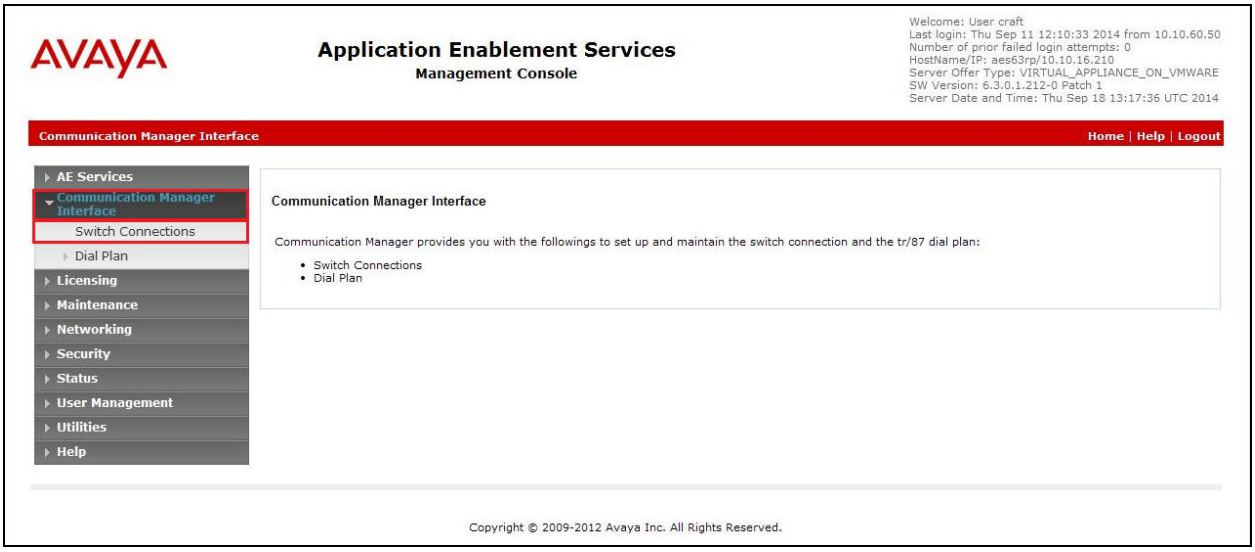
Select **AE Services** on the left pane and verify that the **DMCC** and **TSAPI Services** are licensed by ensuring that **DMCC Service** and **TSAPI Service** are in the list of services and that the **License Mode** is showing **NORMAL MODE** for both services. If this is not the case, please contact an Avaya representative regarding licensing.



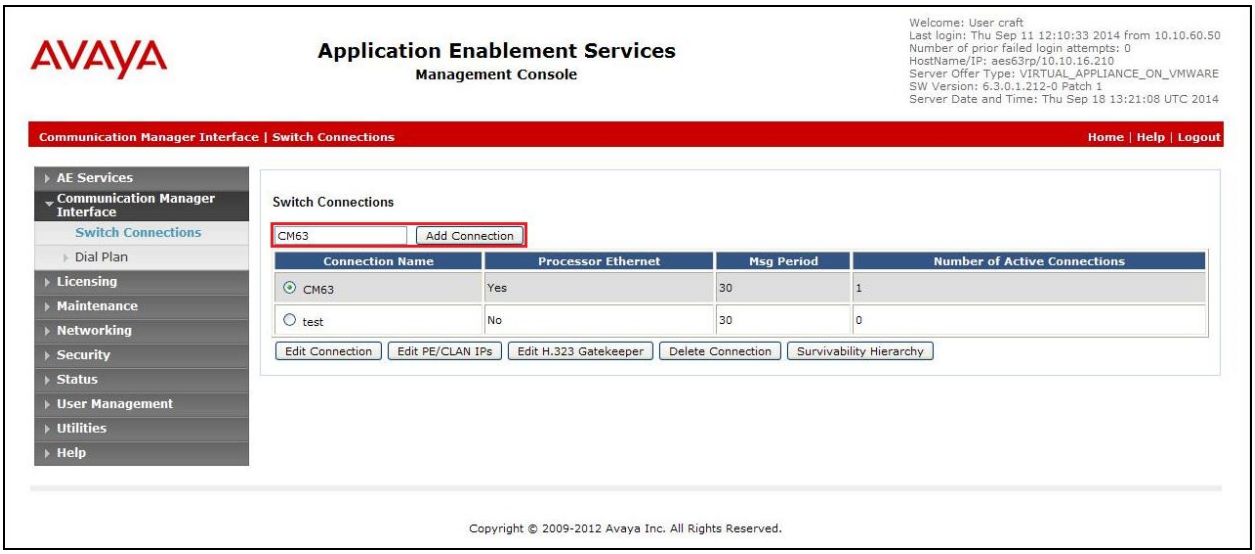
6.3. Create Avaya Aura® Communication Manager Switch Connection

A Communication Manager Switch Connection needs to be created to enable AES to communicate with Communication Manager. Navigate to **Communication Manager Interface**

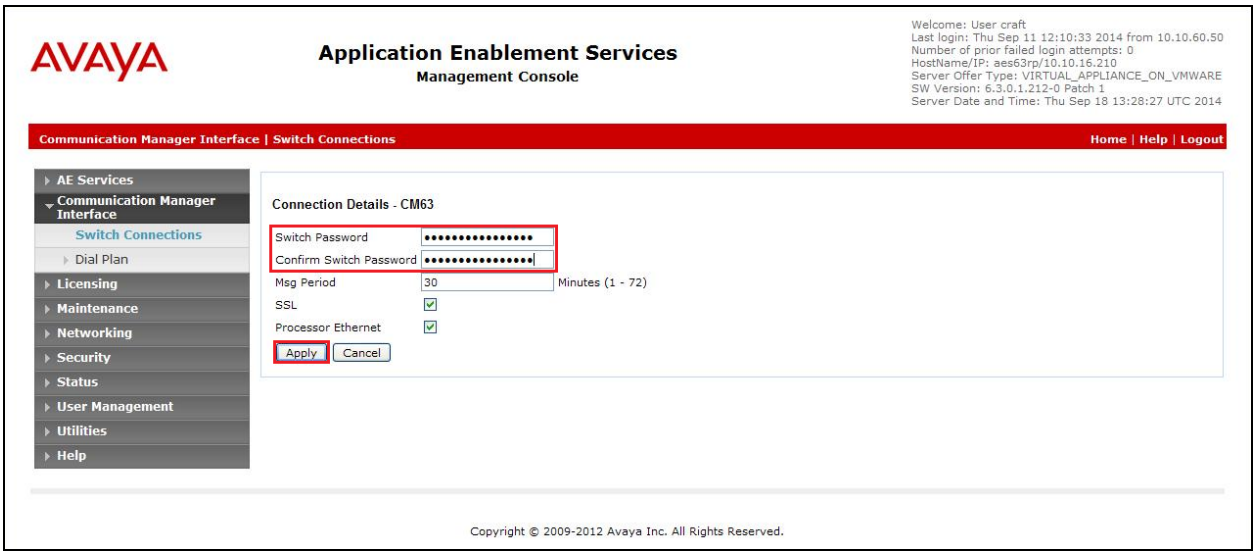
→ **Switch Connections**.



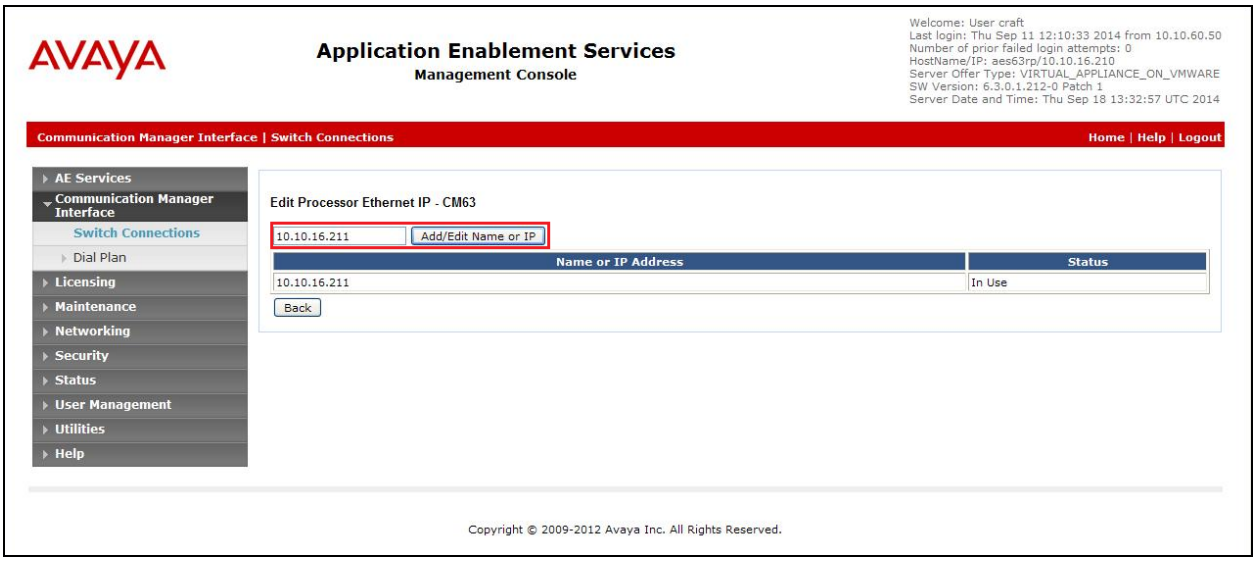
When the **Switch Connections** page opens, enter an informative name for Communication Manager (**CM63**). Click on the **Add Connection** button.



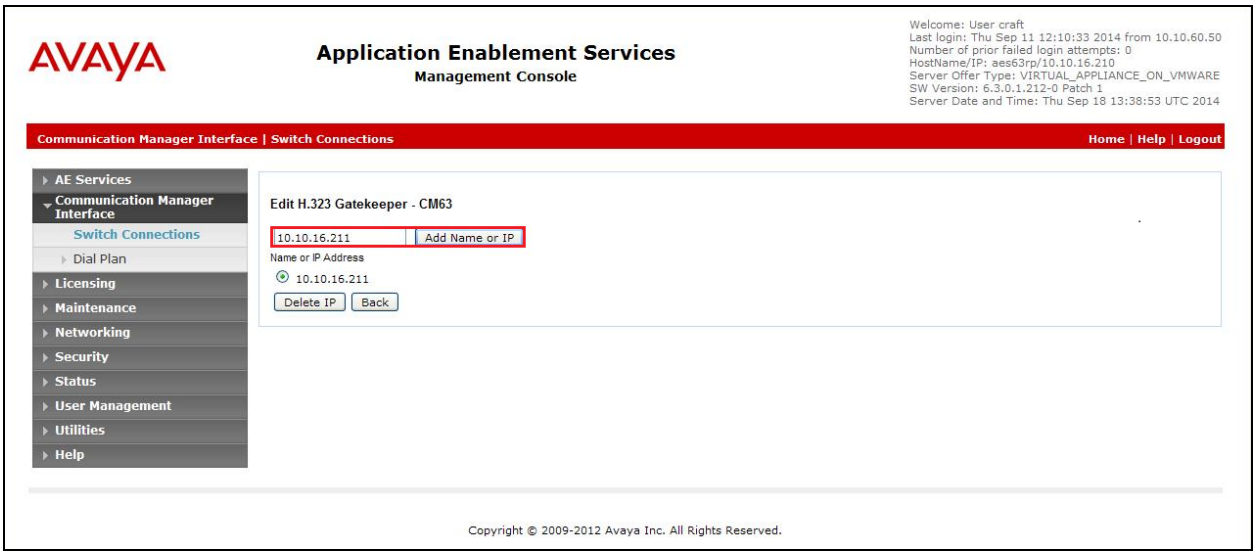
Once the **Connection Details** window opens enter the **Switch Password** as was configured in **Section 5.9** then **Confirm Switch Password**. Click on the **Apply** button.



Click the **Edit PE/CLAN IPs** button (see screen at the bottome of page 17). Enter the IP address of the Processor Ethernet interface (procr IP address, see **Section 5.7**) that AES will use for communication with Communication Manager, and click the **Add/Edit Name or IP** button.



Click the **Edit H.323 Gatekeeper** button, (not shown). Enter the IP address of the Processor Ethernet interface (procr. IP address, see **Section 5.7**). Click the **Add Name or IP** button.

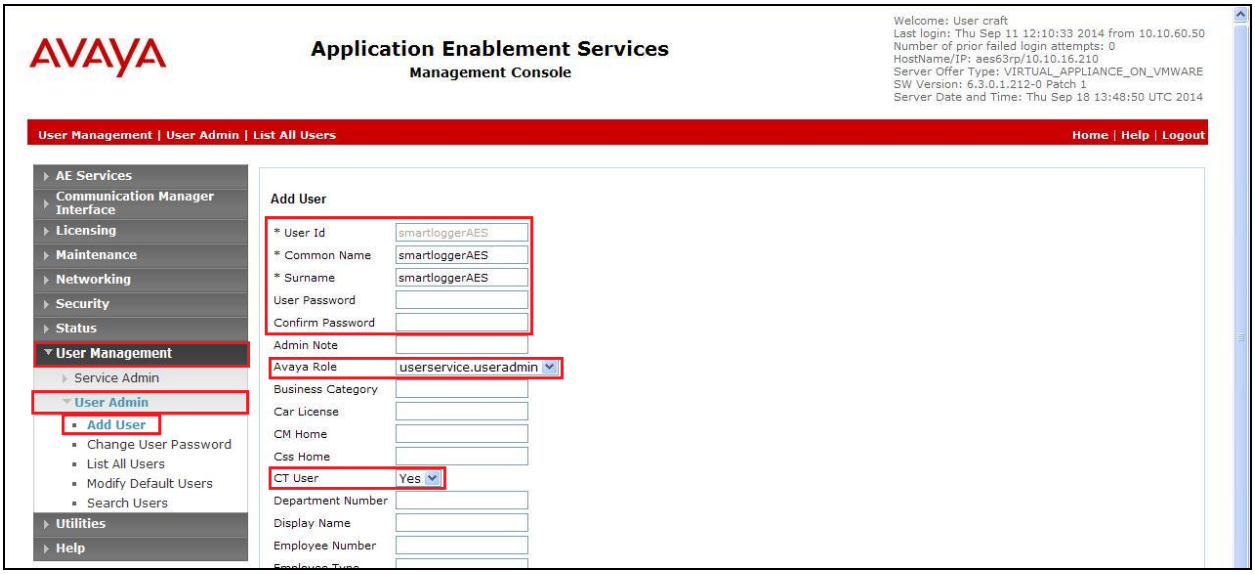


6.4. Create CTI User

A user ID and password needs to be configured for Smart Logger II to communicate as a DMCC Client with AES. Navigate to **User Manager → User Admin**, and select **Add User**. On the **Add User** screen enter the following:

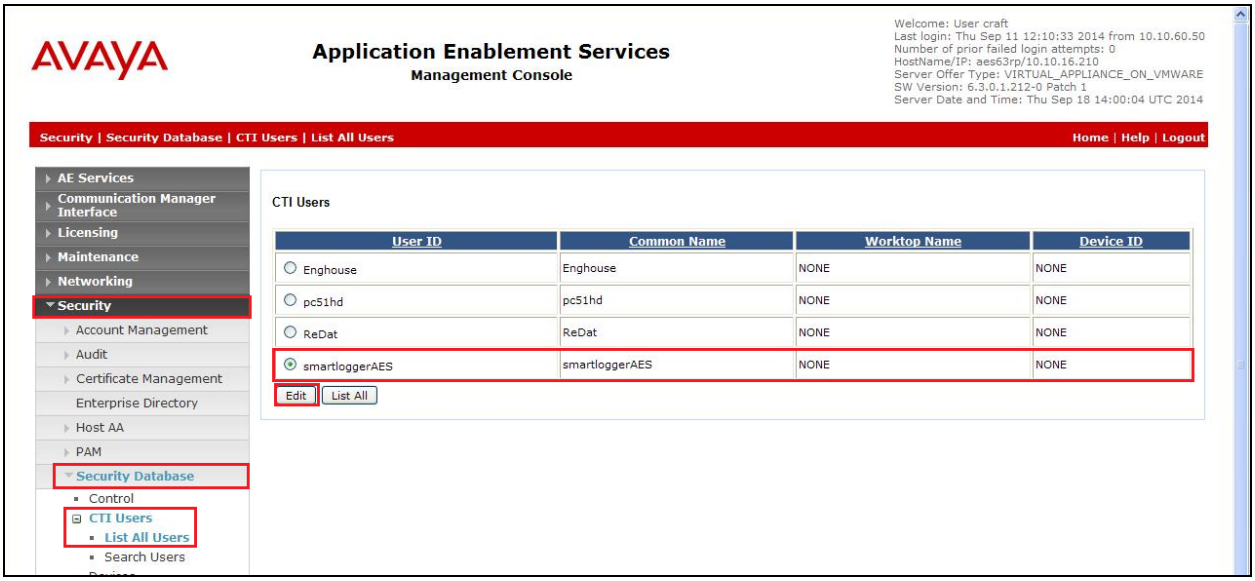
- **User Id**: Enter an informative name (**smartloggerAES**). This ID is required for the Smart logger II configuration in **Section 7.1**
- **Common Name**: Enter a Common Name (**smartloggerAES**)
- **Surname**: Enter a Surname (**smartloggerAES**)
- **User Password** Enter a password. This password is required for the Smart Logger II configuration in **Section 7.1**
- **Confirm Password** Confirm the password
- **Avaya Role** Select **userservice.useradmin** from the dropdown box
- **CT User** Select **Yes** from the dropdown box

Click the **Apply button** at the bottom of the page (not shown)

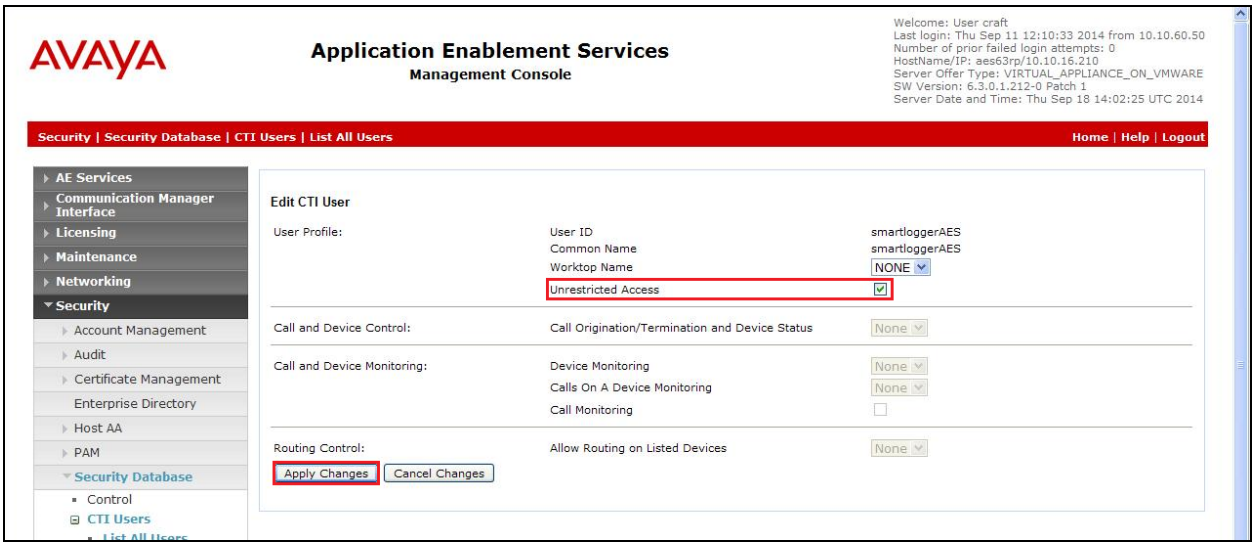


6.5. Enable CTI User

Navigate to the users screen by selecting **Security → Security Database → CTI Users → List All Users.** In the **CTI Users** window, select the Radio button relating to the CTI user created in **Section 6.4** (**smartloggerAES**) and click on the **Edit** button.

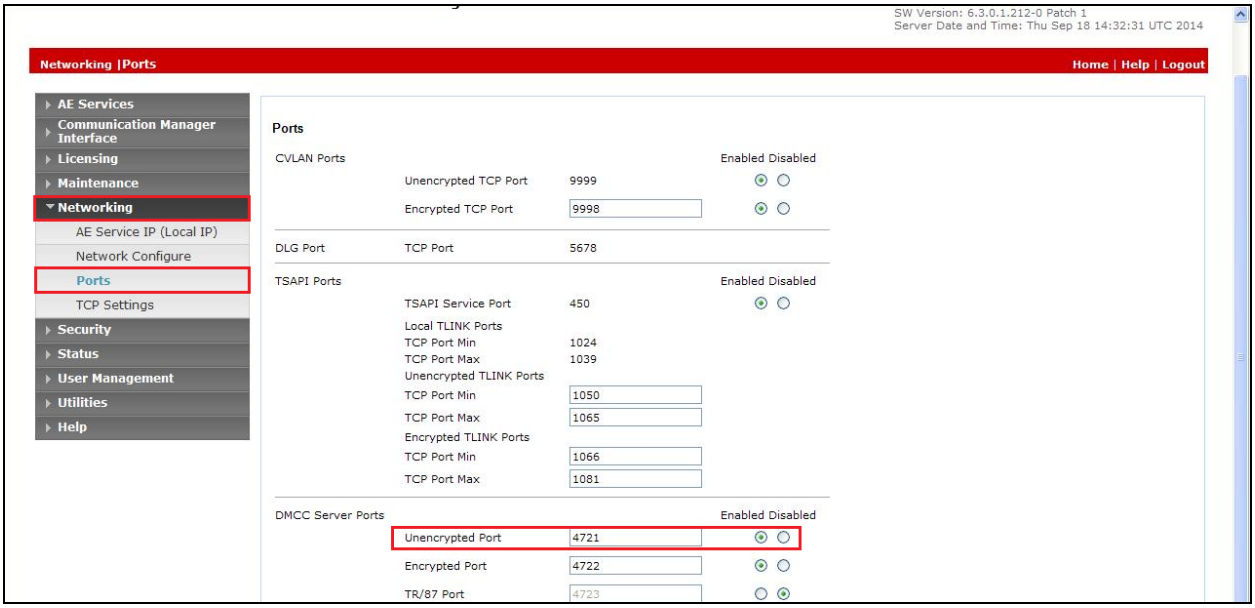


Once the **Edit CTI User** page appears, tick the **Unrestricted Access** check box and click the **Apply Changes button** at the bottom of the screen



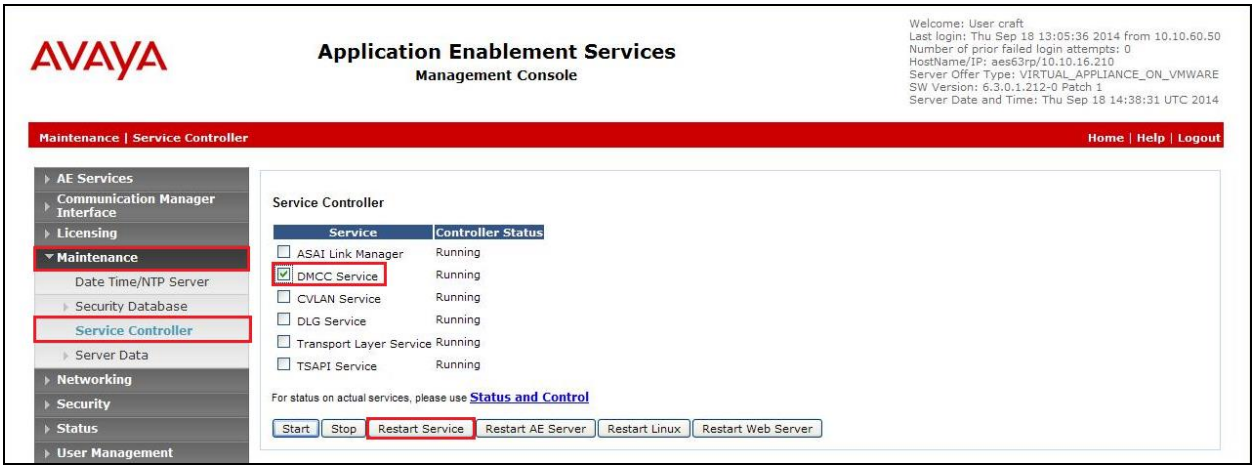
6.6. Configure DMCC Port

Navigate to **Networking → Ports**. In the **DMCC Server Ports** area, enter **4721** in the **Unencrypted Port** box and click on the **Enabled** radio button. Click the **Apply Changes** button (not shown) at the bottom of the screen to complete the process.

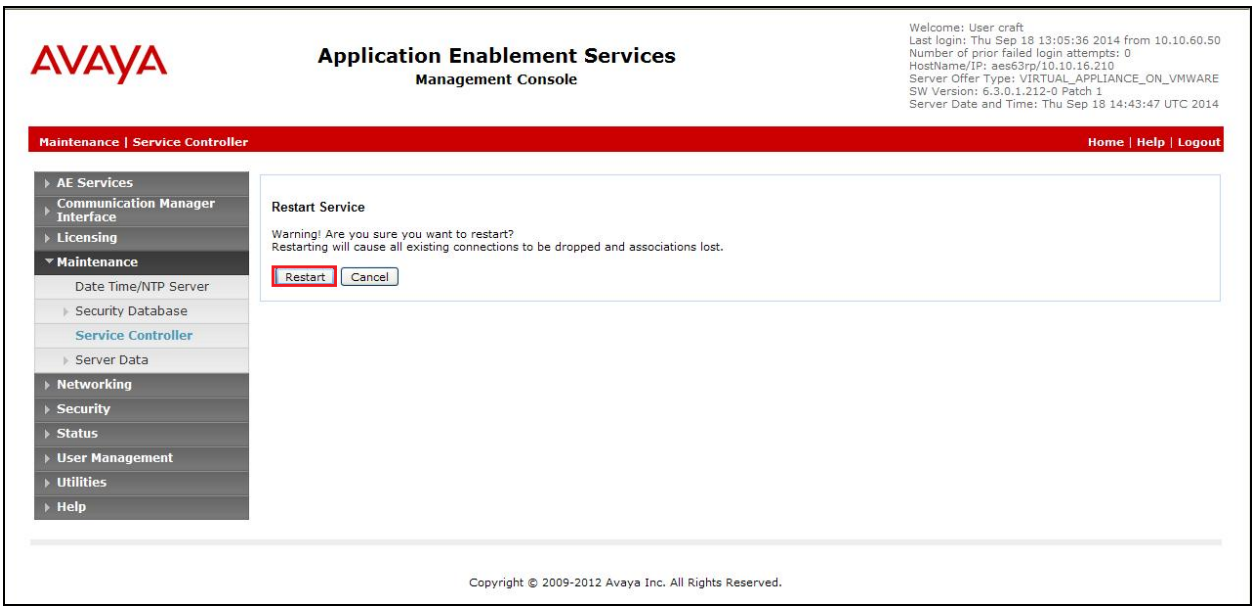


6.7. Restart DMCC Service

After the AES configuration is completed the DMCC service needs to be restarted. To restart navigate to **Maintenance → Service Controller**. Tick the **DMCC Service** check box and click on the **Restart Service** button.



When the Restart page opens click on the **Restart button**.



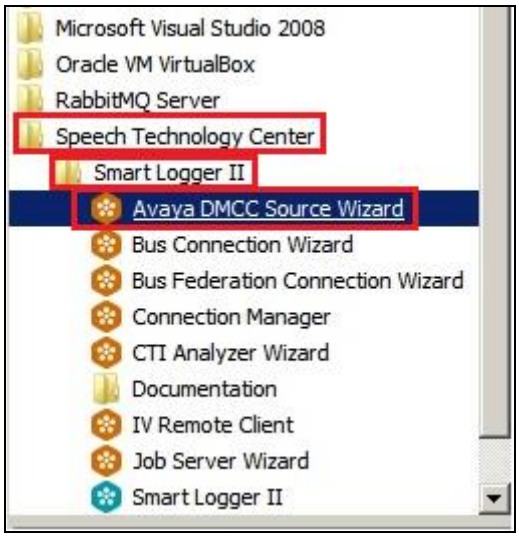
7. Configure Speech Technology Centre Smart Logger II

The Smart Logger II application is provided and installed by Speech Technology Centre. Smart Logger II runs on Windows 2008 Server. The configuration of this is outside of the scope of these Application Notes. It is implied that all Speech Technology Centre and prerequisite software is installed including any appropriate licences.

Full installation of each component is performed by Speech Technology Centre, only the elements relevant to the configuration for the compliance test are detailed here.

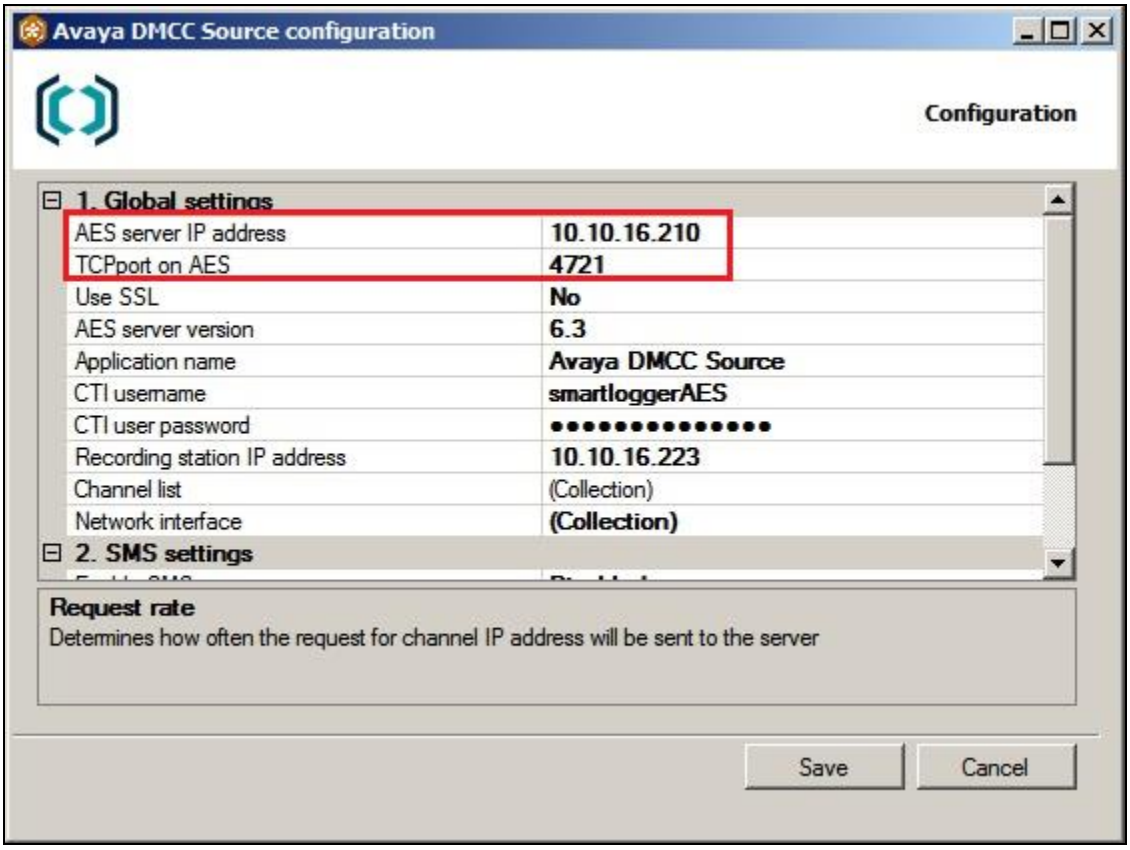
7.1. Avaya DMCC Source Wizard

In order for Smart Logger II to interoperate with AES and Communication Manager, the relevant settings must be configured. On the PC hosting Smart Logger II, click **Start → All Program** (not shown) then navigate to **Speech Technology Centre → Smart Logger II → Avaya DMCC Source Wizard**.

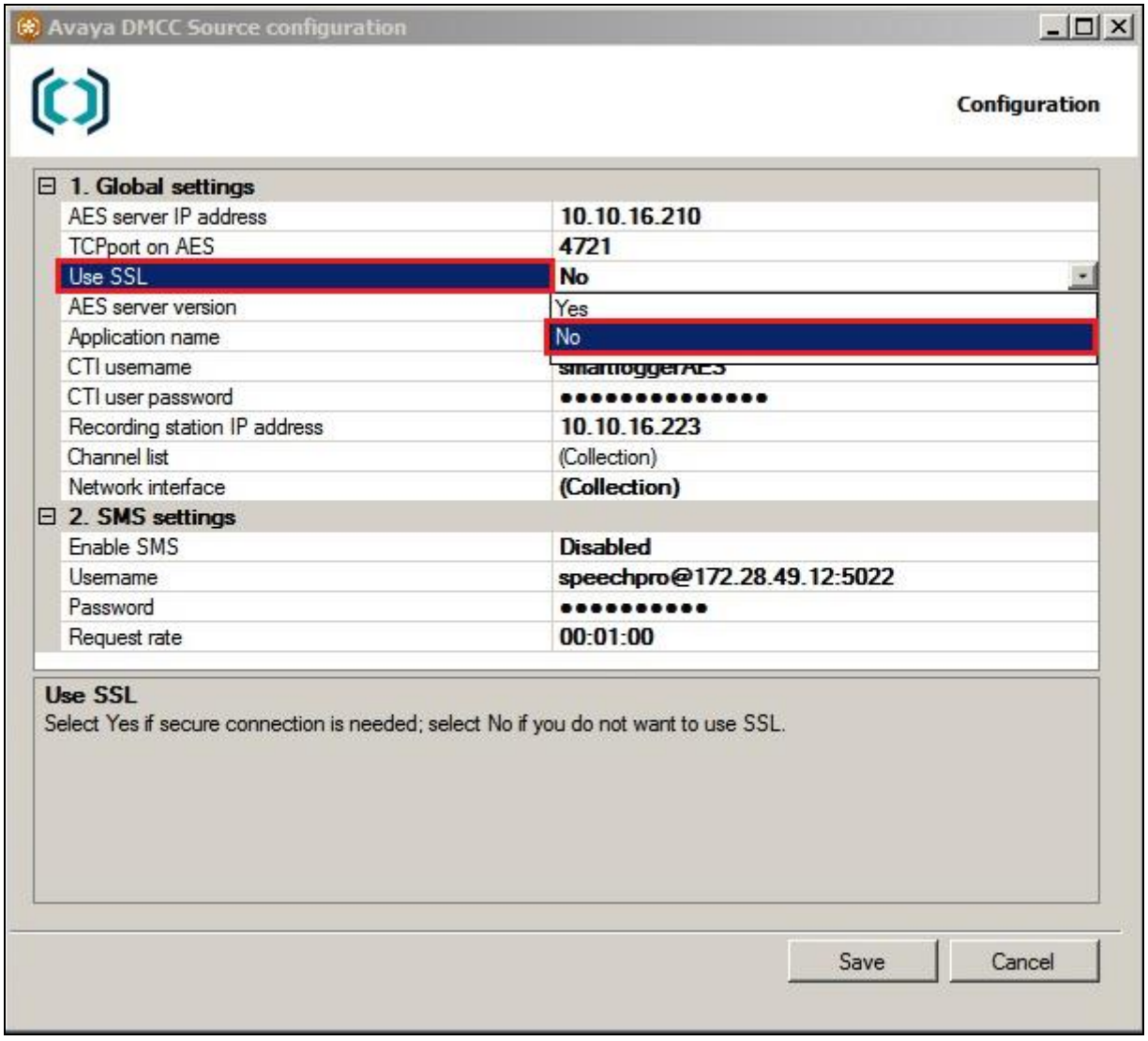


When the **Avaya DMCC Source Configuration** window opens, in the **Global settings** section configure the following:

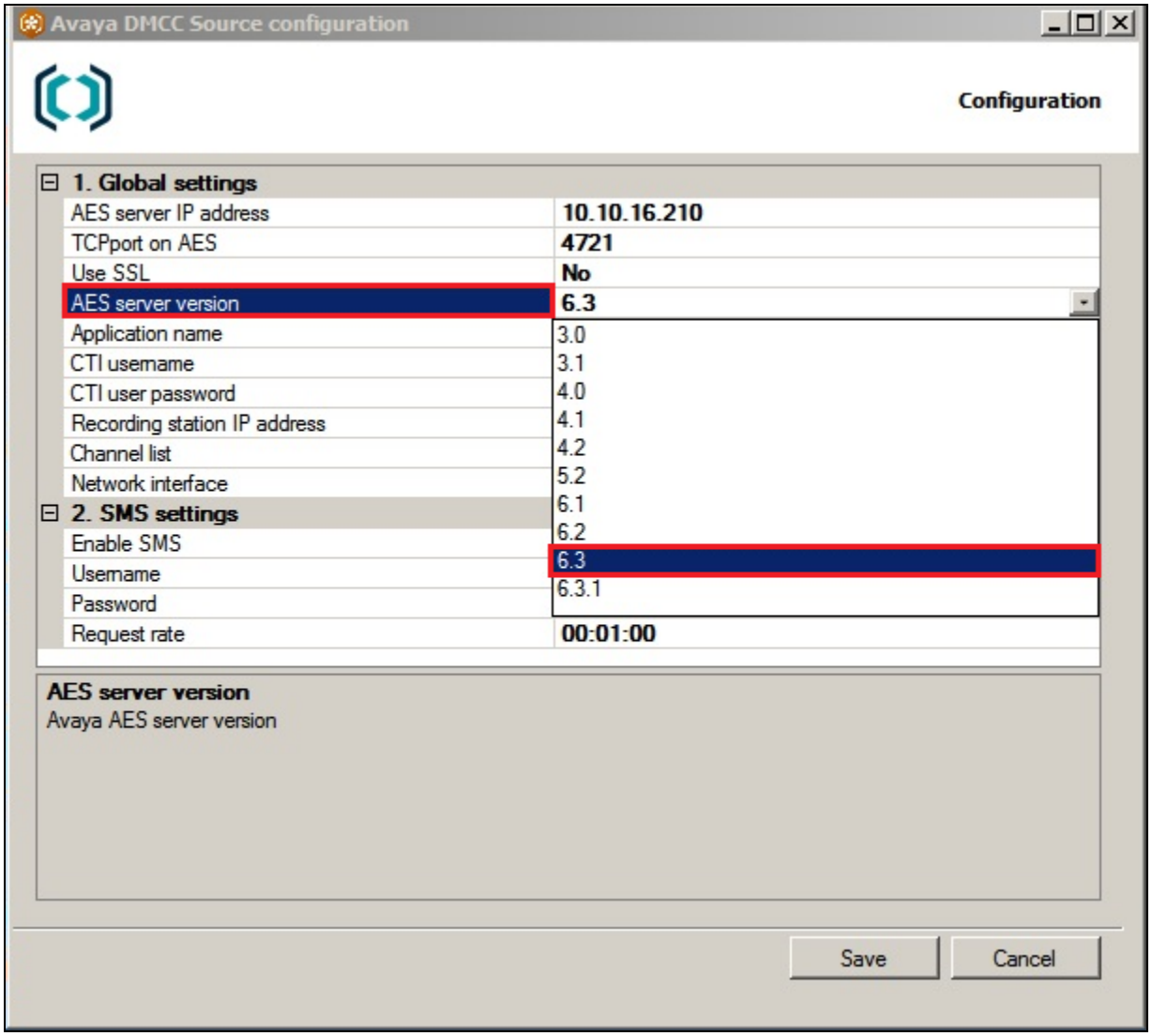
- **AES Server IP address** Enter the IP address of the AES (**10.10.16.210**)
- **TCPport on AES** Enter the TCP port configured in **Section6.6** (**4721**)



Click on the **Use SSL** field, and select **No** from the dropdown box.

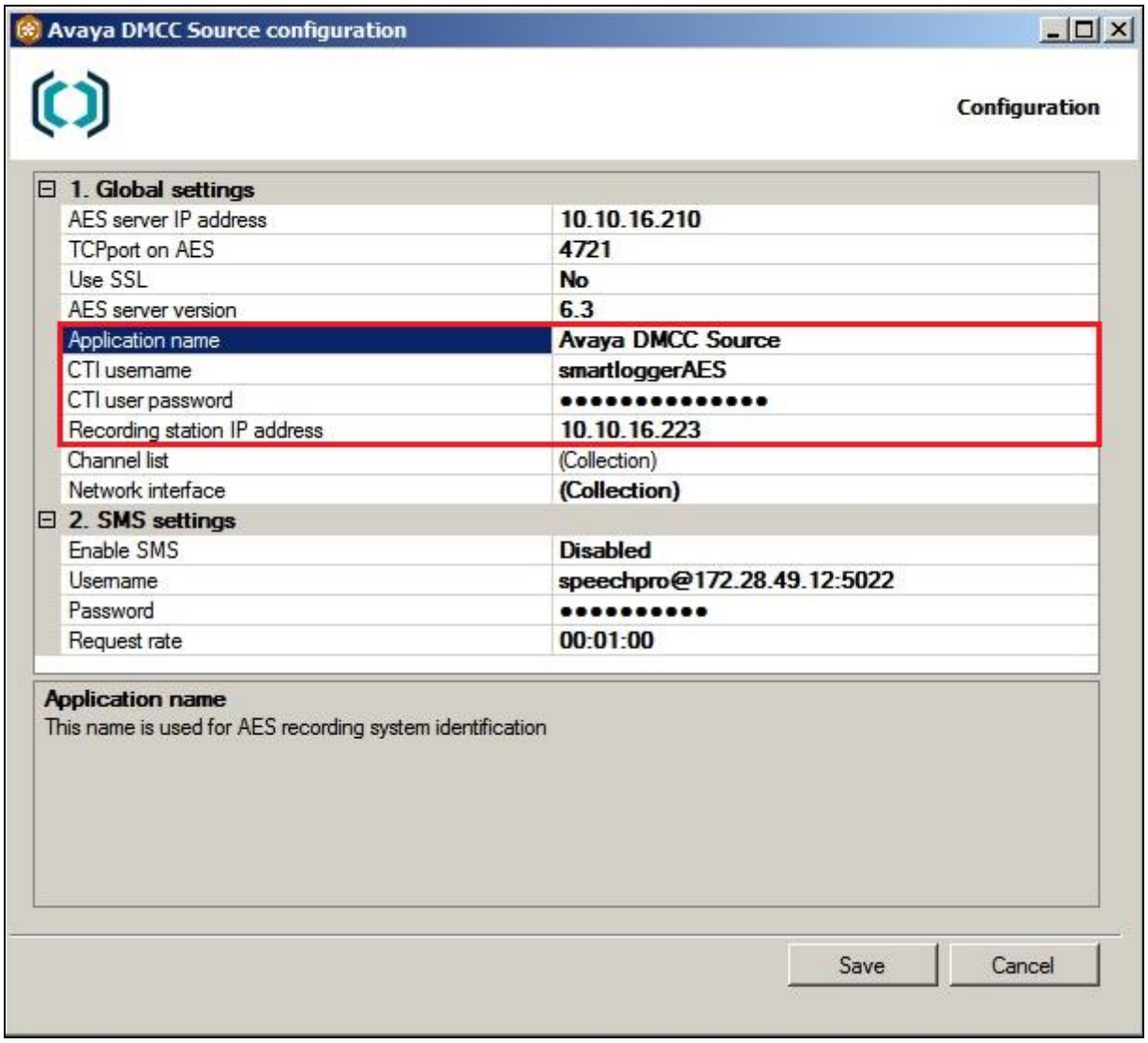


Click on the **AES server version** field, and select **6.3** from the dropdown box.



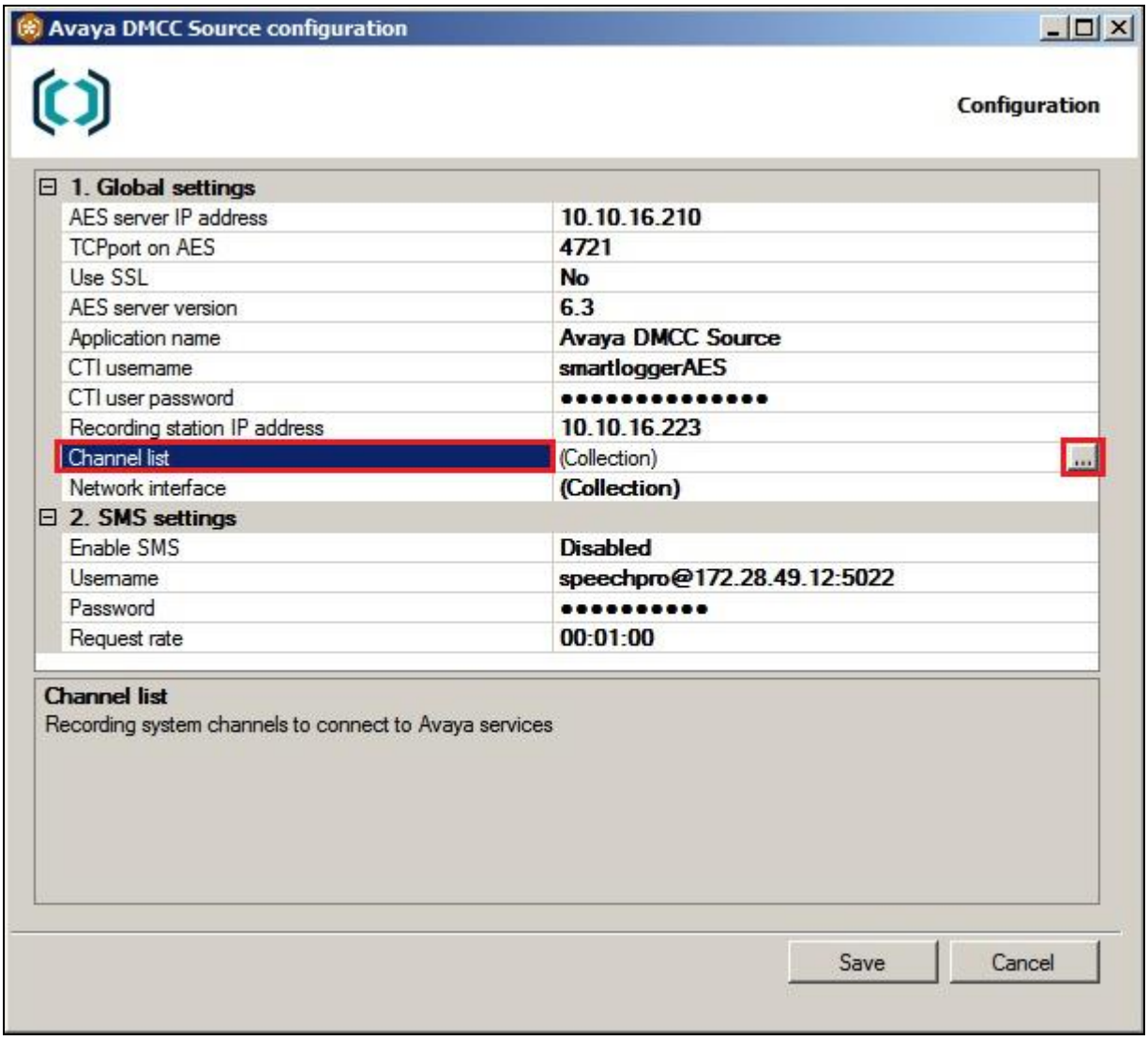
In the next fields enter the following:

- **Application name** Enter **Avaya DMCC Source**
- **CTI username** Enter the CTI username as configured in **Section6.4** (**smartloggerAES**)
- **CTI user password** Enter the CTI user password as configured in **Section6.4**
- **Recording station IP address** Enter the IP address of the server hosting Smart Logger II



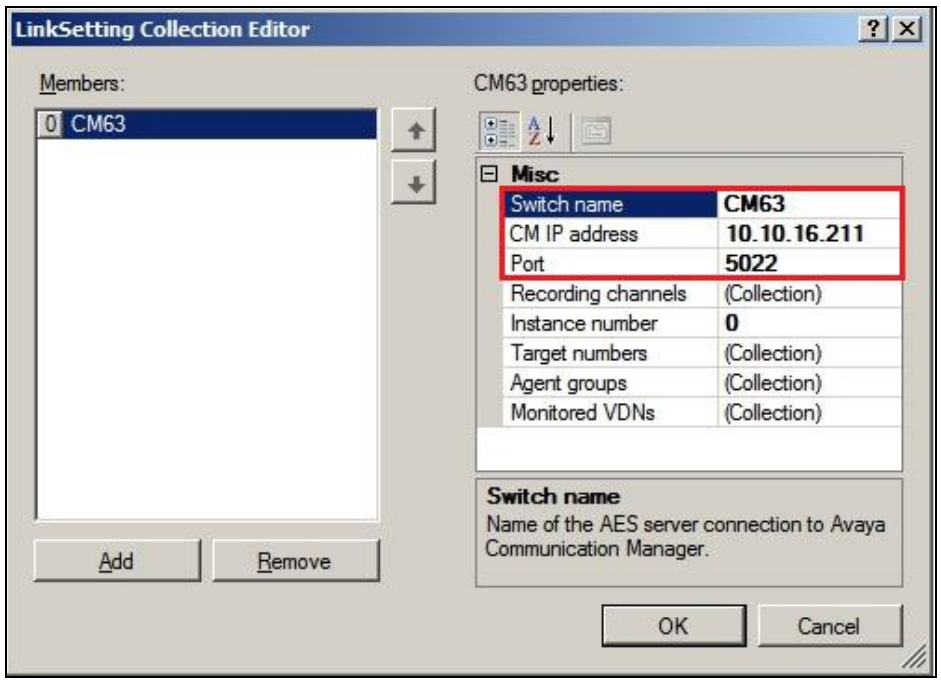
7.1.1. Channel List

Click on the **Channel list** field, and then click on the new button as highlighted below.



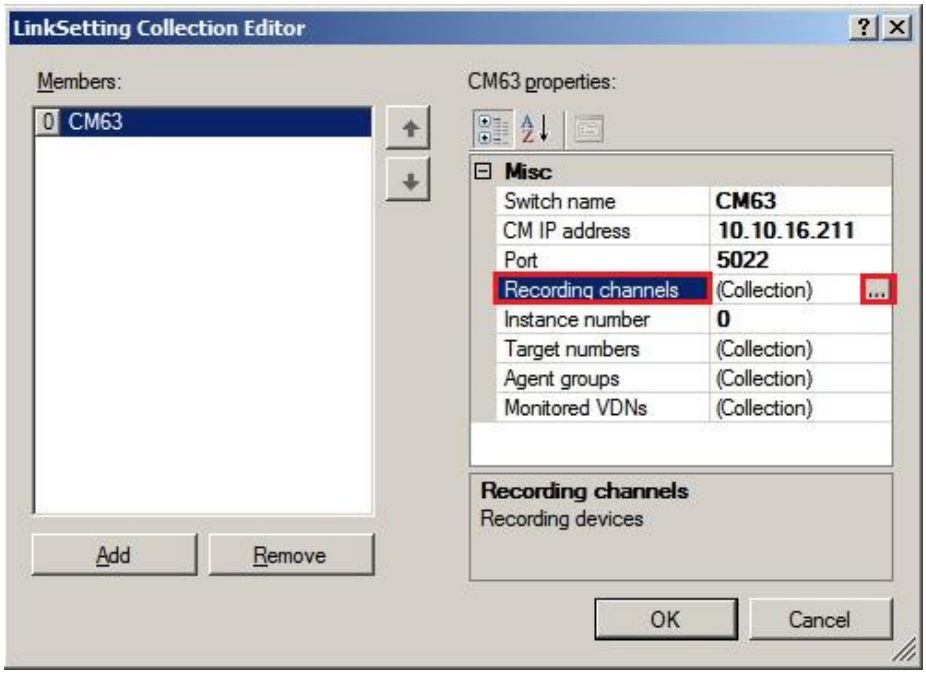
When the **LinkSetting Collection Editor** window opens, enter the following:

- **Switch name** Enter the Communication Manager name as configured in **Section 6.3**
- **CM IP address** Enter the IP address of the **procr** as shown in **Section 5.7**
- **Port** Enter **5022**



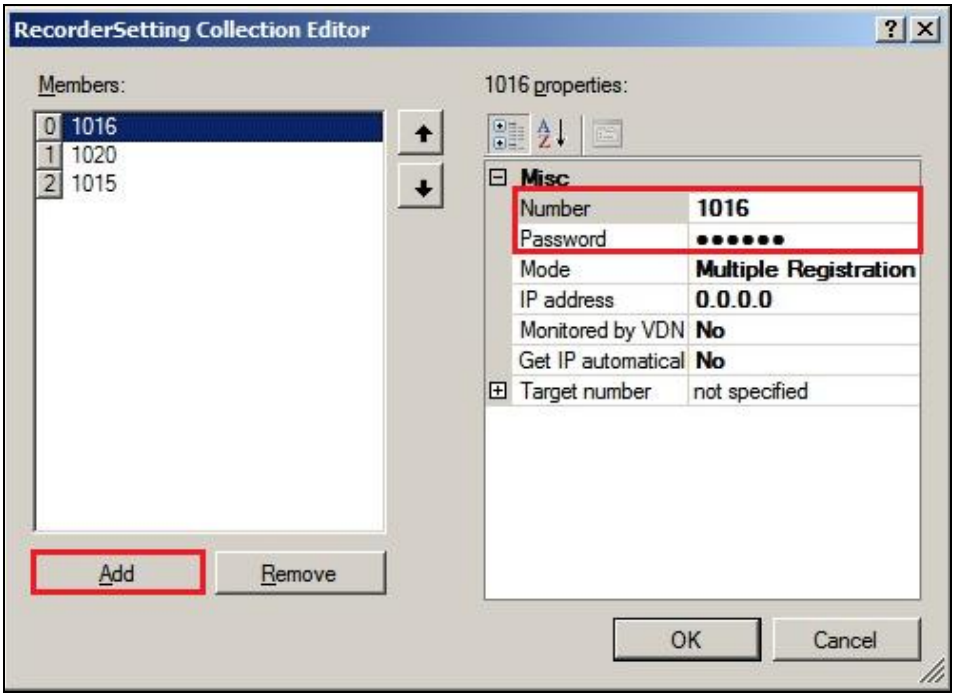
7.1.2. Recording Channels

Click on the **Recording channels** field, and then click on the new button as highlighted below.

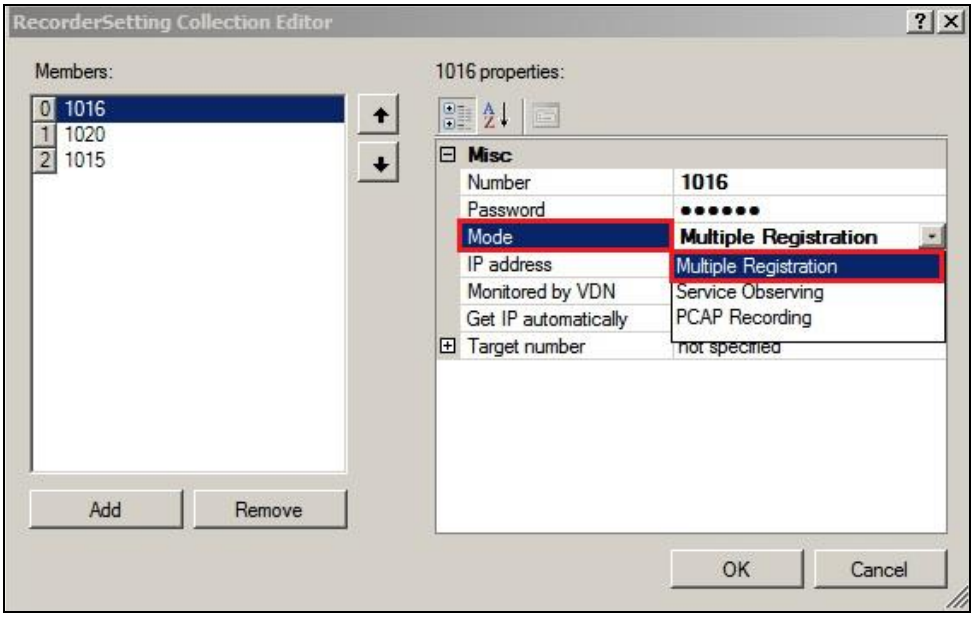


When the **RecorderSetting Collection Editor** window opens, click on the **Add** button and enter the following:

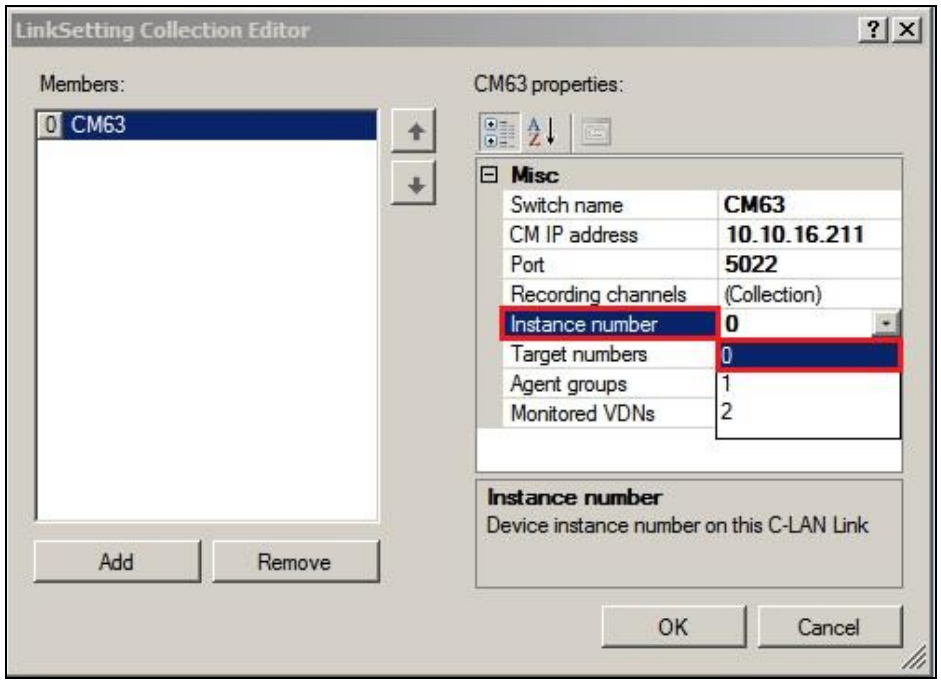
- **Number** Enter the extension to be monitored (extensions as configured in **Section 5.4**)
- **Password** Enter the extension password as configured in **Section 5.4**



Click on **Mode** field, and select **Multiple Registration** from the dropdown box. Leave the remaining fields as default. Click on the **OK** button to save. Repeat **Section 7.1.2** for each extension to be monitored.

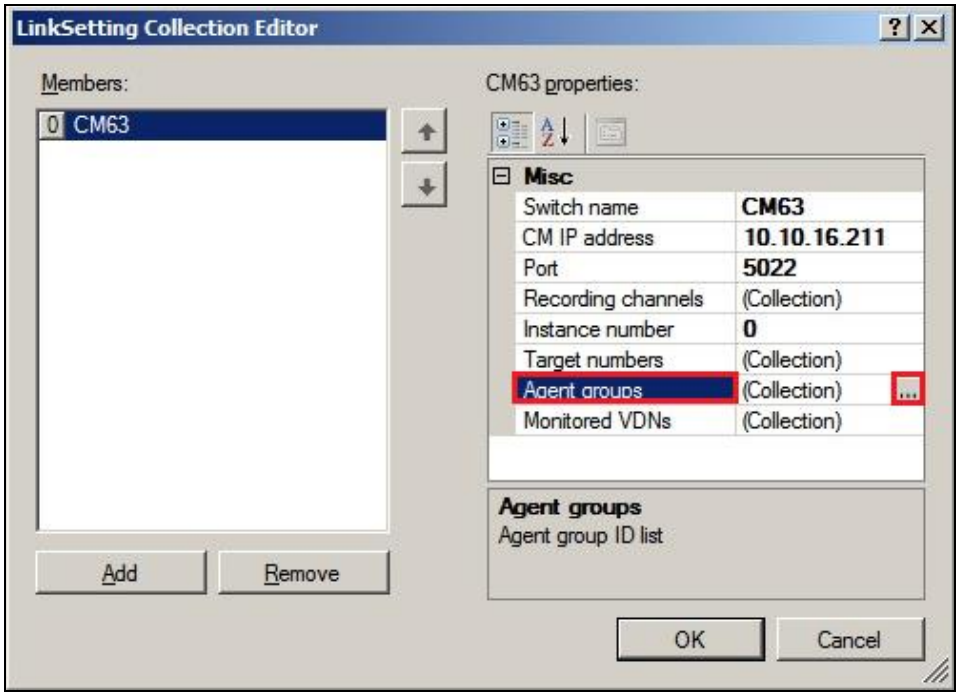


After the Recording channels are configured, return to the **LinkSetting Collection Editor** window and click on the **Instance number** field. From the dropdown box select **0**.

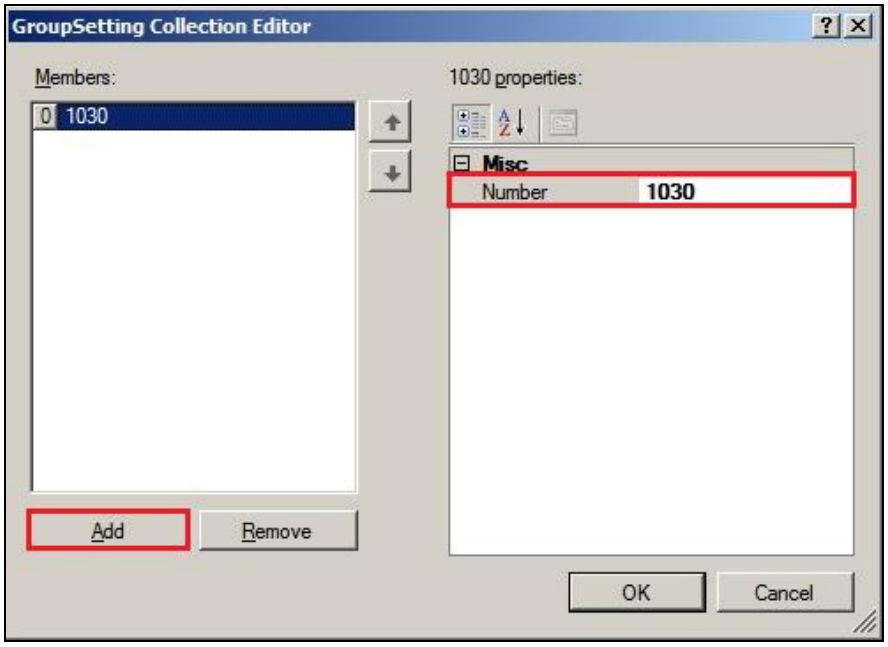


7.1.3. Agent Groups

For the purposes of recording agents, the **Agent groups** field is configured. Agents who log in to this skill will be recorded. Click on the **Agent groups** field, and then click on the new button as highlighted below.

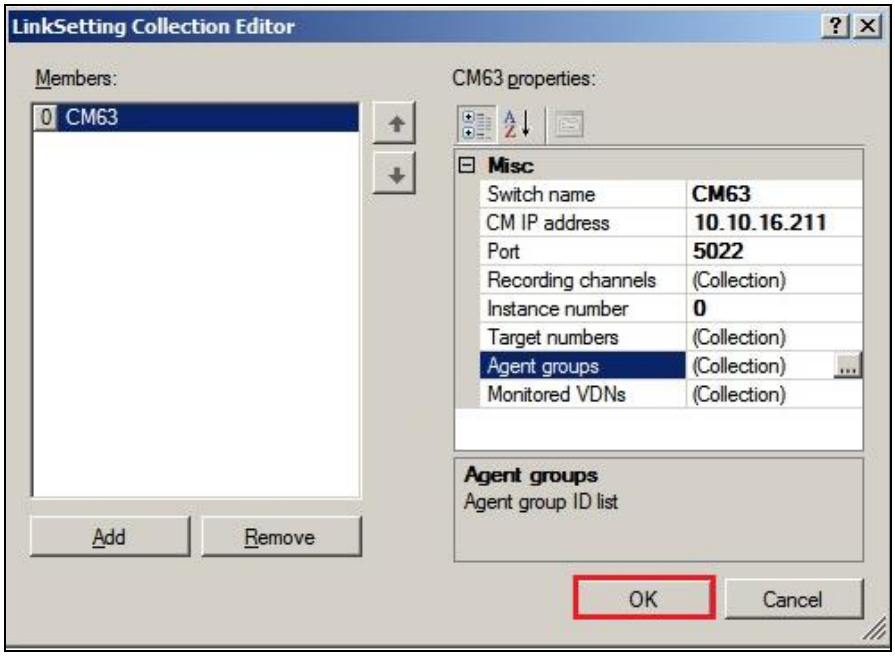


When the **GroupSetting Collection Editor** window opens, click on the **Add** button and enter the **group extension** (skilled hunt group) as configured in **Section 5.5**. Click on the **OK** button to save. Repeat **Section 7.1.3** for each skilled hunt group to be monitored.



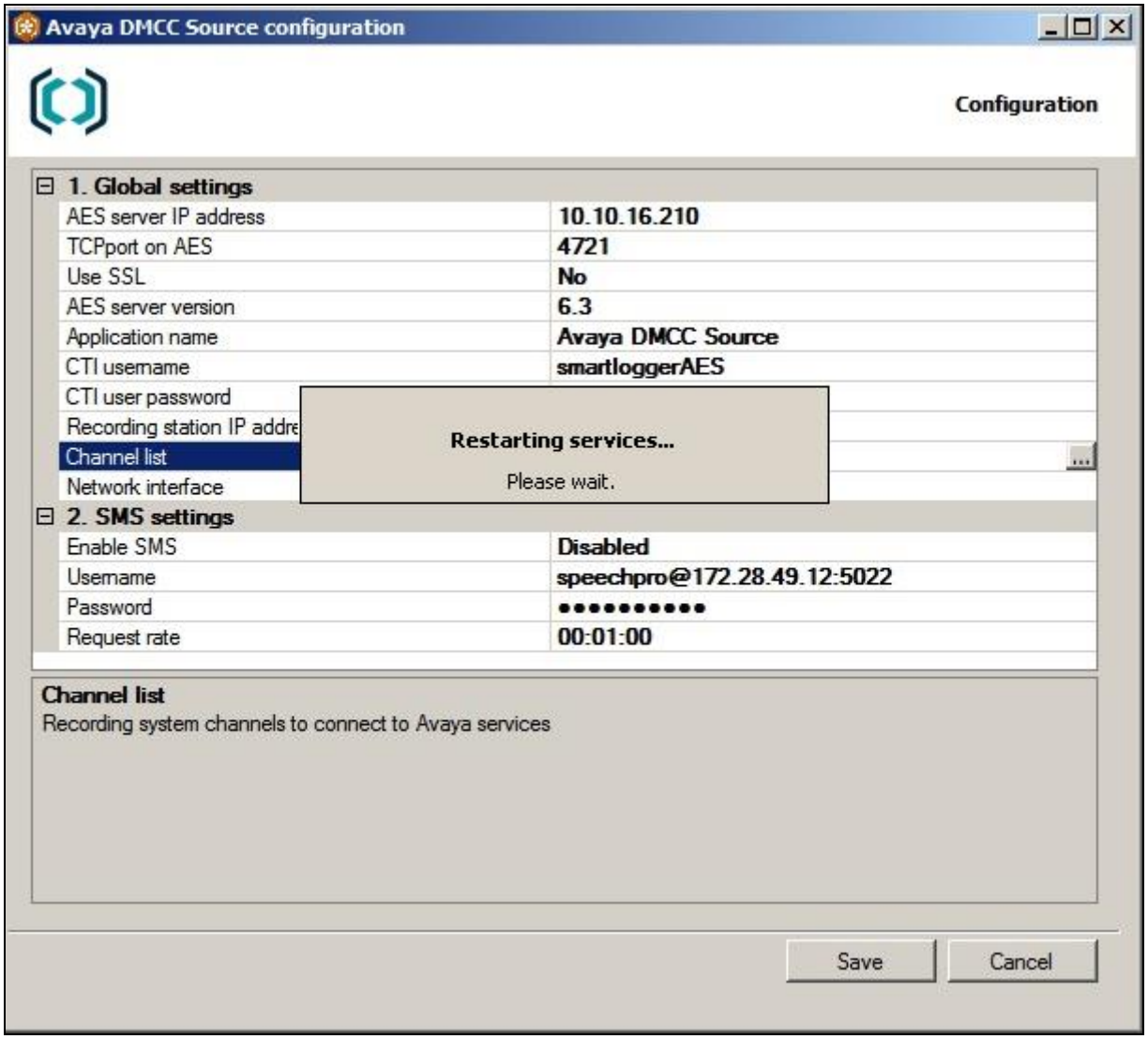
After the Agent groups are configured, return to the **LinkSetting Collection Editor** window and click on the **OK** button to complete the configuration of the **Channel list** field.

Note: The **Target numbers** and **Monitored VDNs** fields were not configured during compliance testing. If configuration of these fields is required, use the procedure described in this section.



On returning to the main configuration window, click on the **Save** button to complete the relevant settings. The screen below will be shown, advising the restart of the Smart Logger II services with the new configuration.

Note: The **Network interface** field or any field in **SMS settings** were not configured during compliance testing.



8. Verification Steps

This section provides the tests that can be performed to verify correct configuration of the Avaya and Speech Technology Centre solution.

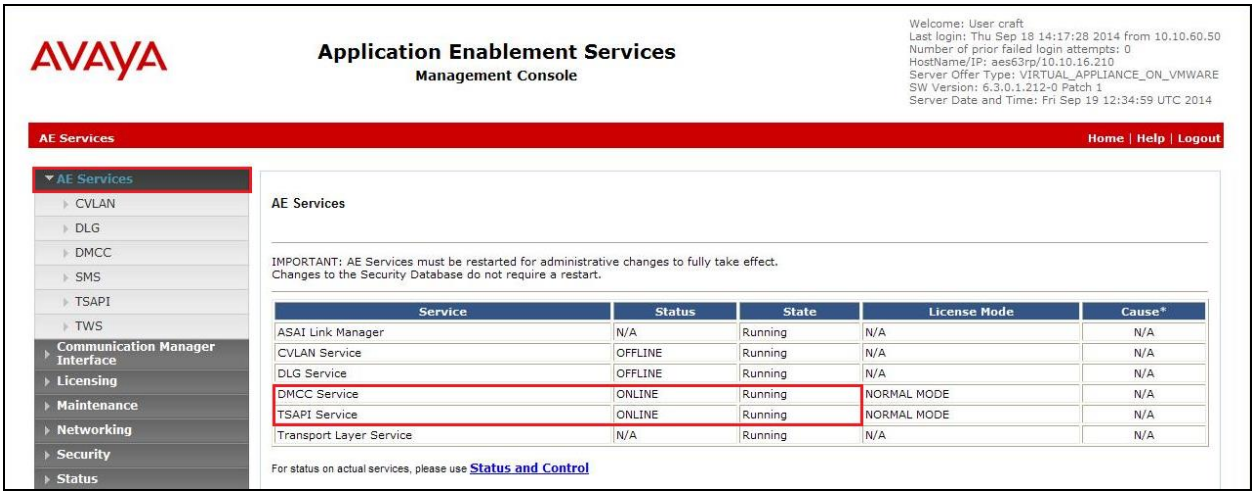
8.1. Verify Avaya Aura® Communication Manager CTI Service State

The following steps can ensure that the communication between Communication Manager and AES is functioning correctly. Use SAT to connect to Communication Manager and check the AESVCS link status with AES by using the command **status aesvcs cti-link**. The CTI Link is 1. Verify the **Service State** of the CTI link is **established.**

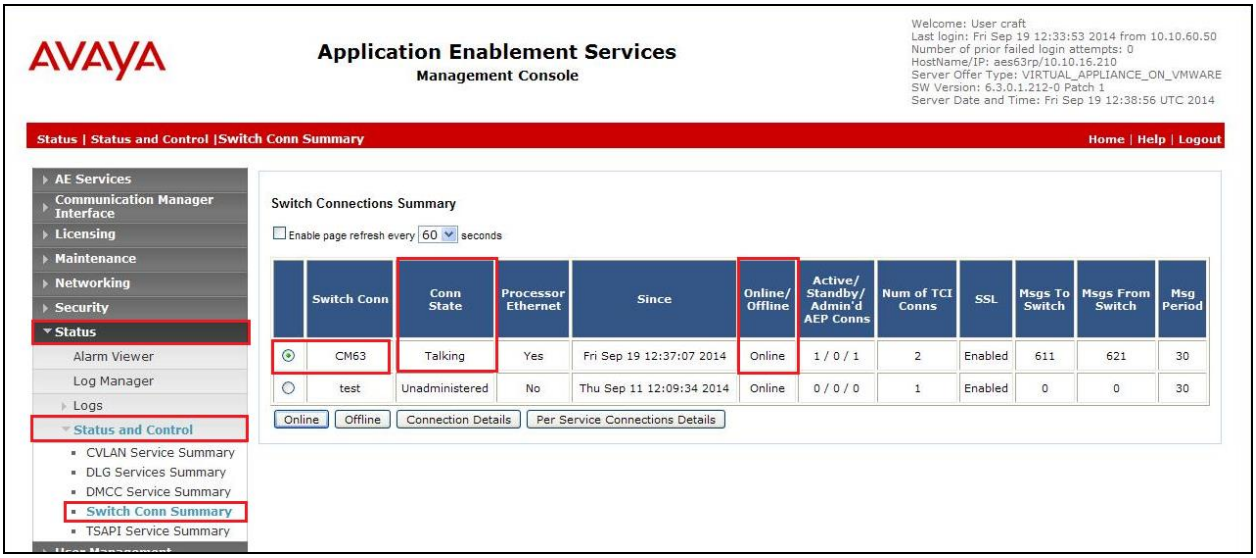
```
status aesvcs cti-link

                        AE SERVICES CTI LINK STATUS

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

1      4        no     aes63rp          established    17        15
```

8.2. Verify Avaya Aura® Application Enablement Services Status

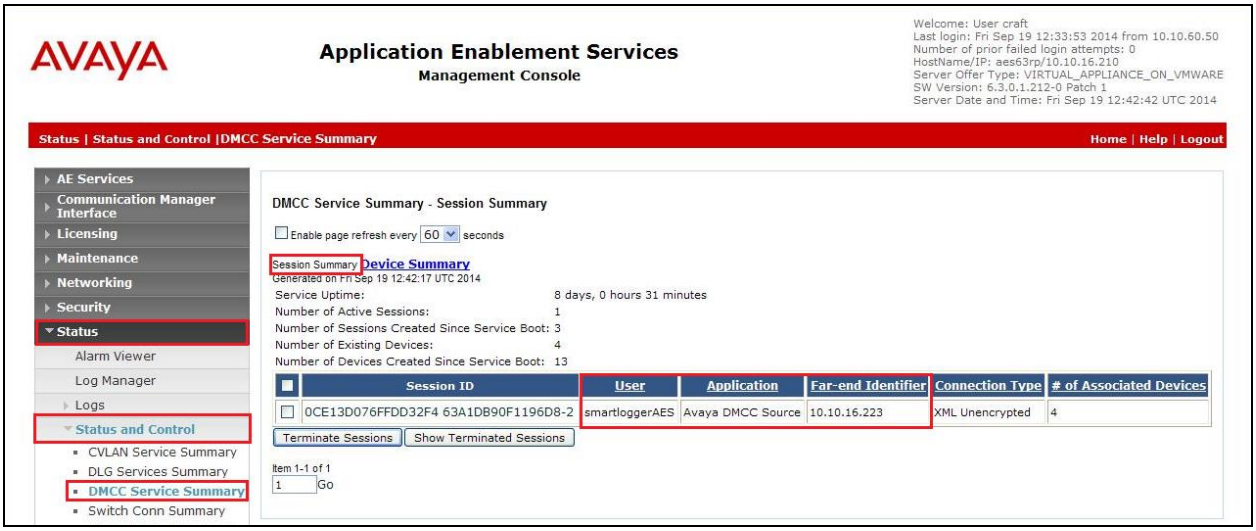
Login to AES, and navigate to the **AE Services** screen. Verify that the DMCC and TSAPI Services are **ONLINE**, and **Running**.



Navigate to **Status → Status and Control -> Switch Conn Summary**. Verify that **Conn State** is **Talking** and **Online/Offline** is **Online** for the configured Communication Manager switch connection.



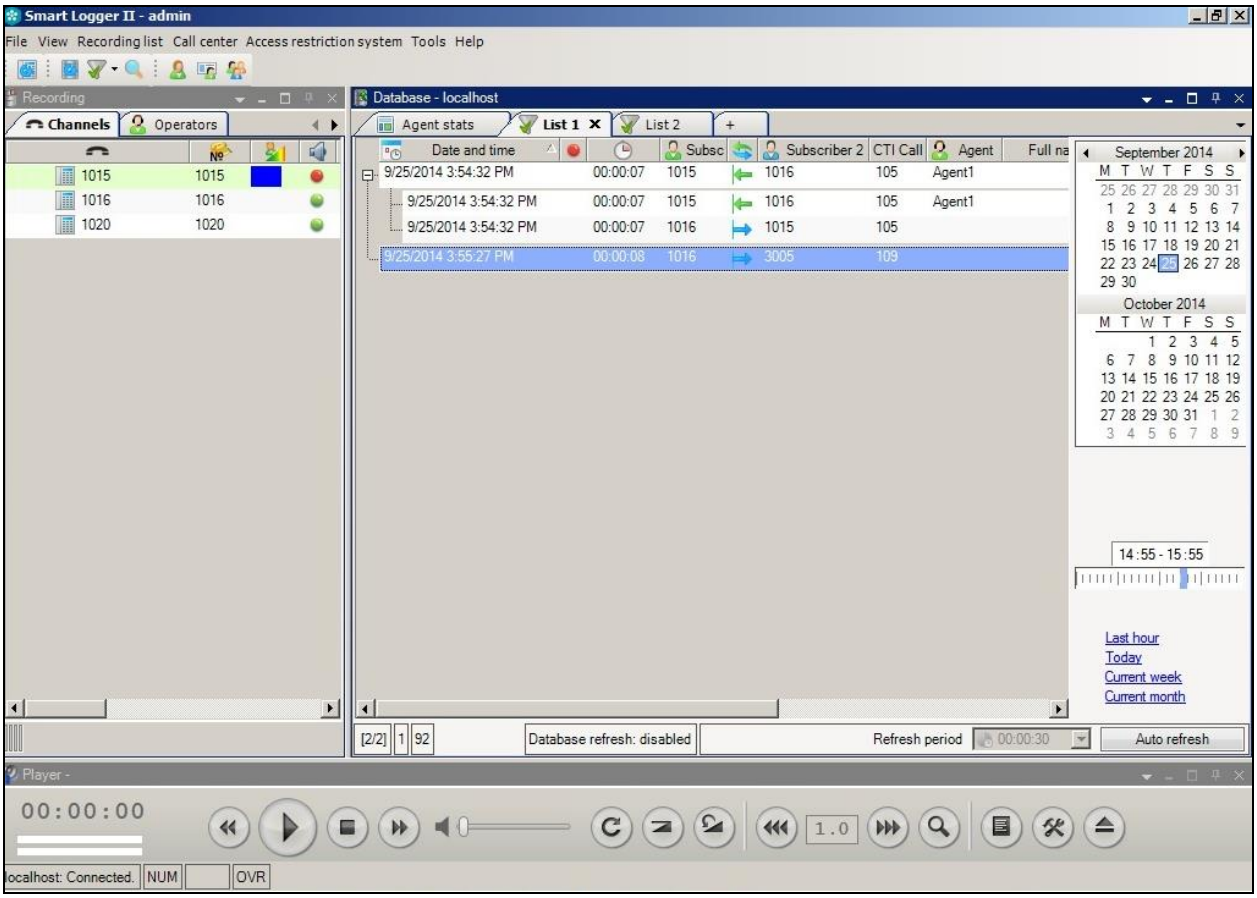
Navigate to **Status → Status and Control -> DMCC Service Summary** and click **Service Summary** on the right. Verify that the User (**samartloggerAES**) shows the **Application** is set to **Avaya DMCC Source** and the **Far-end Identifier** is set to the IP address of the Smart Logger II Server (**10.10.16.223**).



8.3. Verify Speech Technology Centre Smart Logger II

On the PC hosting Smart Logger II, click **Start → All Program** (not shown) then navigate to **Speech Technology Centre →Smart Logger II→ Smart Logger II**.

In the Smart Logger II application window, verify that the **localhost: Connected** status is shown in the window's status bar at the bottom. Recorded calls are in the right-hand pane, and calls in progress, denoted by a red dot next to them are in the left pane. The pane at the bottom of the screen allows playback control of a selected call.



9. Conclusion

A full and comprehensive set of feature functional test cases were performed during compliance testing. Speech Technology Centre Smart Logger II v8.4 is considered compliant with Avaya Communication Manager 6.3 and Avaya Aura® Application Enablement Services 6.3. All test cases have passed and met the objectives outlined in **Section 2.2** with one observation.

10. Additional References

This section references the Avaya and Speech Technology Centre documentation that is relevant to these Application Notes. Avaya product documentations, including the following, are available at *http://support.avaya.com*.

[1] *Administering Avaya Aura® Communication Manager, Release 6.3, October 2013, Document Number 03-300509, Issue 9.0.*
[2] *Avaya Aura® Communication Manager Feature Description and Implementation, Release 6.3, May 2013, Document Number 555-245-205, Issue 10.0.*
[3] *Administering Avaya Aura® Session Manager, Release 6.3, Issue 3 October 2013.*
[4] *Administering Avaya Aura® System Manager, Release 6.3, Issue 3, October, 2013.*
[5] *Avaya Aura® Application Enablement Services Administration and Maintenance Guide, Release 6.3, Issue 2 October 2013.*

Product Documentation for Speech Technology Centre can be obtained at the website:
http://*www.speechpro.com/support/download*

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*.