Avaya Solution & Interoperability Test Lab

Application Notes for ScoreData ScoreFast™ with Avaya Aura® Application Enablement Services, Avaya Aura® Communication Manager and Avaya Aura® Session Manager – Issue 1.0

Abstract

These Application Notes contain interoperability instructions for ScoreData ScoreFast™ with Avaya Aura® Application Enablement Services, Avaya Aura® Communication Manager and Avaya Aura® Session Manager to successfully interoperate.

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 at the Avaya Solution and Interoperability Test Lab.

1. Introduction

This document contains a sample configuration that was used for interoperability compliance testing between ScoreData ScoreFast™ (ScoreFast) and Avaya products.

ScoreFast is a Predictive Analytic solution that utilizes data retrieved from Avaya to make intelligent routing decisions. ScoreFast utilizes the following Avaya interfaces:

- AES – TSAPI Interface – Query agent state for logged on agents.
- AES – SMS Interface – Retrieve Manage objects information from Communication Manager.
- Session Manager – SIP Interface (TCP) – Route calls to and from Session Manager.

Incoming calls to contact centers are routed to ScoreFast via Session Manager SIP Trunk (TCP). ScoreFast performs intelligent routing decision and routes the call back to an agent on Communication Manager via Session Manager (via SIP REFER). ScoreFast uses the SMS interface to retrieve information about station extensions, skills and agents. Once agents are logged on, it uses the TSAPI interface to query agent states.

Note that, ScoreFast utilizes the data retrieved from Avaya Call Management System to make intelligent routing decisions, but during the compliance test, a predetermined set of data was used to make such intelligent decisions. As such, Avaya Call Management System was not used during the compliance test.

2. General Test Approach and Test Results

Interoperability testing contained functional tests that tested the following interfaces/products:

- Avaya Aura® Application Enablement Services – TSAPI Interface
- Avaya Aura® Communication Manager – SMS Interface
- Avaya Aura® Session Manager – SIP Interface

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 interface between AES and ScoreFast used SSL interface. SIP Interface between Session Manager and ScoreFast did not utilize a secure interface.

2.1. Interoperability Compliance Testing

During Interoperability Compliance testing, call center call routing scenarios were tested. Scenarios tested ScoreFast's ability to:

- Route calls to and from Session Manager.
- Failback scenarios where ScoreFast is unavailable, calls are routed to contact center agents based on vector configuration.
- Deliver calls to single skill and multi-skill agents.
- Query Communication Manager objects via SMS.
- Query agent states via TSAPI.

Serviceability tests such as network failure and server reboots were also tested. Please note that performance testing or load testing were not part of this test effort.

2.2. Test Results

All planned test cases were completed and passed.

2.3. Support

Support for ScoreFast can be obtained via following means:
Email: info@scoredata.com
Phone: +1-408-300-2560
Web: www.scoredata.com

3. Reference Configuration

Figure 1 illustrates a sample configuration that consists of Avaya Products and ScoreFast.

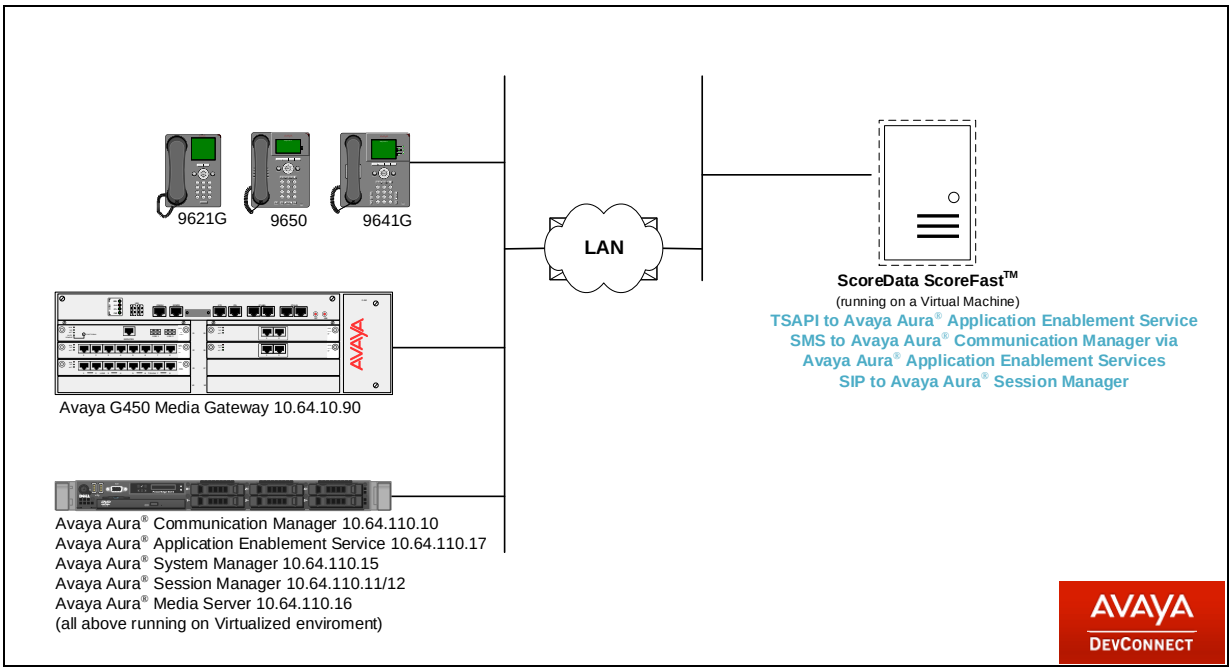


Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager	7.1.3 R017x.01.0.532.0 Build 24515
Avaya G450 Media Gateway	37.19.0
Avaya Aura® Application Enablement Services	7.1.3.0.1.7-0
Avaya Aura® System Manager	7.1.3.0.037763
Avaya Aura® Session Manager	7.1.3.0.713014
Avaya Aura® Media Server	v.7.8
ScoreData ScoreFast™ running on Windows Server 2016 Standard.	2.0

5. Configure Avaya Aura® Communication Manager

This section contains steps necessary to configure ScoreFast successfully with Communication Manager.

All configurations in Communication Manager were performed via SAT terminal.

The table below shows a sample call center data that was used during compliance testing.

Station	Agent	Hunt Group/Extension	VDN	Vector
50001	2001	1/23001	22035	35
50002	2002			
52001	2003			

Table 1: Sample Data

5.1. Configure Stations

Use **add station *n*** command to add a station, where ***n*** is an available station extension. Configure the station as follows, on Page 1:

- In **Name** field, enter a descriptive name
- Set **Type** to the type of the telephones
- Enter a **Security Code**

These stations are used by contact center agents to log on to Avaya IP Deskphones.

```
add station 50001                                               Page   1 of   5
                                      STATION

Extension: 50001                          Lock Messages? n               BCC: 0
     Type: 9641                           Security Code: *                TN: 1
     Port: IP                           Coverage Path 1:                 COR: 1
     Name: H.323 Station 1              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: 50001
            Speakerphone: 2-way               Mute Button Enabled? y
        Display Language: english                 Button Modules: 0
 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
```

One Page 4, under **BUTTON ASSIGNMENTS**, add **auto-in, aux-work, after-call** and **manual-in** as shown below:

```
add station 50001                                               Page   4 of   5
                                      STATION
 SITE DATA
       Room:                                                 Headset? n
       Jack:                                                 Speaker? n
      Cable:                                                Mounting: d
      Floor:                                            Cord Length: 0
   Building:                                              Set Color:

ABBREVIATED DIALING
     List1:                     List2:                     List3:


BUTTON ASSIGNMENTS
 1: call-appr                            5: auto-in            Grp:
 2: call-appr                            6: aux-work    RC:    Grp:
 3: call-appr                            7: after-call         Grp:
 4:                                      8: manual-in          Grp:

    voice-mail
```

5.2. Configure Hunt Group

Use **add hunt-group *n*** command to add a hunt group, where ***n*** is an available hunt group. On Page 1:

- In the **Group Name** filed, enter a descriptive name.
- Set **ACD, Queue, Vector** to **y.**
- Enter an available **Group Extension**

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

            Group Number: 1                                  ACD? y
              Group Name: Skill 1                          Queue? y
         Group Extension: 23001                          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:
```

On Page 2, set **Skill** to **y** and **Measured** to **both.**

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

                    Skill? y      Expected Call Handling Time (sec): 20
                      AAS? n        Service Level Target (% in sec): 80 in 20
                 Measured: both
     Supervisor Extension:


      Controlling Adjunct: none


        VuStats Objective:

   Multiple Call Handling: none


 Timed ACW Interval (sec): 1        After Xfer or Held Call Drops? n
```

5.3. Configure Agents

Use **add agent-loginID *n*** to add an agent, where ***n*** is an available agent id. On Page 1:

- In the **Name** field, type in a descriptive name
- Enter password in **Password** and **Password (enter again)**

```
add agent-loginID 2001                                          Page   1 of   2
                                  AGENT LOGINID

                Login ID: 2001                                     AAS? n
                    Name: SD Agent 1                             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):
                                                        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
```

On Page 2, set skill number and skill level in **SN** and **SL** fields. Skill number is the hung group that was added in previous section.

```
agent-loginID 2001                                          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: 35      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:
15:
```

5.4. Configure Vectors

Use **change vector *n*** to configure a Vector, where ***n*** is an available Vector number. For test scenarios, Vector 35 was used during compliance test. Note the extension configured in the **route-to** step, 888200. 8 is aar feature access code and 88200 is configured to route to ScoreFast via aar (not shown). Vector was configured as follows:

```
change vector 35                                                Page   1 of   6
                                 CALL VECTOR

    Number: 35               Name: SD Vector
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 wait-time    2   secs hearing ringback
02 goto step    6             if available-agents in skill 1st          =  0
03 goto step    6             if P                >      0
04 set          P      = none   ADD   1
05 route-to     number 888200           with cov n if unconditionally
06 queue-to     skill 1st  pri m
07 stop
                       Press 'Esc f 6' for Vector Editing
```

Following variables were configured during compliance test.

```
hange variables                                                 Page   1 of  39
                              VARIABLES FOR VECTORS

Var Description                 Type    Scope Length Start Assignment       VAC
A   Adjunct Route Digits        collect L     16     1
B   Adjunct Route Flag          collect P     1      1
C
D
E
F
G
H
I
J
K
L
M
N
O
P   SD                          collect P     1      1
Q
R
```

5.5. Configure VDN

Use **add vdn *n*** to add a vdn, where ***n*** is an available vdn extension**.** On Page 1:

- In the **Name** field, enter a descriptive name
- In the **Destination** field, set **Vector Number** to the vector configured earlier in this document. i.e., Vector Number 35.
- Set 1st Skill* to the Hunt Group from **Section 5.3**

```
add vdn 22035                                            Page   1 of   3
                           VECTOR DIRECTORY NUMBER

                            Extension: 22035
                                Name*: SD VDN 1
                          Destination: Vector Number        35
                   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*: 35
                           2nd Skill*:
                           3rd Skill*:

SIP URI:
```

5.6. Configure AES connection

Use **change ip-services** command to add an entry for AES. On Page 1,

- In the **Service Type** field, type **AESVCS**.
- In the **Enabled** field, type **y**.
- In the **Local Node** field, type the Node name **procr** for the Processor Ethernet Interface.
- In the **Local Port** field, use the default of **8765**.

```
change ip-services                                              Page   1 of   3

                                   IP SERVICES
 Service     Enabled     Local        Local       Remote      Remote
  Type                   Node         Port        Node        Port
AESVCS        y      procr            8765
```

On Page 3 of the IP Services form, enter the following values:

- In the **AE Services Server** field, type the actual hostname obtained from the AES server.
- In the **Password** field, type a password to be administered on AES.
- In the **Enabled** field, type **y**.

```
change ip-services                                              Page   3 of   3
                            AE Services Administration

   Server ID    AE Services       Password          Enabled    Status
                   Server
      1:      aes                 *                    y        in use
      2:
```

5.7. Configure CTI Link

Use **add cti-link *n*** command, where ***n*** is an available CTI link number.

- In the **Extension** field, type in an available extension number
- In the **Type** field, type **ADJ-IP**.
- In the **Name** field, type a descriptive name.

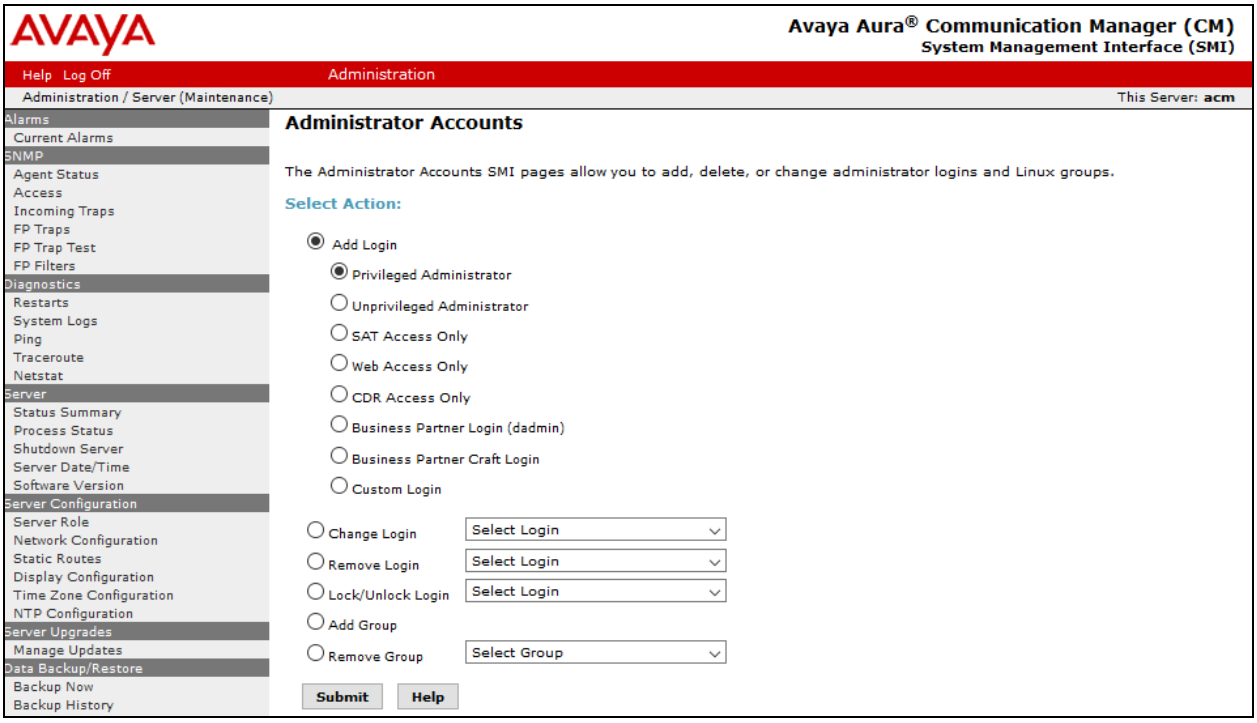
```
add cti-link 1                                                  Page   1 of   3
                                   CTI LINK
 CTI Link: 1
Extension: 69999
     Type: ADJ-IP
                                                                        COR: 1
     Name: AES CTI Link
```

5.8. Configure SMS User

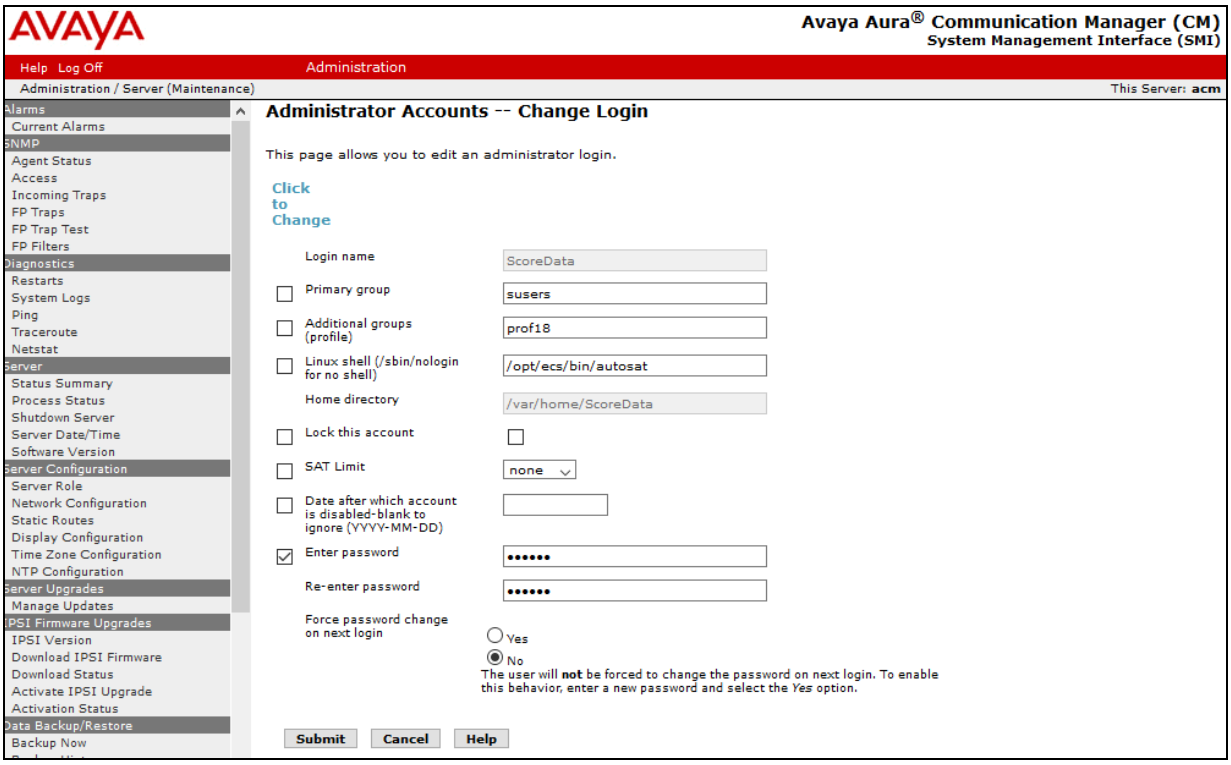
ScoreFast uses the SMS interface to retrieve objects information from Communication Manager. An SMS user needs to be created as such. User profile 18 was used for SMS User. This profile is one of the default profiles.

```
list user-profiles

                                 USER PROFILES

                    Extended
    Profile          Profile     User Profile Name
      0                n         services super-user
      1                n         services manager
      2                n         business partner
      3                n         services
      16               n         call center manager
      17               n         snmp
      18               n         customer super-user
      19               n         customer non-super-user
```

Log onto Communication Manager System Management Interface via a browser, http://<IP-Address>, where IP-Address is the IP Address of Communication Manager. Navigate to **Administration → Server (Maintenance) → Administrator Accounts,** and select **Add Logon → Privileged User**.



Type in a desired **Login Name**, Select **prof18** for **Additional Groups,** set **Linux shell** to **/opt/ecs/bin/autosat** and type in password in **Enter password or key** and **Re-enter password or key.**



6. Configure Avaya Aura® Application Enablement Services

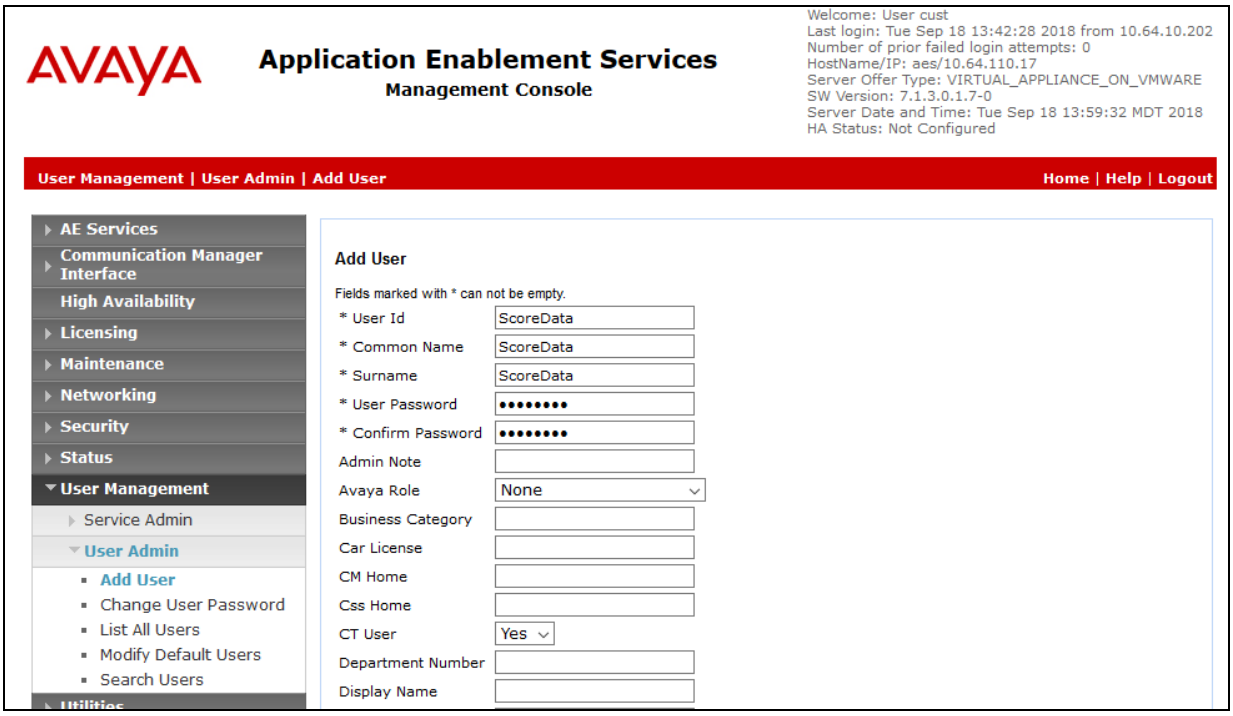
Configuration of Avaya Aura® Application Enablement Services requires a user account be configured for ScoreFast.

6.1. Configure User

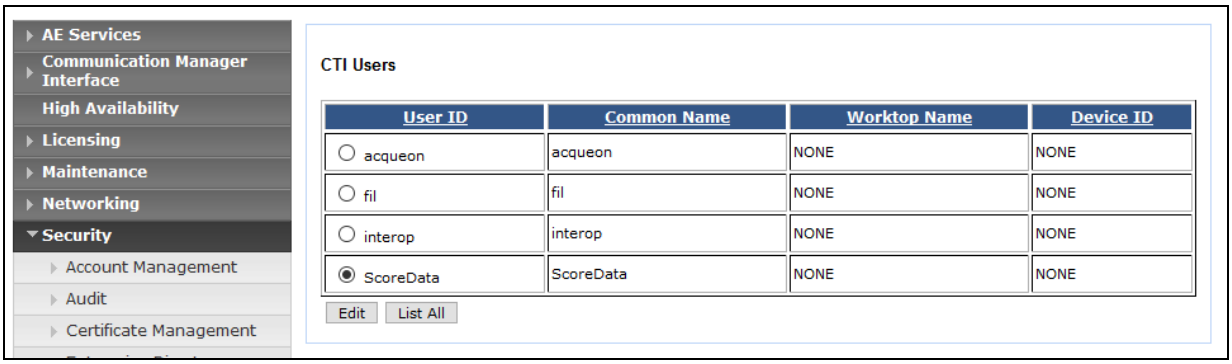
All administration is performed by web browser, https://<aes-ip-address>/

A user needs to be created for ScoreFast to communicate with AES. Navigate to **User Management → User Admin → Add User**.

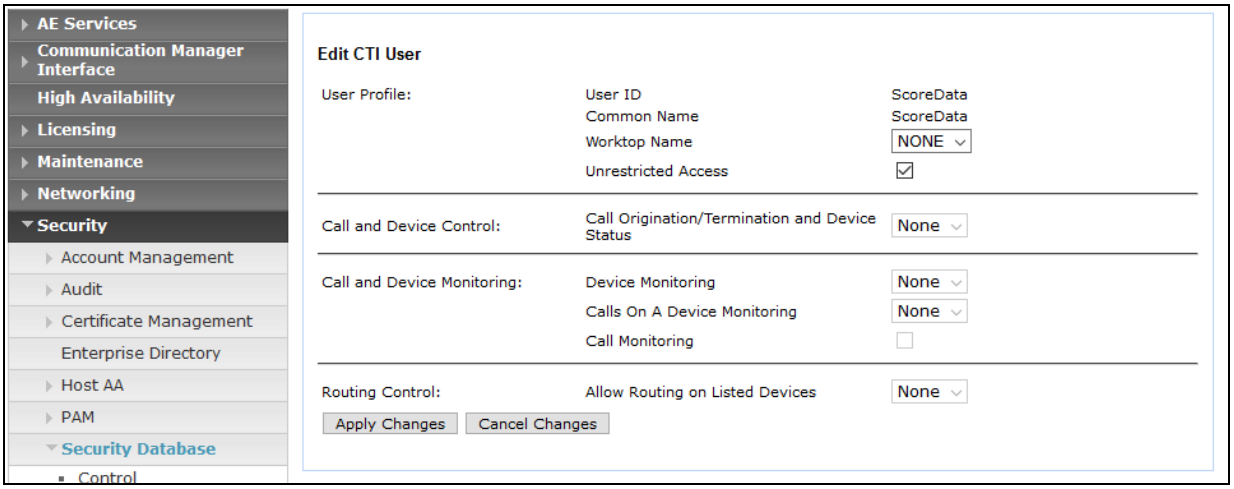
Fill in **User Id, Common Name, Surname, User Password** and **Confirm Password**. Set the **CT User** to **Yes,** and **Apply**.



Navigate to **Security → Security Database → CTI Users → List All Users**.

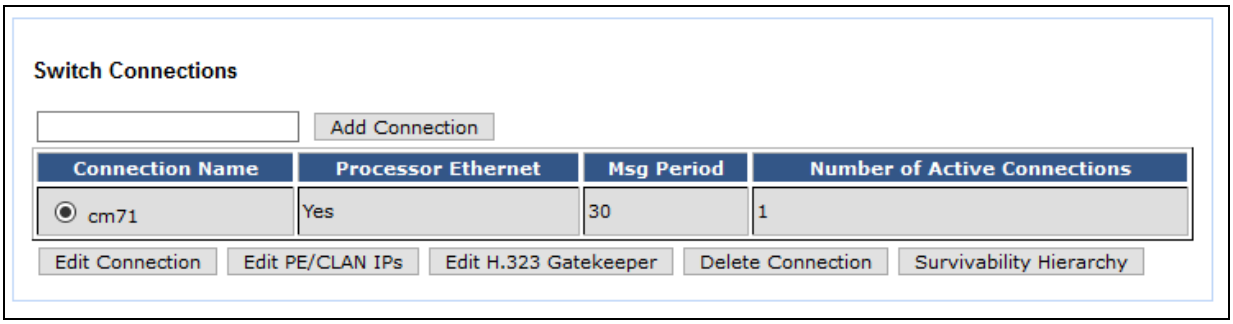


Select the recently added user and click **Edit**. Check the box for **Unrestricted Access** and click **Apply Changes**.

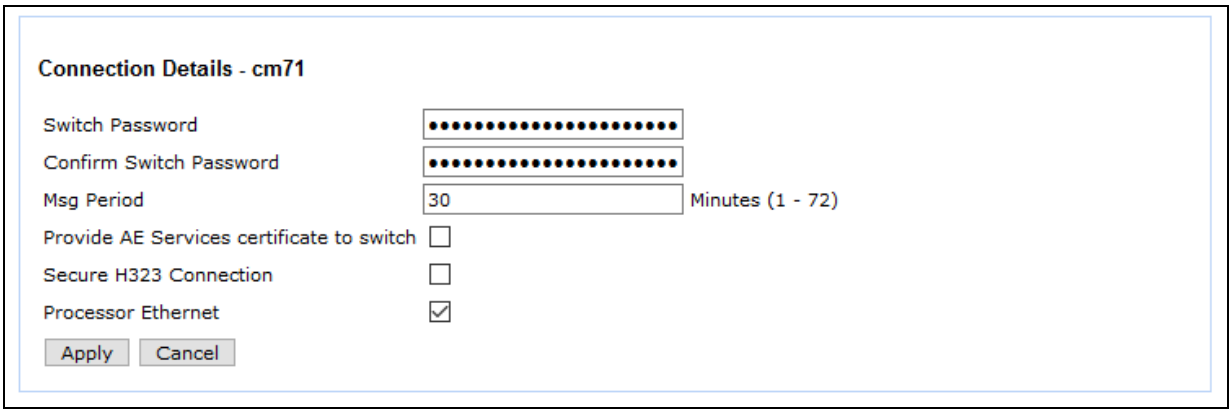


6.2. Configure Communication Manager Switch Connections

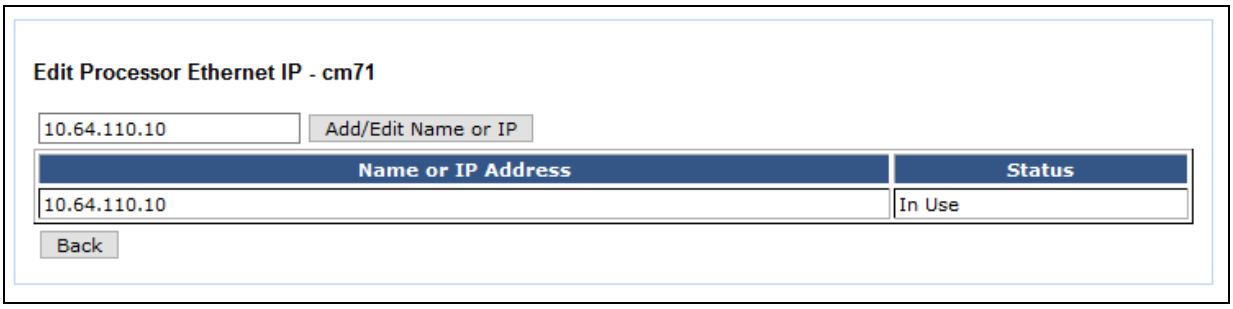
To add links to the Communication Manager, navigate to the **Communication Manager Interface → Switch Connections** page and enter a name for the new switch connection and click the **Add Connection** button. This was previously configured as **acm71** for this test environment:



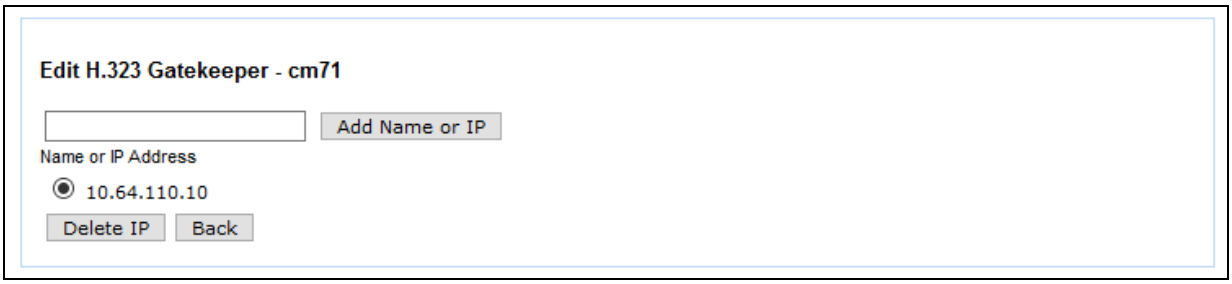
Use the **Edit Connection** button shown above to configure the connection. Enter the **Switch Password** and check the **Processor Ethernet** box if using the **procr** interface, as shown below. This must match the password configured when adding AESVCS connection in Communication Manager.



Use the **Edit PE/CLAN IPs** button (shown in this section's first screen shot above) to configure the **procr** or **CLAN** IP Address (es) for TSAPI message traffic.



Use the **Edit H.323 Gatekeeper** button (shown in this section's first screen capture above) to configure the **procr** or **CLAN** IP Address (es).



6.3. Configure TSAPI Link

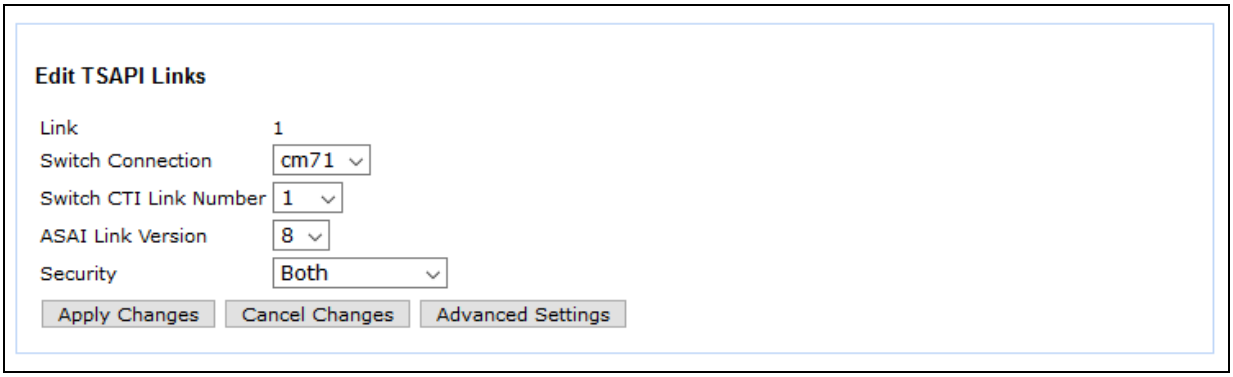
Navigate to the **AE Services → TSAPI → TSAPI Links** page to add the TSAPI CTI Link. Click **Add Link** (not shown).

Select a **Switch Connection** using the drop down menu. Select the **Switch CTI Link Number** using the drop down menu. The **Switch CTI Link Number** must match the number configured in the **cti-link** form for Communication Manager.

If the application will use Encrypted Links, select **Encrypted** in the **Security** selection box.

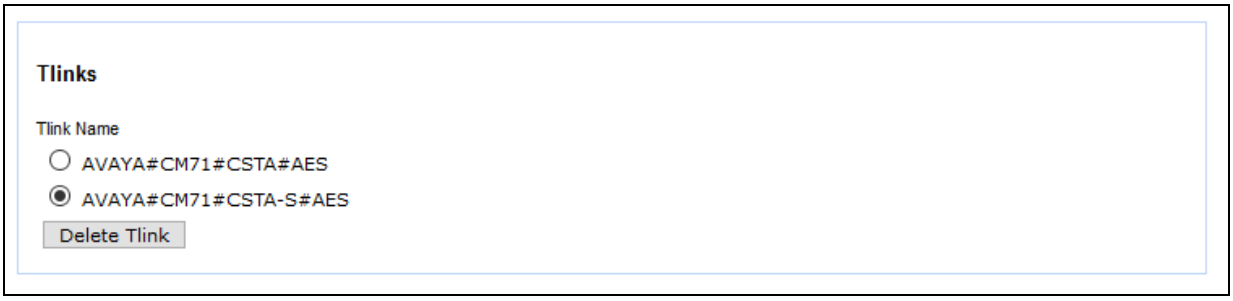
Click **Apply Changes**.

Configuration shown below was previously configured.



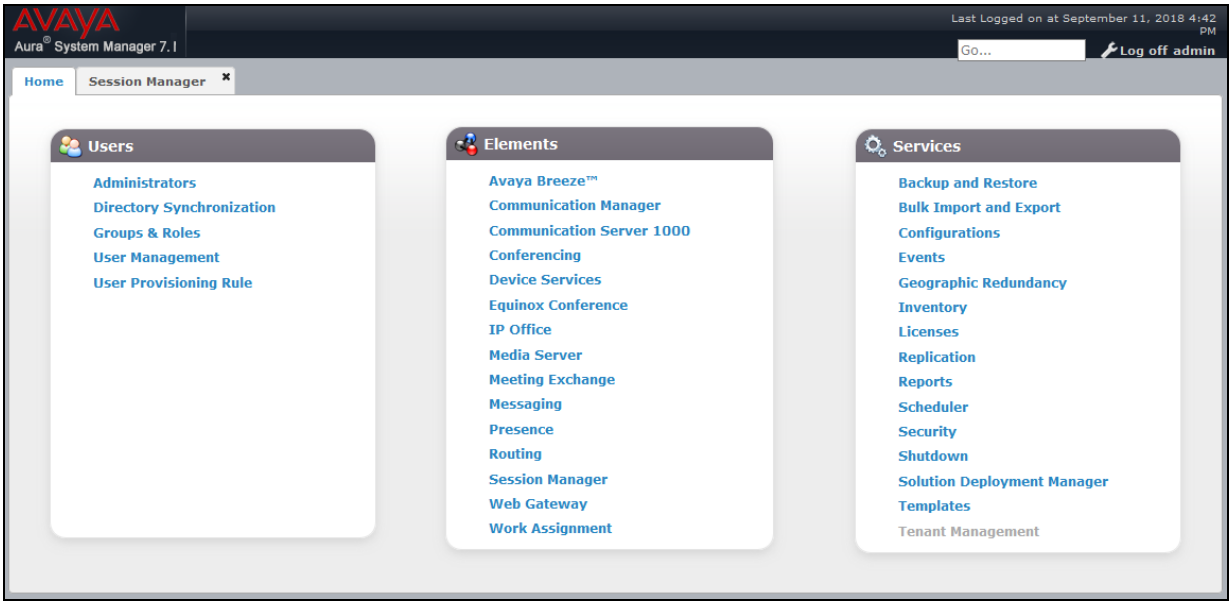
6.4. Obtain Tlink

Navigate to **Security → Security Database → Tlinks.** Take a note of the Tlink that will be used by ScoreFast to connect.



7. Configure Avaya Aura® Session Manager

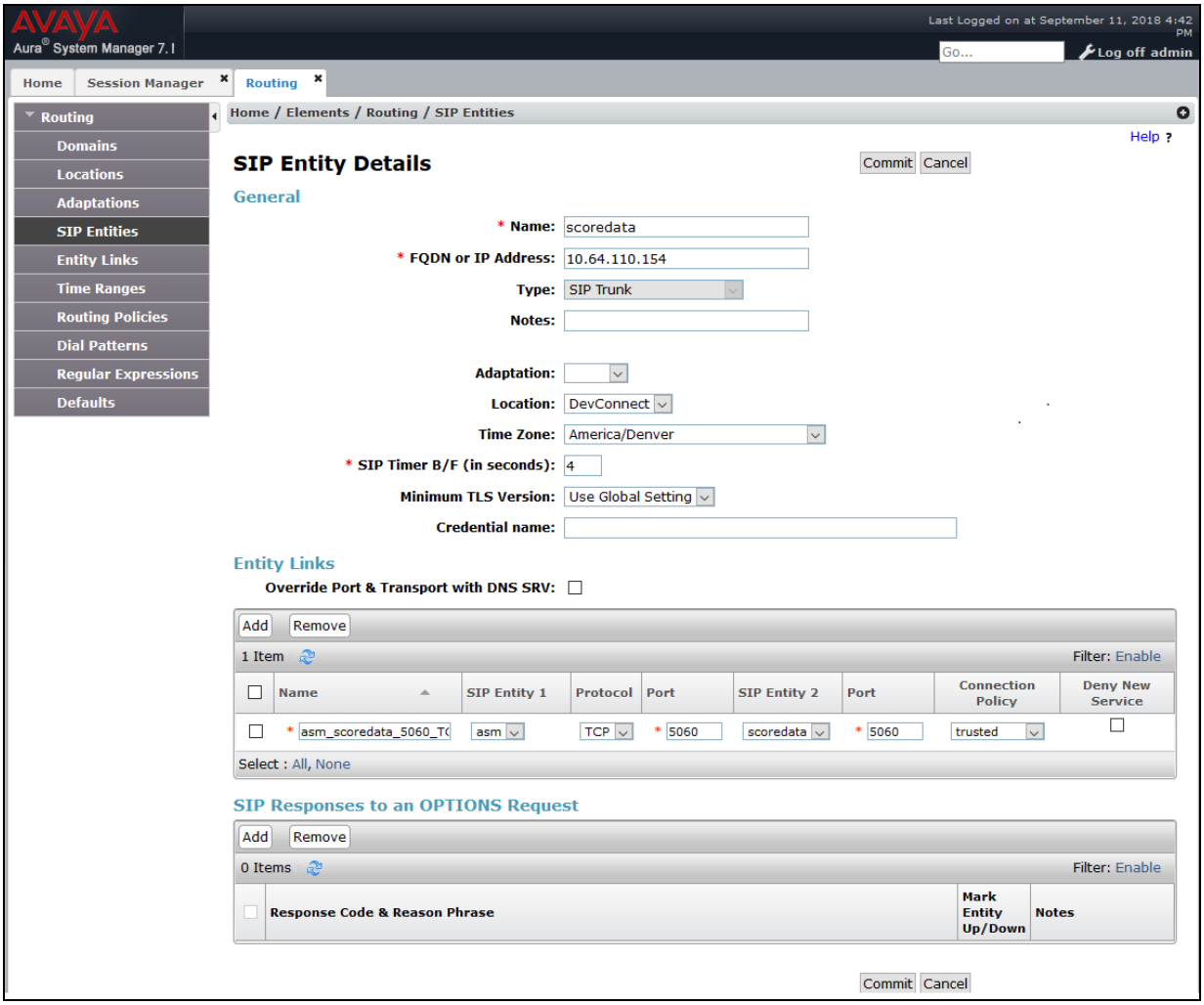
Configuration of Session Manager is performed via System Manager. Log onto System Manager Web console using appropriate credentials.



7.1. Add SIP Entity and Entity Links

To add a SIP Entity for ScoreFast, navigate to **Elements → Routing → SIP Entities → New.**

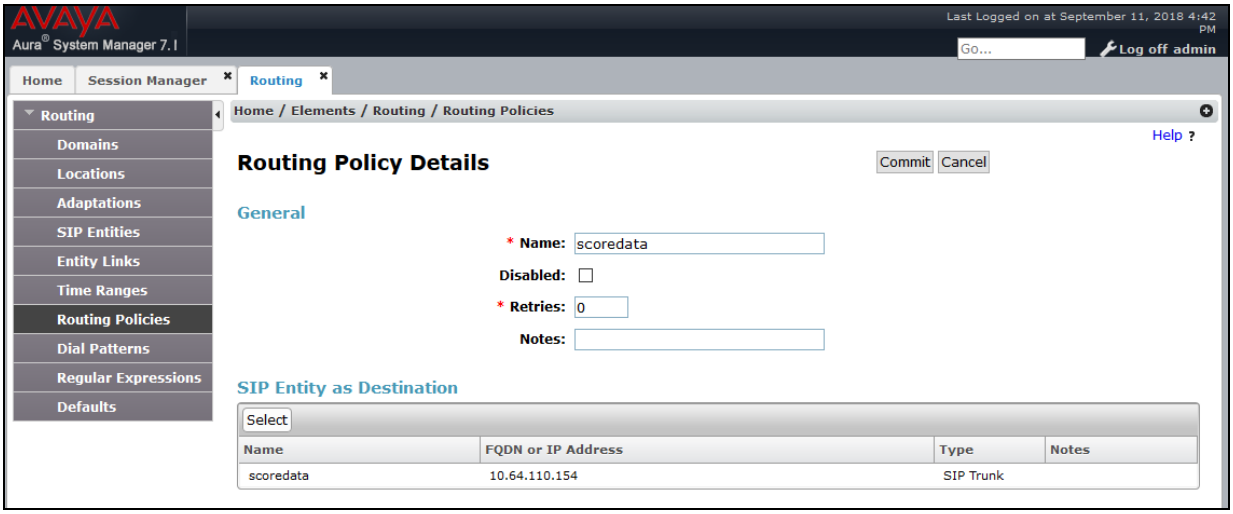
- Type in a **Name.**
- Type in the IP Address of ScoreFast in **FQDN or IP Address.**
- Scroll down and configured the Entity link as shown below. Note the SIP Entity 1 and SIP Entity 2 Ports; they will be used when configuring Scorefast.



7.2. Add Routing Policy

Continuing from above, select **Routing Policies** in the left pane and select **New.**

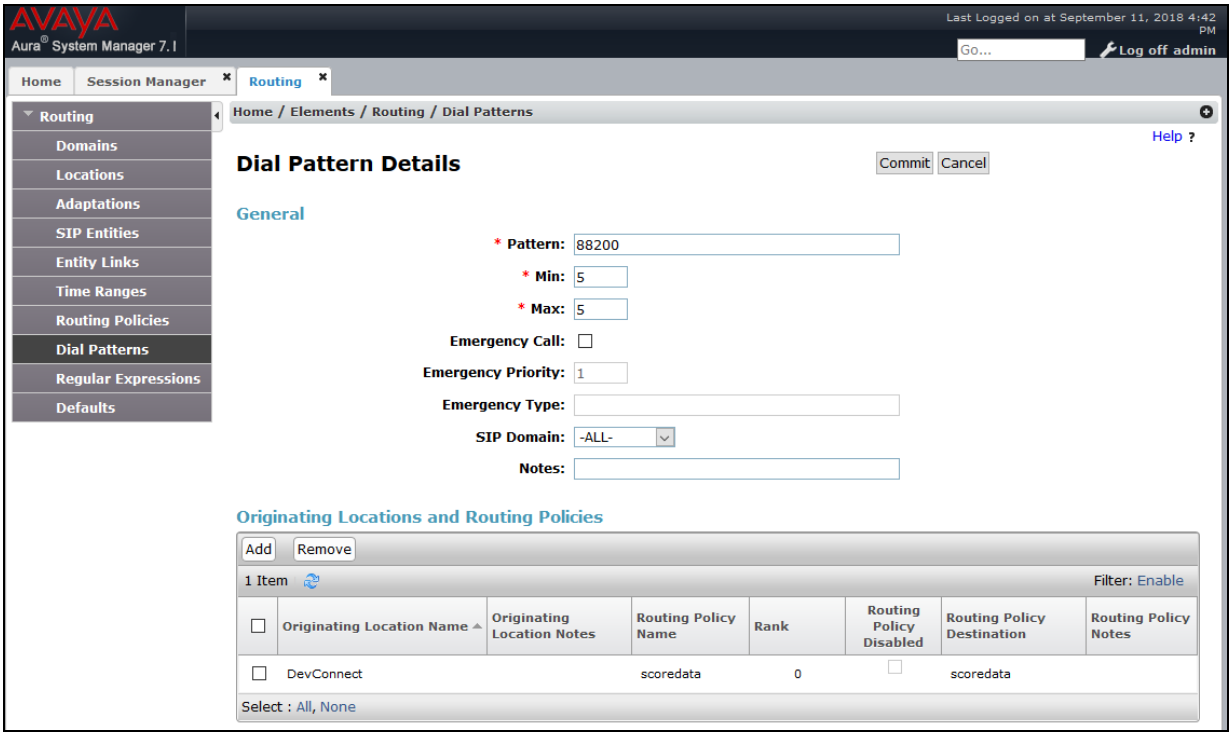
- Type in a **Name**
- Select the **Select** button; select the ScoreFast SIP Entity created above (not shown)



7.3. Add Dial Pattern

Continuing form above, select **Dial Patterns** in the left pane and select **New** to add a new Dial Pattern.

- Enter the dial pattern for aar routed digits from **Section 5.4.**
- Select **Add** and configure the Routing Policy from previous section.



8. Configure ScoreData ScoreFast™

Configuration for ScoreFast is performed on the server it is installed on. During the compliance test, this configuration was performed by a ScoreData Engineer. During the compliance test, ScoreFast was installed on a Windows Server 2016 Standard Virtual Machine.

Below is a list of components that should be installed and configured to implement ScoreFast.

- SD-CTI
  - SD_SMSAPI
  - SD_TMACServer
  - SD_CtiServer
- SD-SIP
  - SD_TSIPServer

8.1. Installation

Copy the ScoreData provided package folder to an application folder. And open "install.bat" file and change the path to application folder root path.

```
sc create "SD _CtiServer" binPath= "C:\Program
Files\Tetherfi\Tetherfi_TSAPIServer\TetherfiCTIServer.exe"

sc create "SD _SMSAPI" binPath= "C:\Program
Files\Tetherfi\Tetherfi_SMSAPI\SMSAPIWinService.exe"

sc create "SD _TMACServer" binPath= "C:\Program
Files\Tetherfi\Tetherfi_TMACServer\AMACWebServerWin.exe"

sc create "SD _TSIPServer" binPath= "C:\Program
Files\Tetherfi\Tetherfi_SipProxy\Tetherfi_SipProxy.exe"
```

Then execute "install.bat" from the ScoreData provided package, in administrator mode. After installation, make all services to auto start and set recovery option to restart (not shown).

8.2. Password encryption

To encrypt passwords, use "ConfigurationProviderT.exe" from SD_SMSAPI folder.

To Encrypt, open command prompt and navigate to folder where you have copied "ConfigurationProviderT.exe". Execute below command:

```
ConfigurationProviderT.exe  < passworde>
```

8.3. SMSAPI Configuration

Go to SD_SMSAPI application folder and open “SMSAPI_Data.json” file and configure values accordingly.

- tmc.conf.aesIp – IP Address of AES.
- tmc.conf.cmIp – IP Address of Communication Manager.
- tmc.conf.cmUser – SMS User name from **Section 5.8**.
- tmc.conf.cmPassword – SMS User password from **Section 5.8** (use ConfigurationProviderT.exe to encrypt).
- tmc.conf.appPath – Path to SMS API folder (use \\ instead of \).
- tmc.conf.aesUsername – AES TSAPI User name from **Section 6.1.**
- tmc.conf.aesPassword – AES TSAPI User password from **Section 6.1** (use ConfigurationProviderT.exe to encrypt)
- tmc.conf.aesLink – AES Tlink from **Section 6.4**
- tmc.conf.aesTls – TLS version for AES SMS Services (Tls, Tls11, Tls12)
- tmc.conf.listenerPort – SMS API listener port (no need to change. Keep 50000)

Open “tmc.config” and configure correct application paths (not shown).

Sample:


```
{
  "tmc.conf.aesIp": "10.64.110.17",
  "tmc.conf.cmIp": "10.64.110.10:5022",
  "tmc.conf.cmUser": "scoredata",
  "tmc.conf.cmPassword":
"OJFKp5m4Aa0ZNylUlGc3KLY6pxrD/3JG4wYzMGmvBp136fB7fHYoTIDke34XQv36J
FLQyVPkMoNrgcprIDJW0Q==",
  "tmc.conf.appPath": "C:\\Program Files\\Tetherfi\\Tetherfi_SMSAPI",
  "tmc.conf.aesUsername": "scoredata",
  "tmc.conf.aesPassword":
"M6DIkXL5cHd6bjnYcUEb+orufG63sw7AwZB3A9iVVBwUlRe2jQvcyUDWo+NiB4rvp
H25k1sfNi/nMicyaESJrQ==",
  "tmc.conf.aesLink": " AVAYA#CM71#CSTA-S#AES",
  "tmc.conf.aesTls": "Tls12",
  "tmc.conf.listenerPort": "50000"
}
```

8.4. TMAC Server Configuration

Go to SD _TMACServer application folder and open “TMAC_ScoreData.json” file. Configure values accordingly.

- tmc.conf.aesUsername – AES TSAPI User name from **Section 6.1.**
- tmc.conf.aesPassword – AES TSAPI User password from **Section 6.1** (use ConfigurationProviderT.exe to encrypt)
- tmc.conf.aesLink – AES Tlink from **Section 6.4**
- tmc.conf.appPath – TMAC Server application folder (use \\ instead of \)
- tmc.conf.logPath – TMAC Server agent logs path (use \\ instead of \ and folder should be present)
- tmc.conf.listenerPort - TMACServer listener port (no need to change. Keep 50000)
- tmc.conf.ctiserverwsport – CTI Server listen port (no need to change. Keep 1337)
- tmc.conf.scoredataapi – ScoreData Score API URL
- tmc.conf.scoredatatokenapi – ScoreData Token API URL
- tmc.conf.scoredatatimeout – Timeout for score data connection in milliseconds
- tmc.conf.scoredatausername – ScoreData API authorization username
- tmc.conf.scoredatapassword – ScoreData API authorization password (use ConfigurationProviderT.exe to encrypt)

Open “tmc.config” and configure correct application paths (not shown).

Sample:


```
{
  "tmc.conf.aesUsername": "scoredata",
  "tmc.conf.aesPassword":
"M6DIkXL5cHd6bjnYcUEb+orufG63sw7AwZB3A9iVVBwUlRe2jQvcyUDWo+NiB4rvp
H25k1sfNi/nMicyaESJrQ==",
  "tmc.conf.aesLink": " AVAYA#CM71#CSTA-S#AES",
  "tmc.conf.appPath": "C:\\Program Files\\Tetherfi\\Tetherfi_TMACServer",
  "tmc.conf.logPath": "C:\\Program
Files\\Tetherfi\\Logs\\Tetherfi_TMACServer\\AgentLogs",
  "tmc.conf.listenerPort": "50000",
  "tmc.conf.ctiserverwsport": "1337",
  "tmc.conf.scoredataapi": "https://console.scoredata.com/agent/v1/",
  "tmc.conf.scoredatatokenapi": "http://console.scoredata.com/api/token/",
  "tmc.conf.scoredatatimeout": "50000",
  "tmc.conf.scoredatausername": "tetherfi",
  "tmc.conf.scoredatapassword":
"hCDSZw9TOpVDfMqSJZp4e+OmeNqb5bFzg4CUKaLMJvutFeJfy/TN//2HFjcfSTbil+rB
4rKvye7q7kFl9cDx6Q==",

}
```

8.5. CTI Server Configuration

Go to SD _CtiServer application folder and open “TetherfiTSAPIServer.exe.config”.

Change below value to include correct application path.

```
<add key="Log4NetConfigFile" value="ApplicationPath\Log4Net.config"/>
```

8.6. TSIP Server configuration

Go to SD _TSIPServer application folder and open “TSIP_Data.json” and configure values accordingly.

- tmc.conf.ProxyPort – SIP Entity 2 Port from **Section 7.1**.
- tmc.conf.ProxyLocalIP – IP Address of ScoreFast server.
- tmc.conf.SipDomain – IP Address of Session Manager.
- tmc.conf.SipServerIp –IP Address of Session Manager.
- tmc.conf.SipServerPort – SIP Entity 1 Port from **Section 7.1.**
- tmc.conf.WSPort – local port which TSIP proxy listen on (don’t change. Keep 27005)
- tmc.conf.SipUserList – TSIP call ports should be configured here. Based on the number of calls you want to handle using the TSIP Server, it should be configured here (100-110 means 10 ports)
- tmc.conf.AppPath – Application path of TSIP Server (use \\ instead of \)
- tmc.conf.LogPath – Log path of TSIP server (use \\ instead of \)
- tmc.conf.WcfPort – TSIP Server listen port (don’t change, keep 50000)
- tmc.conf.scoredataapi – ScoreData Score API URL
- tmc.conf.scoredatatokenapi – ScoreData Token API URL
- tmc.conf.scoredatatimeout – Timeout for score data connection in milliseconds
- tmc.conf.scoredatausername – ScoreData API authorization username
- tmc.conf.scoredatapassword – ScoreData API authorization password (use ConfigurationProviderT.exe to encrypt)

Open “tmc.config” and configure correct application paths (not shown).

Sample:


```
{
  "tmc.conf.ProxyPort": "5060",
  "tmc.conf.ProxyLocalIP": "10.64.110.154",
  "tmc.conf.SipDomain": "10.64.150.17",
  "tmc.conf.SipServerIp": "10.64.150.17",
  "tmc.conf.SipServerPort": "5060",
  "tmc.conf.WSPort": "27005",
  "tmc.conf.SipUserList": "100-110",
  "tmc.conf.AppPath": "C:\\Program Files\\Tetherfi\\Tetherfi_SipProxy",
  "tmc.conf.LogPath": "C:\\Program Files\\Tetherfi\\Logs\\Tetherfi_SipProxy",
  "tmc.conf.WcfPort": "50000",
  "tmc.conf.scoredataapi": "https://console.scoredata.com/agent/v1/",
  "tmc.conf.scoredatatokenapi": "http://console.scoredata.com/api/token/",
  "tmc.conf.scoredatatimeout": "50000",
  "tmc.conf.scoredatausername": "tetherfi",
  "tmc.conf.scoredatapassword":
"hCDSZw9TOpVDfMqSJZp4e+OmeNqb5bFzg4CUKaLMJvutFeJfy/TN//2HFjcfSTbil+rB4rK
vye7q7kFl9cDx6Q==",
}
```

8.7. Service Start order

Via services.msc, restart the services in following order:

1. SD_SMSAPI
2. SD_CtiServer
3. SD_TMACServer
4. SD_TSIPServer

9. Verification Steps

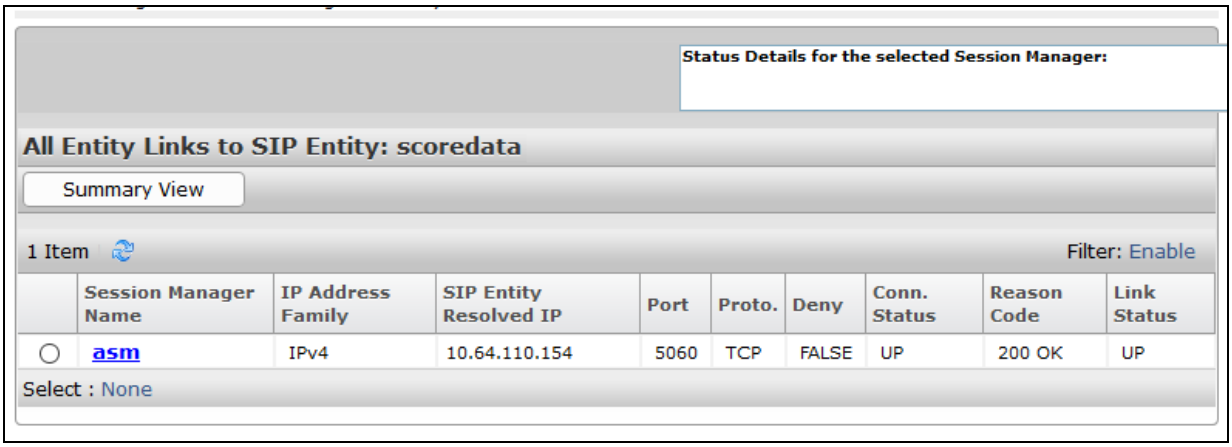
- Via a SAT terminal, verify that AES is **Enabled** and **listening** using the **status aesvcs interface** command.

```
status aesvcs interface

                          AE SERVICES INTERFACE STATUS

Local Node         Enabled?  Number of      Status
                             Connections

procr              yes       2              listening
```

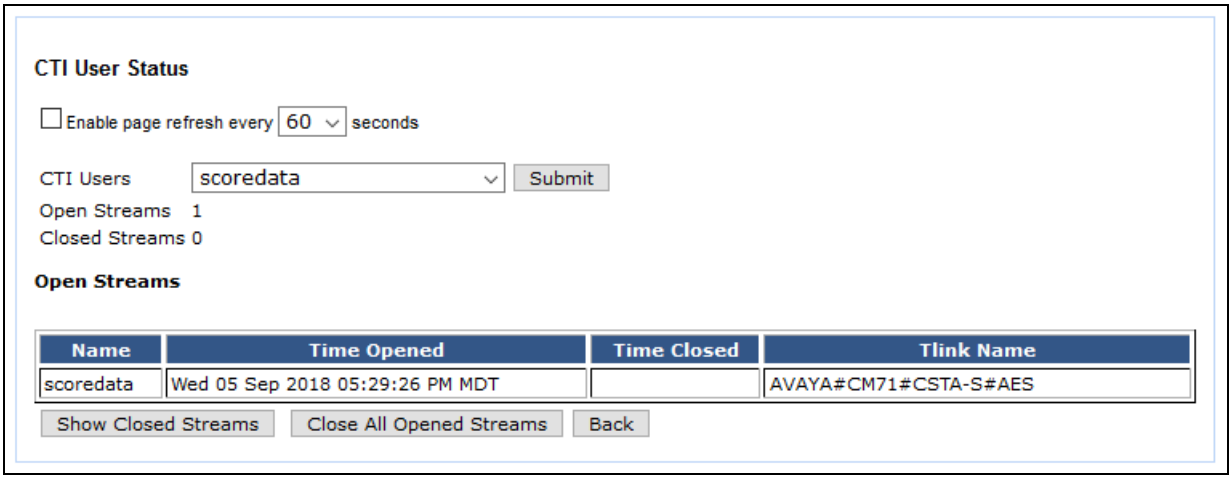
- Verify via SAT terminal, the Service State between Communication Manager and the AES is **established,** using the **status aesvcs cti-link** command.

```
                          AE SERVICES CTI LINK STATUS

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

1      8        no    aes              established   225      225
```

- Via System Manager, **Session Manager → System Status → SIP Entity Monitoring → ScoreFast SIP Entity,** verify Conn. Status and Link Status is **UP.**



Via AES OAM, **TSAPI Service Summary → Status and Control → TSAPI Service Summary → User Status,** verify the user created in **Section 6.1** for ScoreFast is connected.



10. Conclusion

ScoreData ScoreFast™ was able to successfully interoperate with Avaya Aura® Communication Manager, Avaya Aura® Application Enablement Services and Avaya Aura® Session Manager. All executed test cases were passed.

11. Additional References

This section references the product documentation relevant for these Application Notes.

[1] Administering Avaya Aura® Communication Manager, Release 7.1.3, Issue 7, May 2018.

[2] Administering Avaya Aura® Session Manager, Release 7.1.3, Issue 5, July 2018.

[3] Administering and Maintaining Avaya Aura® Application Enablement Services, Release 7.1.3, Issue 5, May 2018.

Documentation related to ScoreFast™ can be directly obtained from ScoreData.

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.