Avaya Solution & Interoperability Test Lab

Application Notes for Spok Enterprise Alert and Spok ALI Alert with Avaya Aura® Application Enablement Services and Avaya Aura® Communication Manager – Issue 1.1

Abstract

These Application Notes contain instructions for Spok Enterprise Alert and Spok ALI Alert with Avaya Aura® Application Enablement Services and Avaya Aura® Communication Manager to successfully interoperate.

Readers should pay particular attention to the scope of testing as outlined in **Section 2.1**, as well as 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

Spok Enterprise Alert (Enterprise Alert) and Spok ALI (Automatic Location Identification) Alert (ALI Alert) are Enhanced E911 solutions. Enterprise Alert interoperates with the Avaya Aura® Communications Manager by integrating via a PRI trunk which routes emergency (911) calls. By monitoring the D channel, Enterprise Alert captures emergency call events, performs ANI (Automatic Number Identification) substitution, records the call and provides passive monitoring that bridges one or more phones on the call so that internal resources can listen to the call. ALI Alert monitors a configured crises alert Avaya 9600 Series IP Deskphone to capture emergency call events. It provides the same features as Enterprise Alert except Passive monitoring and call recording. Both solutions rely on Avaya Site Administration to automatically obtain the extension and extension location of non-IP phones. Both solutions rely on the Spok Avaya inventory function to automatically obtain extension and MAC address of Avaya IP phones (SIP and H.323). Both solutions rely on Spok's IP phone tracking function and Avaya's Push interface to automatically obtain the location of each IP phone extension. Link layer discovery is used to track the location of the IP phones' MAC address.

To achieve the above functionality Spok Enterprise Alerts uses the following Avaya Interfaces:

- Avaya Aura® Communication Manager – PRI Interface (Enterprise Alert)
- Avaya Aura® Communications Manager – Crises Alert (ALI Alert)
- Avaya Aura® Application Enablement Services – SMS Interface
- Avaya Aura® Communications Manager – H.323 phone inventory
- Avaya Aura® Session manager – SIP phone inventory
- Avaya Site Administration
- Avaya Aura® Communication Manager and Avaya 9600 Series IP Deskphones – SNMP interface
- Avaya 9600 Series IP Deskphones – Push Interface

2. General Test Approach and Test Results

General test approach was to verify that Spok Enterprise Alert and ALI Alert are able to successfully integrate with various Avaya Interfaces. Functional test scenarios are mentioned in **Section 2.1**

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 Spok utilized capabilities of SSL via HTTPS.

2.1. Interoperability Compliance Testing

Interoperability testing contained functional test scenarios:

- Location information retrieval using Avaya Site Administration and upload to Spok ALI Database table
- Avaya IP Endpoint extensions and MAC address upload to Spok ALI database table
- Avaya 9600 Deskphone registration to Spok Push Application
- Update Emergency Location Extension for Avaya IP Endpoints
- Obtain Emergency Location Extension for Avaya IP Endpoints
- Tracking Avaya IP Endpoints
- Bridging on a phone to an active emergency call via a listen only bridge
- Display of emergency caller extension and location on a networked PC via the Spok Sentry notification feature.
- Emergency calls notifications and recordings via Email

2.2. Test Results

All planned test cases passed.

2.3. Support

Technical support for the Spok Enterprise Alert and ALI Alert solution can be obtained by contacting Spok:

- **Web:** http://www.spok.com
- **Phone:** +1-888-797-7487

3. Reference Configuration

Figure 1 illustrates a sample configuration that consists of Avaya Products, Spok Enterprise Alert and Spok ALI Alert. Enterprise Alert uses a configuration that enables the emergency event determination, Passive Monitoring and ANI insertion on the PRI. ALI Alert uses a configuration that uses the Crises Alert phone for emergency call event determination and SMS for ANI insertion (i.e. setting the emergency location extension in the station record).

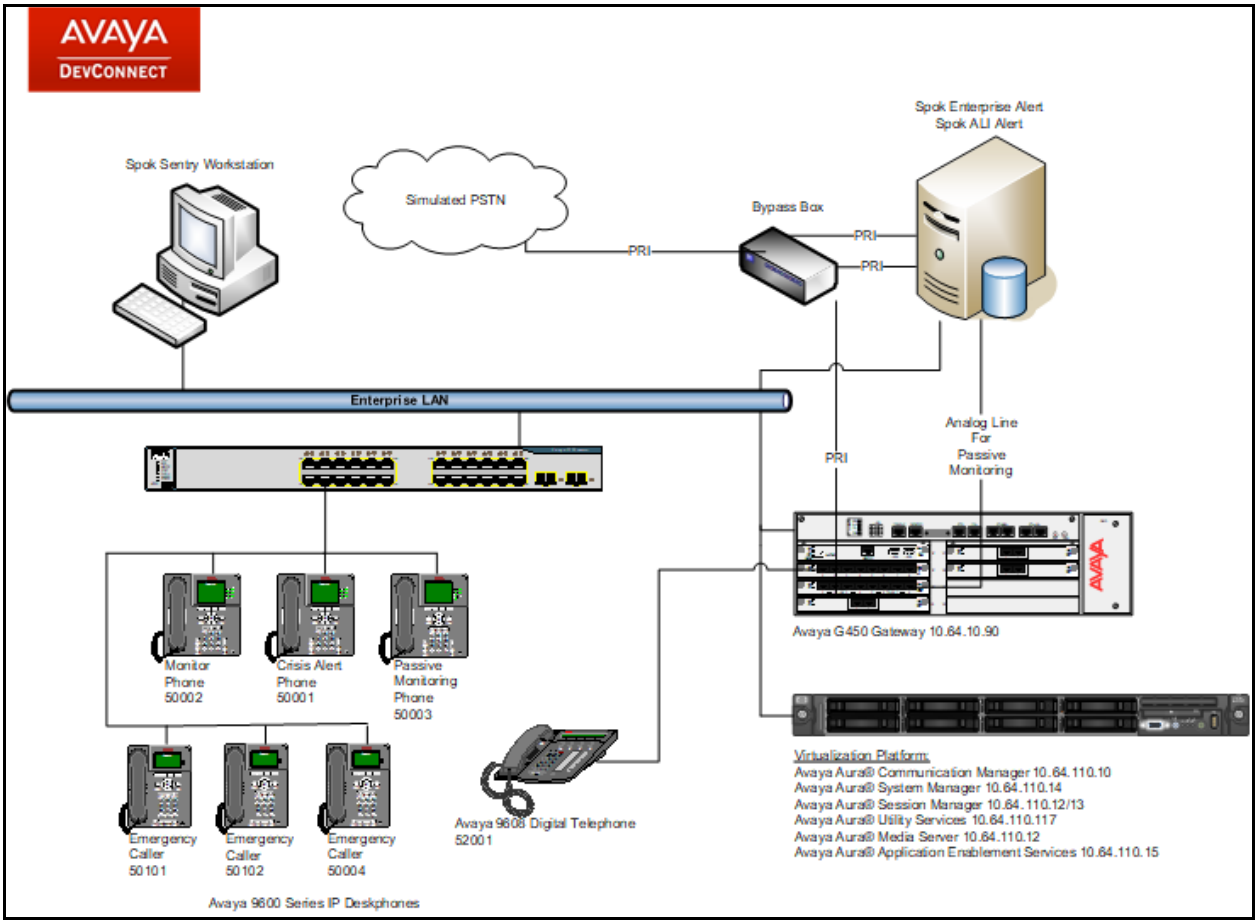


Figure 1: Test Configuration for Spok

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	7.1.1.0.0.532.23985
Avaya Aura® Session Manager	7.1.1.0.711008
Avaya Aura® System Manager	7.1.1.0.046931
Avaya G450 Media Gateway	38.20.1
Avaya Aura® Media Server	7.8.0.333
Avaya Aura® Application Enablement Services	7.1.1.0.0.5
Avaya 9600 Series Deskphones • 96x1 SIP • 96x1 H.323 • 96xx SIP • 96xx H.323	 • 7.1.1.0.91817 • 6.6.5.06 • 2.6.17 • 3.2.8.091517
Spok Enterprise Alert/ALI Alert running Windows Server 2016 (x64)	11.11.0.417

5. Configure Avaya Aura® Communication Manager

This section contains steps necessary to configure Spok Enterprise Alert and Spok ALI Alert successfully with Communication Manager.

All configurations in Communication Manager were performed via the SAT terminal.

5.1. Verify Feature and License

Enter the **display system-parameters customer-options** command and ensure that the following features are enabled.

One Page 4, verify **Computer Telephone Adjunct Links, ASAI Link Core Capabilities** and **ASAI Link Plus Capabilities** are set to **y.**

```
display system-parameters customer-options                      Page   4 of  12
                                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? 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
```

On Page 5, verify **ISDN Feature Plus, ISDN-PRI, IP Trunks** and **Multimedia IP SIP Trunking** are set to **y.**

```
display system-parameters customer-options                      Page   5 of  12
                                OPTIONAL FEATURES

   Emergency Access to Attendant? y                               IP Stations? y
           Enable 'dadmin' Login? y
           Enhanced Conferencing? y                       ISDN Feature Plus? y
                  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
```

On Page 11, verify **IP_API_A** has a sufficient limit.

```
display system-parameters customer-options                      Page  11 of  12
                     MAXIMUM IP REGISTRATIONS BY PRODUCT ID

Product ID  Rel. Limit          Used
AgentSC     *  : 2400           0
IP_API_A    *  : 2400           6
IP_Agent    *  : 2400           0
IP_NonAgt   *  : 2400           0
IP_Phone    *  : 2400           1
IP_ROMax    *  : 2400           0
IP_Soft     *  : 2400           0
IP_Supv     *  : 2400           0
IP_eCons    *  : 68             0
oneX_Comm   *  : 2400           0
               : 0              0
           IP Attendant Consoles? y
```

5.2. Configure Site Data

To configure specific building codes for a site, use **change site-data** command.
One **Page 1**, add entries for building codes. For compliance test, two entries of **MADISON** and **PARK** were added.

```
change site-data                                                Page   1 of   4
                    SITE DATA USER DEFINITION
                      VALID BUILDING FIELDS


  MADISON
  PARK
```

On **Page 3,** two entries of **10** and **8** for Floors were configured.

```
change site-data                                                Page   3 of   4
                     SITE DATA USER DEFINITION
                        VALID FLOOR FIELDS


  10
  8
```

Ensure to configure user extensions with the site data. When Spok runs SMS queries, this data is used for location information.

5.3. Configure Stations

Use **add station *n*** command to add a station, where ***n*** is an available station extension. This station will be used by Spok Enterprise Alert as a monitoring station for Crisis Alert. 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**
- Set **IP SoftPhone** to **y**

```
add station 50001                                              Page   1 of   5
                                      STATION

Extension: 50001                          Lock Messages? n               BCC: 0
     Type: 9630                           Security Code: *                TN: 1
     Port: S00002                       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 **crss-alert** and **release,** as shown below:

```
change 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: crss-alert
 2: call-appr                            6: release
 3: call-appr                            7:
 4:                                      8:
```

Add another station for an Incoming DID. For example if the incoming DID is 732-277-2872, use the last five digits as a station extension. This station is a virtual station that will be used by Spok Enterprise alert to remotely perform call forwarding for callbacks from Public Safety Answering Point (PSAP).

- In **Name** field, enter a descriptive name
- Set **Type** to **9630**
- Enter a **Security Code**

```
add station 72872                                            Page   1 of   5
                                       STATION

Extension: 72872                          Lock Messages? n               BCC: 0
     Type: 9630                           Security Code: 123456           TN: 1
     Port: IP                           Coverage Path 1:                 COR: 1
     Name: DID 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: 72872
            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? n

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

5.4. Configure DS1

For an available T1 card on the Avaya G540 gateway, use **add ds1 *n***, where ***n*** is the location of the T1 card. The PRI trunk from this T1 card will be connected to the PRI Bypass box on a PBX port. Configure as follows:

- Type in a descriptive name in **Name** field
- Set **Bit Rate** to **1.544**
- Set **Line Coding** to **b8zs**
- Set **Framing Mode** to **esf**
- Set **Signaling Mode** to **isdn-pri**
- Set **Connect** to **network**
- Set **Protocol Version** to **b**

```
add ds1 1v1                                                    Page   1 of   2
                                DS1 CIRCUIT PACK

            Location: 001V1                           Name: to_SPOK
            Bit Rate: 1.544                    Line Coding: b8zs
   Line Compensation: 1                       Framing Mode: esf
      Signaling Mode: isdn-pri
             Connect: network
   TN-C7 Long Timers? n                   Country Protocol: 1
Interworking Message: PROGress            Protocol Version: b
Interface Companding: mulaw                            CRC? n
           Idle Code: 11111111
                             DCP/Analog Bearer Capability: 3.1kHz

                                          T303 Timer(sec): 4


      Slip Detection? n                 Near-end CSU Type: other

   Echo Cancellation? n          Block Progress Indicator? n
```

5.5. Configure Signaling Group

User **add signaling-group *n***, where ***n*** is an available signaling group number, to add a signaling group. Configure as follows:

- Set **Group Type** to **isdn-pri**
- Set the **Primary D-Channel** according to the DS1 configured. Use channel number 24 as a D-Channel
- Set **TSC Supplementary Service Protocol** to **b**
- Once the trunk group has been configured return to this form and set the **Trunk Group for Channel Selection**

```
add signaling-group 10                                          Page   1 of   1
                                SIGNALING GROUP

 Group Number: 10             Group Type: isdn-pri
                    Associated Signaling? y          Max number of NCA TSC: 0
                       Primary D-Channel: 001V124     Max number of CA TSC: 0
                                                    Trunk Group for NCA TSC:
       Trunk Group for Channel Selection:         X-Mobility/Wireless Type: NONE
      TSC Supplementary Service Protocol: b          Network Call Transfer? n
```

5.6. Configure Trunk Group

Use **add trunk-group *n***, where ***n*** is an available trunk group number, to add a trunk group. On **Page 1**, configure as follows:

- Set **Group Type** to **isdn**
- Provide a descriptive name in **Group Name**
- Set **TAC** according to the dial plan
- Set **Carrier Medium** to **PRI/BRI**
- Set **Outgoing Display** to **y**
- Set **Service Type** to **tie**

```
add trunk-group 10                                          Page   1 of  21
                                TRUNK GROUP

Group Number: 2                     Group Type: isdn          CDR Reports: r
  Group Name: to_SPOK                     COR: 1        TN: 1        TAC: *002
   Direction: two-way        Outgoing Display? y         Carrier Medium: PRI/BRI
 Dial Access? y              Busy Threshold: 255  Night Service:
Queue Length: 0
Service Type: tie                    Auth Code? n            TestCall ITC: rest
                         Far End Test Line No:
TestCall BCC: 4
```

On **Page 3**, configure as follows:

- Set **Send Name** and **Send Calling Number** to **y**
- Set **Format** to **private**

```
                                 TRUNK FEATURES
          ACA Assignment? n            Measured: none      Wideband Support? n
                                 Internal Alert? n        Maintenance Tests? y
                               Data Restriction? n     NCA-TSC Trunk Member:
                                      Send Name: y      Send Calling Number: y
            Used for DCS? n                            Send EMU Visitor CPN? n
   Suppress # Outpulsing? n            Format: private
 Outgoing Channel ID Encoding: preferred     UUI IE Treatment: service-provider

                                                   Replace Restricted Numbers? n
                                                  Replace Unavailable Numbers? n
                                                        Send Connected Number: n
Network Call Redirection: none                     Hold/Unhold Notifications? n
             Send UUI IE? y     Modify Tandem Calling Number: no
               Send UCID? n
 Send Codeset 6/7 LAI IE? y                          Ds1 Echo Cancellation? n
```

On **Page 5 and 6**, add the **Port** 1-23 according to the location of the T1 board on Avaya Media Gateway.

```
add trunk-group 10                                            Page   5 of  21
                                 TRUNK GROUP
                                      Administered Members (min/max):   1/23
GROUP MEMBER ASSIGNMENTS                  Total Administered Members:  23

       Port    Code Sfx Name        Night           Sig Grp
  1: 001V101  MM710                                  10
  2: 001V102  MM710                                  10
  3: 001V103  MM710                                  10
  4: 001V104  MM710                                  10
  5: 001V105  MM710                                  10
  6: 001V106  MM710                                  10
  7: 001V107  MM710                                  10
  8: 001V108  MM710                                  10
  9: 001V109  MM710                                  10
 10: 001V110  MM710                                  10
 11: 001V111  MM710                                  10
 12: 001V112  MM710                                  10
 13: 001V113  MM710                                  10
 14: 001V114  MM710                                  10
 15: 001V115  MM710                                  10
```

5.7. Configure Route Pattern

Configure route pattern to use the trunk group configured in the previous section. Use the **change route-pattern 10** command to configure the following:

- Set **Grp No** for Line 1 to the trunk group configured in the previous section
- Set **FRL** to **0**
- Set **Numbering Format** to **lev0-pvt** as configured in the screen capture below.

```
change route-pattern 10                                          Page   1 of   3
                    Pattern Number: 10     Pattern Name:
    SCCAN? n    Secure SIP? n     Used for SIP stations? n

    Grp FRL NPA Pfx Hop Toll No.  Inserted                             DCS/ IXC
    No          Mrk Lmt List Del  Digits                               QSIG
                             Dgts                                      Intw
 1: 10   0                                                              n   usr
 2:                                                                     n   usr
 3:                                                                     n   usr
 4:                                                                     n   usr
 5:                                                                     n   usr
 6:                                                                     n   usr

     BCC VALUE  TSC CA-TSC    ITC BCIE Service/Feature PARM Sub  Numbering LAR
    0 1 2 M 4 W     Request                                Dgts Format
 1: y y y y y n  n            rest                                lev0-pvt  none
 2: y y y y y n  n            rest                                          none
 3: y y y y y n  n            rest                                          none
 4: y y y y y n  n            rest                                          none
 5: y y y y y n  n            rest                                          none
 6: y y y y y n  n            rest                                          none
```

5.8. Configure Private Numbering

Use **change private-number 0** command to configure the private numbering. This will ensure that the calling party number is sent to Spok Enterprise Alerts when a call is placed from any of the Avaya Endpoints. For the test configuration, extensions starting with 5 and 5 digits long were used.

```
change private-numbering 0                                       Page   1 of   2
                           NUMBERING - PRIVATE FORMAT

Ext Ext            Trk        Private          Total
Len Code           Grp(s)     Prefix           Len
 11 1                                         11    Total Administered: 2
 5  5                                         5        Maximum Entries: 540
```

5.9. Configure Crisis Alert

Use **change system-parameters crisis-alert** command and set **Every User Respond** to **n.**

```
change system-parameters crisis-alert                          Page   1 of   1
                         CRISIS ALERT SYSTEM PARAMETERS

ALERT STATION
    Every User Responds? n

ALERT PAGER
            Alert Pager? n
```

5.10.Configure ARS Routing

Due to the nature of emergency calls, 933 was used instead of 911, but steps here show how 911 routing can be configured. Use the **change ars analysis 911** command to configure 911 calls to route to Spok Emergency Alerts and enable crisis alerts. The following configuration shows that when 911 is called, the call is routed to Spok Emergency Alerts and a crisis alert is sent to all the phones that are configured with crss-alert buttons.

- Set **Dialed String** to **911**
- Set **Total Min** and **Max** to **3**
- Set **Route Pattern** to the pattern configured in **Section 5.7**
- Set **Call Type** to **alrt**

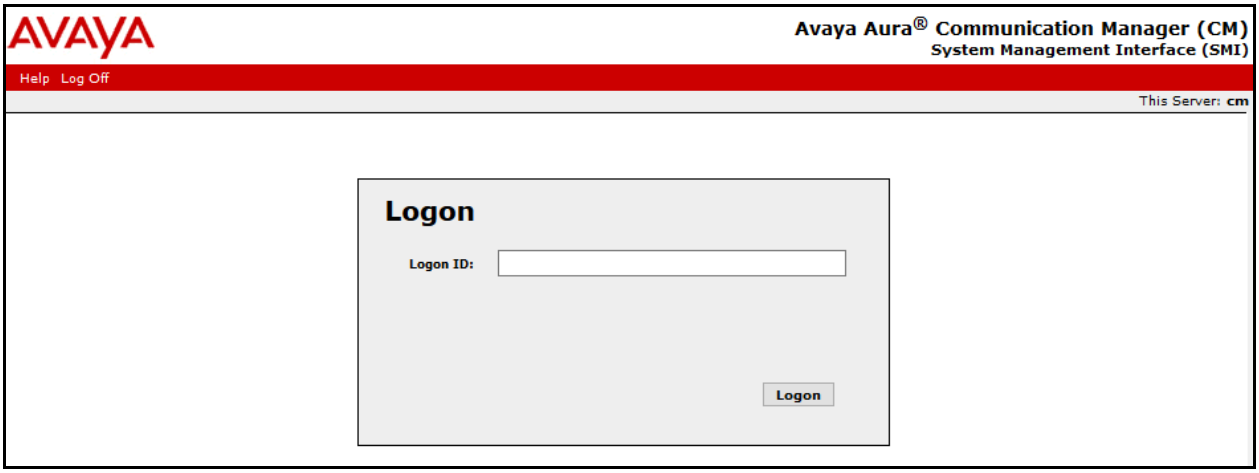
```
change ars analysis 911                                        Page   1 of   2
                             ARS DIGIT ANALYSIS TABLE
                                   Location: all            Percent Full: 1

          Dialed           Total     Route    Call   Node  ANI
          String          Min  Max  Pattern   Type   Num   Reqd
    911                   3    3     10        alrt         n
```

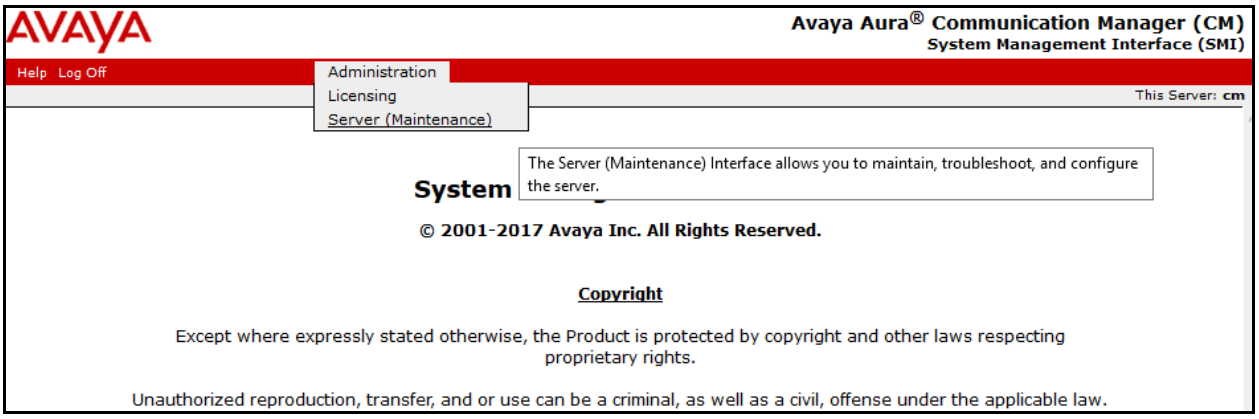
5.11.Add an Administrative User

Add a user for Spok Enterprise Alert to provide access for Avaya Site Administration and the SMS interface.

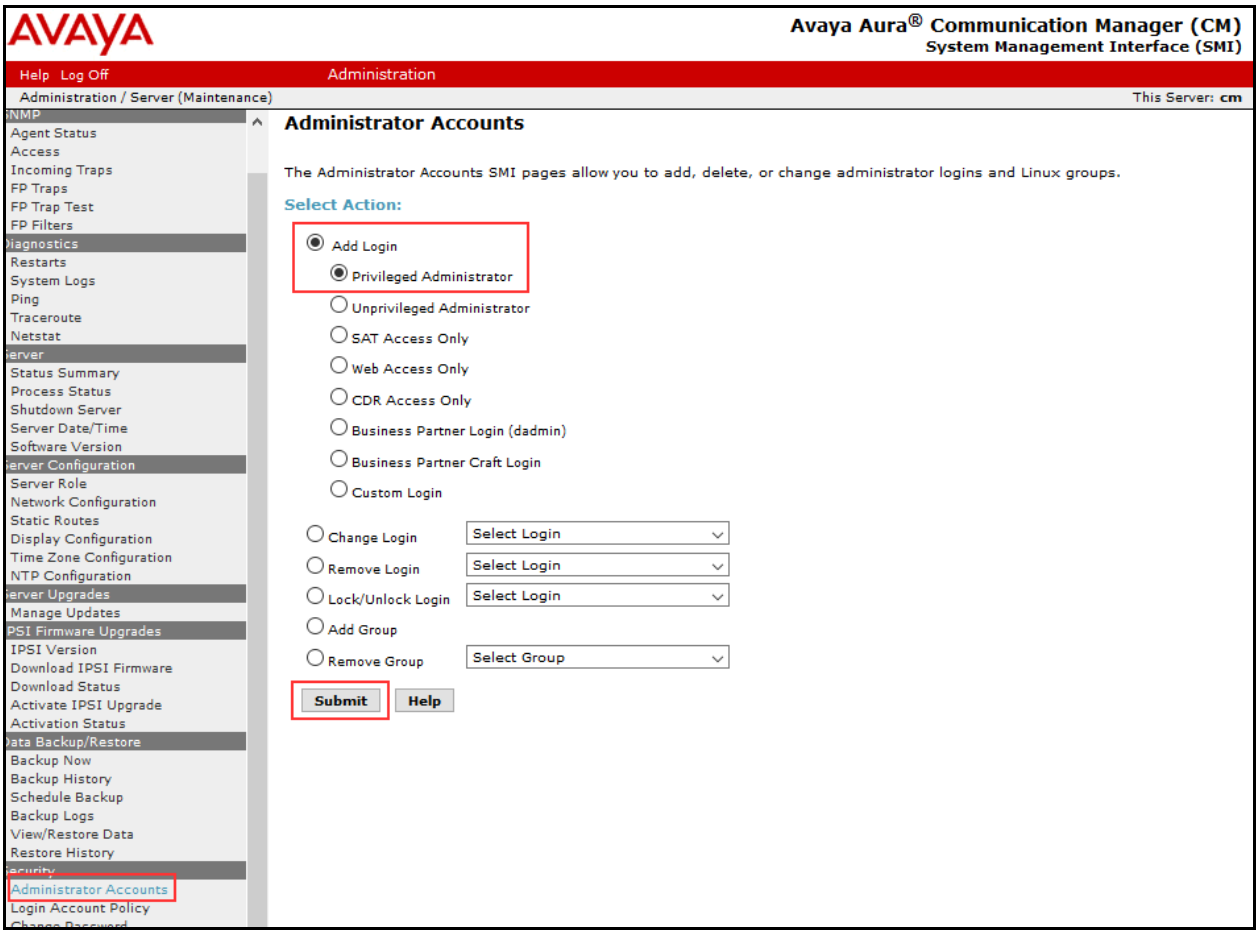
Navigate to https://<ip-address> where ip-address is the ip-address of Communication Manager and log in using appropriate credentials.



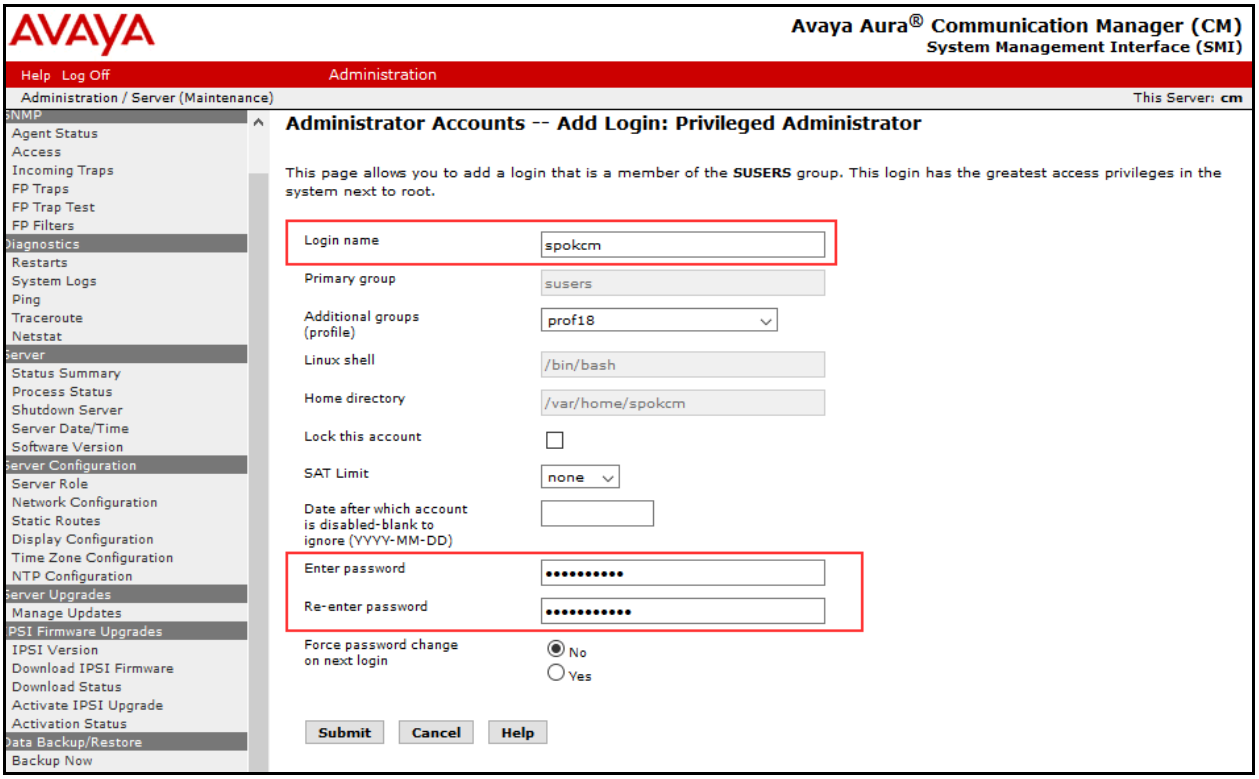
Navigate to **Administration → Server Maintenance**.



On the left pane, navigate to **Security → Administrator Accounts**, and select **Add Login → Privileged Administrator;** click **Submit**.



- Type in a **Login Name.**
- Set **Additional Groups** to a profile configured in Communication Manager. Please note that this profile was pre-configured in Communication Manager and is not shown in this document. To add a profile in Communication Manager via SAT, use the **add user-profile** command.
- Type in a password in **Enter Password** and **Re-enter password.**
- Click **Submit** when done.

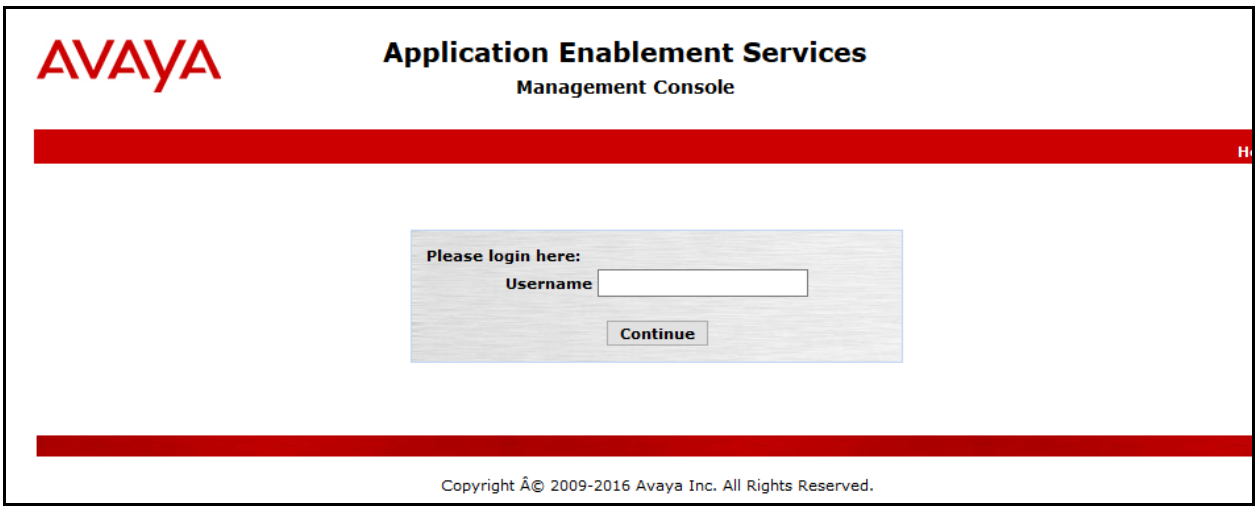


6. Configure Avaya Aura® Application Enablement Services

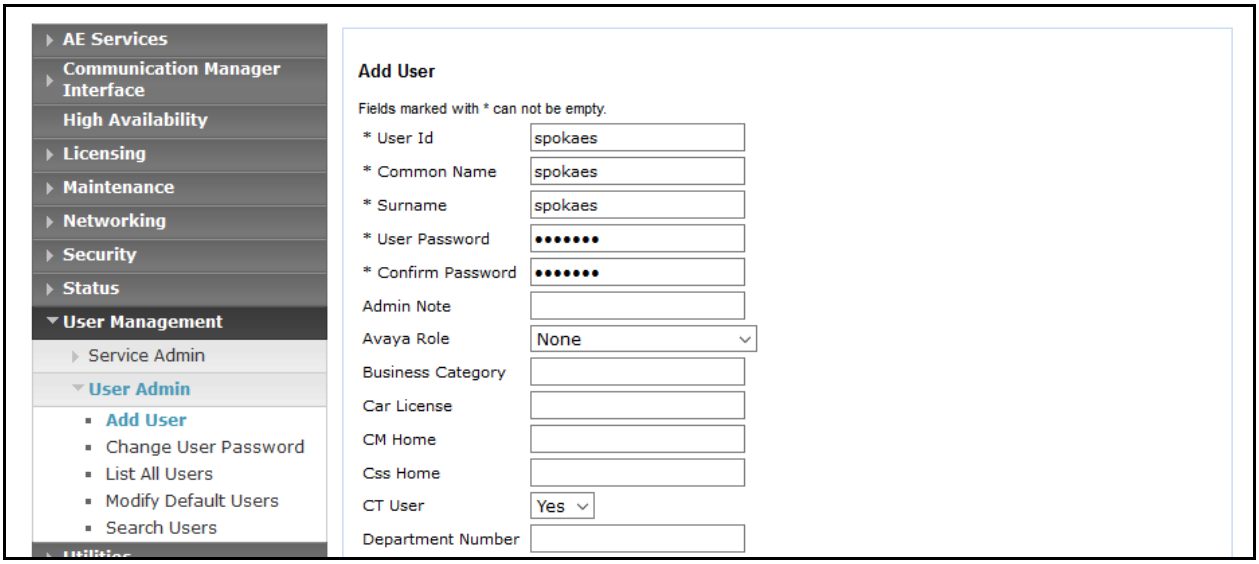
Configuration of Application Enablement Services requires a user account to be configured for Spok Enterprise Alert.

6.1. Configure User

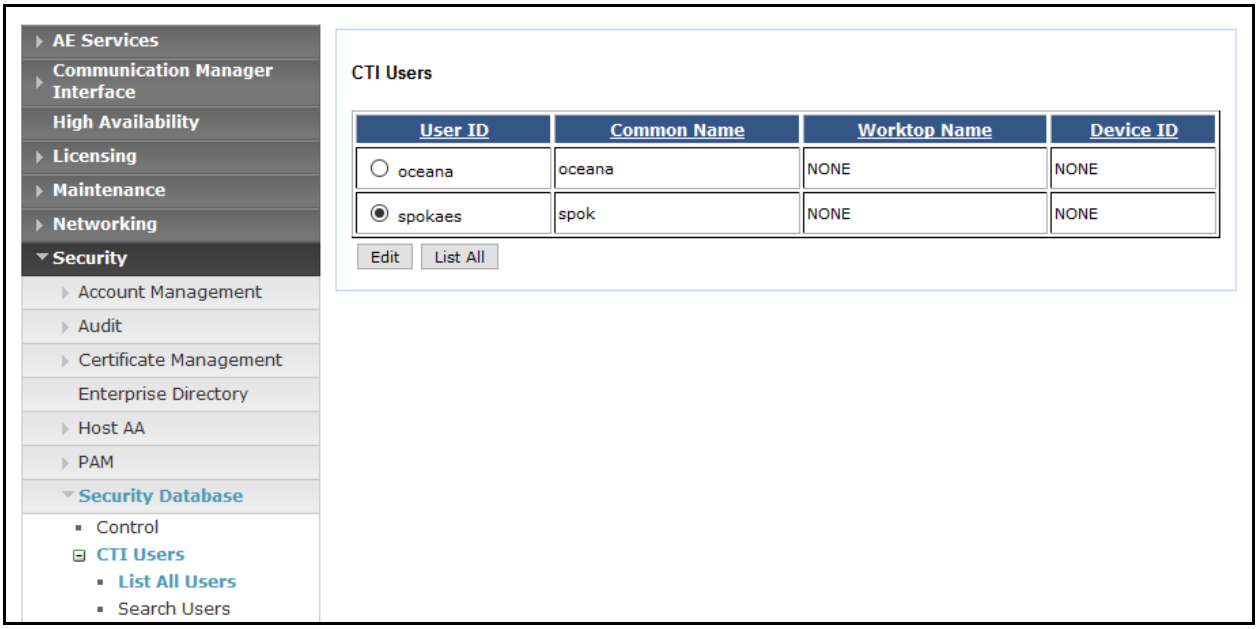
All administration is performed by web browser, https://<aes-ip-address>/. Log on using appropriate credentials



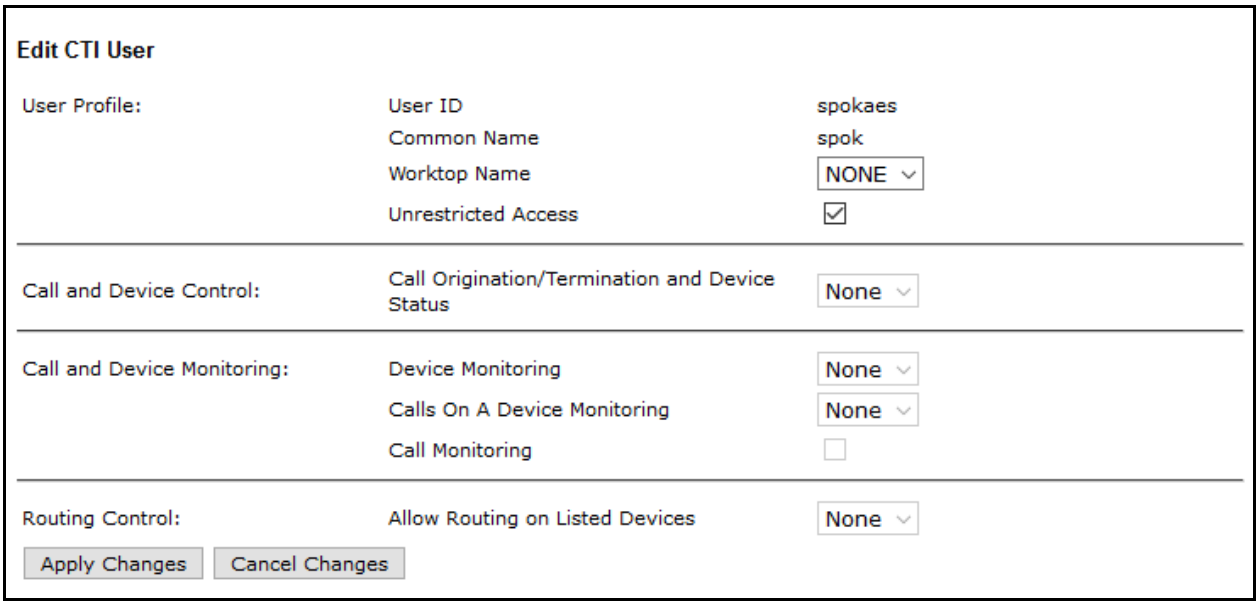
A user needs to be created for Spok Enterprise Alert to communicate with AES. Navigate to **User Management → User Admin → Add User**. Populate the **User Id, Common Name, Surname, User Password** and **Confirm Password** fields. Set the **CT User** to **Yes,** and click **Apply**.



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**.



7. Configure 46xxSetting.txt

To configure the Push, Subscribe and SNMP settings for Avaya 9600 Series IP Deskphones, configure the 46xxSetting.txt file with the following settings. Once configured, reboot the phones to take the changes.

The following is an example of SNMP SETTINGS section in the 46xxsettings.txt file:

```
#####################  SNMP SETTINGS  #######################
SET SNMPADD <ip-address>
SET SNMPSTRING spok
```

The following is an example of PUSH INTERFACE SETTINGS section in the 46xxsettings.txt file:

```
################  PUSH INTERFACE SETTINGS  #################
SET TPSLIST <ip-address>
SET SUBSCRIBELIST http:// <ip-address>/avayapush/aspx/processingpage.aspx
SET PUSHCAP 2222
SET PUSHPORT 80
```

<ip-address> is the IP Address of Spok Enterprise Alert.

8. Configure Spok Enterprise Alert

Spok installs, configures, and customizes the Enterprise Alert and ALI Alert applications for their end customers and is outside the scope of this document.

9. Verification

To verify the connectivity to Spok Enterprise Alert, use **status trunk <n>** where n is the trunk number of the PRI trunk connected to Spok Enterprise Alert. Verify **Service State** for all trunk members is **in-service/idle**.

```
status trunk 10                                                          Page   1

                              TRUNK GROUP STATUS

Member   Port     Service State      Mtce Connected Ports
                                     Busy

0010/001 001V101  in-service/idle    no
0010/002 001V102  in-service/idle    no
0010/003 001V103  in-service/idle    no
0010/004 001V104  in-service/idle    no
0010/005 001V105  in-service/idle    no
0010/006 001V106  in-service/idle    no
0010/007 001V107  in-service/idle    no
0010/008 001V108  in-service/idle    no
0010/009 001V109  in-service/idle    no
0010/010 001V110  in-service/idle    no
```

To verify Spok ALI Alert, generate a test call that will generate a crisis alert. Verify Spok ALI Alert receives the crisis alert.

10. Conclusion

Spok Enterprise Alert and ALI Alert were able to successfully interoperate with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services.

11. References

Documentation related to Avaya products may be obtained via http://support.avaya.com.

[1] Administering Avaya Aura® Communication Manager, Release 7.1, August 2017, Document Number 03-300509, Issue 1.

[2] Avaya Aura® Communication Manager Feature Description and Implementation, Release 7.1, August 2017, Document Number 555-245-205, Issue 1.

[3] Administering Avaya Aura® Session Manager, Release 7.1, Issue 1 August 2017

[4] Administering Avaya Aura® System Manager, Release 7.1, Issue 1, August, 2017

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.