



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for configuring Aperio from Fiserv with Avaya Aura® Communication Manager R6.3 and Avaya Aura® Application Enablement Services R6.3 - Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps for Aperio from Fiserv to interoperate with Avaya Aura® Communication Manager R6.3 and Avaya Aura® Application Enablement Services R6.3. Aperio utilizes the Device Media Call Control on Avaya Aura® Application Enablement Services to allow 3<sup>rd</sup> party call control.

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

These Application Notes describe the configuration steps to integrate Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services with Aperio.

Aperio consists of a backend Application Server and an agent client. It is a solution for agent desktops in an Avaya call center environment focused on voice

Aperio database contains customer and third party agency information which is available to Aperio clients. The Aperio client allows Computer Telephony Integration to Avaya telephones via Avaya Aura® Application Enablement Services using Device Media Call Control (DMCC). The client can access stored information from the Aperio database using recognised phone numbers.

## 2. General Test Approach and Test Results

The general test approach was to configure the Aperio client to communicate with Communication Manager via the Application Enablement Services (Avaya AES). Two Aperio clients were configured. Two Agents and two skills were created on Communication Manager. See **Figure 1** for a network diagram. The interoperability compliance test included both feature functionality and serviceability tests focusing on validating successful handling of inbound skillset/VDN calls using Aperio Client. This was performed by calling inbound to a VDN and/or outbound using Aperio Client to answer and make calls.

Aperio has a Client/Server relationship and Aperio server was installed on a Windows 7 laptop running an MS SQL 2008 R2 database. Connect client software is installed on each client PC utilised by an agent. The Aperio database contains the IP address of the AES and the Aperio software references this when connecting to AES ensuring that each agent PC will get its connection information to AES from a single source i.e., the database on the Aperio server.

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 receiving calls in different call scenarios. The tests included:

- Aperio client controlling 9630 IP Deskphone.
- Aperio client controlling 9611G IP Deskphone.
- Agent logs on/off of the Avaya desk phones.
- Internal/External calls to Aperio client.
- Agent Transfer and conference from Aperio client.
- Hold initiated by Aperio client
- Calls to Aperio client from customers with/without case files.
- Failover/Service – Tests the behaviour of Aperio Client during certain failed conditions.

## 2.2. Test Results

All functionality and serviceability test cases were completed successfully. The following observations were noted.

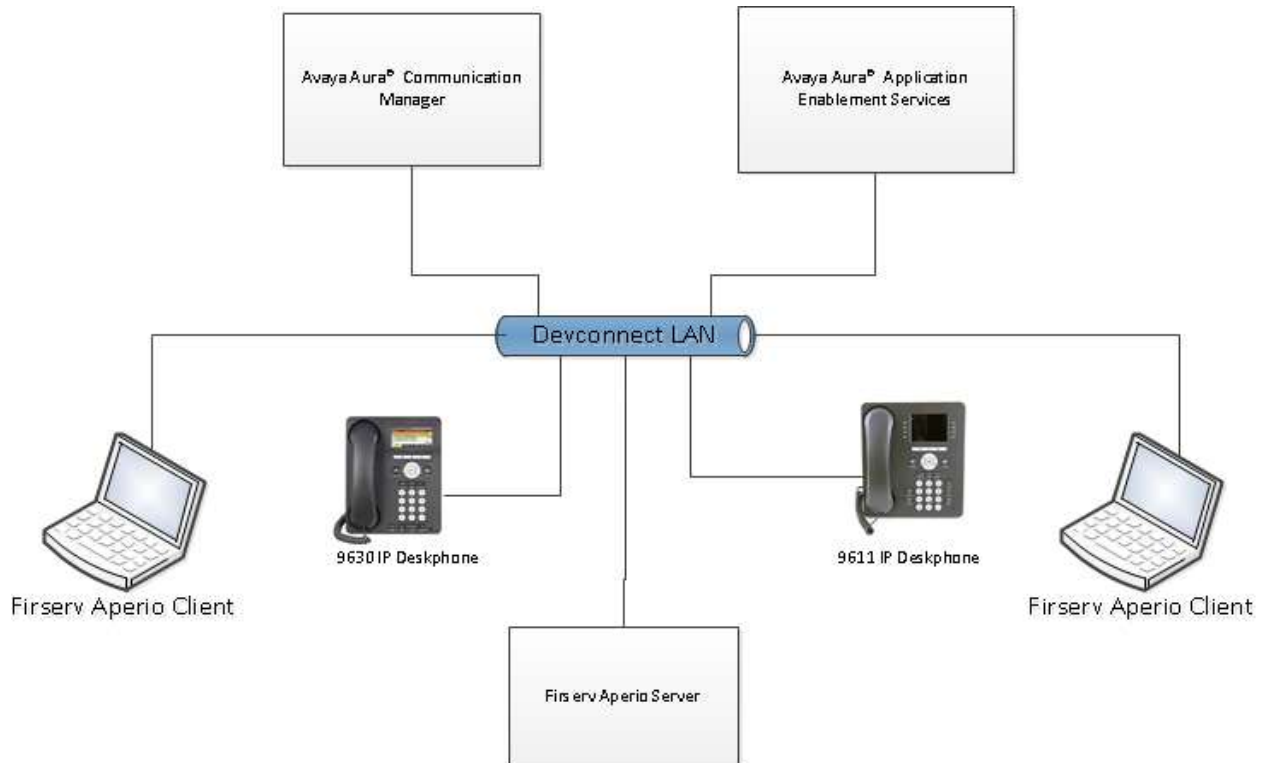
1. Aperio does not support making agent state changes on the handset controlled by the Aperio Client. The Ready/Not Ready events are not sent via Avaya AES to Aperio
2. Direct Agent calls cannot be made to the client when Aperio has the agent in an Unavailable state
3. Aperio does not return an Agent to ready state even if the AUTO-IN feature is used. Agent must be manually made available from the client. It is recommended that MANUAL-IN is used on Communication Manager stations.
4. Aperio does not have the ability to detect that an unanswered call has been terminated meaning a call answer pop up remains on screen. There is no adverse effect on the functionality when this is closed.
5. Aperio only supports conferencing to existing agents administered on the system via a drop down menu and there is no functionality to manually enter a number to add to the conference.

## 3. Support

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## 4. Reference Configuration

The configuration shown in **Figure 1** was used during the compliance test of Aperio with Avaya AES and Communication Manager. Aperio utilises a DMCC connection through Avaya AES to gain call control of the Avaya Aura® Communication Manager agent sets.



**Figure 1: Connection of Firserv Aperio with Avaya Aura® Application Enablement Services R6.3, Avaya Aura® Communication Manager R6.3**

## 5. Equipment and Software Validated

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

<b>Equipment/Software</b>	<b>Release/Version</b>
Avaya Aura® Communication Manager running on a virtual server	R6.3 SP11 R016x.03.0.124.0 - 22361
Avaya Aura® Application Enablement Services running on a virtual server	R6.3 SP4 Build No – 6.3.3.4.10-0
Avaya G450 Gateway	36.14.0
Avaya 9611G IP Deskphone	96x1 H323 Release 6.6.029
Avaya 9630 IP Deskphone	96xx H323 Release 3.2
Aperio for Agiliti	PSO_Release 2.1 20150910

## 6. Configure Avaya Aura® Communication Manager

The information provided in this section describes the configuration of Communication Manager relevant to this solution. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**.

The configuration illustrated in this section was performed using Communication Manager System Administration Terminal (SAT).

### 6.1. Configure the Avaya Aura® Communication Manager Connection to Avaya Aura® Application Enablement Services

The connection between Communication Manager and Avaya AES is assumed to be already in place however the steps required to set this connection are listed in the sections below.

#### 6.1.1. Verify System Features

Use the **display system-parameters customer-options** command to verify that Communication Manager has permissions for features illustrated in these Application Notes. 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? y                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
```

### 6.1.2. Note procr IP Address for Avaya Aura® Application Enablement Services Connectivity

Display the procr IP address by using the command **display node-names ip** and noting the IP address for the **procr** and Avaya AES (**aes63vmpg**).

```

display node-names ip                                     Page 1 of 2
                                     IP NODE NAMES
Name                               IP Address
SM100                              10.10.40.34
aes63vmpg                         10.10.40.30
default                            0.0.0.0
g430                               10.10.40.15
procr                             10.10.40.31

```

### 6.1.3. Configure Transport Link for Avaya Aura® Application Enablement Services Connectivity

To administer the transport link to Avaya AES use the **change ip-services** command. On **Page 1** add an entry with the following values:

- **Service Type:** Should be set to **AESVCS**.
- **Enabled:** Set to **y**.
- **Local Node:** Set to the node name assigned for the procr in **Section 5.1.2**
- **Local Port:** Retain the default value of **8765**.

```

change ip-services                                     Page 1 of 4
                                     IP SERVICES
Service Enabled Local Local Remote Remote
Type Type Node Port Node Port
AESVCS y procr 8765

```

Go to **Page 4** of the **ip-services** form and enter the following values:

- **AE Services Server:** Name obtained from the Avaya AES server, in this case **aes63vmpg**.
- **Password:** Enter a password to be administered on the Avaya AES server.
- **Enabled:** Set to **y**.

**Note:** The password entered for **Password** field must match the password on the Avaya AES server in **Section 6.2**. The **AE Services Server** should match the administered name for the Avaya AES server, this is created as part of the AES installation, and can be obtained from the AES server by typing **uname -n** at the Linux command prompt.

```

change ip-services                                     Page 4 of 4
                                     AE Services Administration
Server ID AE Services Password Enabled Status
Server
1: aes63vmpg ***** y idle
2:
3:

```

#### 6.1.4. Configure CTI Link for TSAPI Service

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

```
add    cti-link 1                               Page 1 of 3
                                             CTI LINK
CTI Link: 1
Extension: 2002
      Type: ADJ-IP
                                             COR: 1
      Name: aes63vmpg
```

#### 6.2. Configure routing on Avaya Aura® Communication Manager

This section shows the steps required to add a new service or skill on Communication Manager. Services are accessed by calling a Vector Directory Number (VDN) which points to a hunt group associated with an agent. These VDN's are also configured on Aperio, for example, "Sales" or "Support". The following sections give step by step instructions on how to add or configure the following:

- Variable.
- VDN.
- Vector.
- Hunt Group.
- Agent.

This same procedure is required for every VDN and Agent that is to be added on Aperio, the following sections will show the required steps to add one agent 4404 and the necessary routing for VDN 2901.



### 6.2.1. Add VDN

To add a VDN, type **add vdn x**, where x is your VDN number. Enter a suitable name for example the **VDN 2901** below will be used exclusively for calls to support.

```
add vdn 2901                                     Page 1 of 3
                                         VECTOR DIRECTORY NUMBER
                                         Extension: 2901
                                         Name*: Support Voice
                                         Destination: Vector Number      2901
Attendant Vectoring? n
Meet-me Conferencing? n
Allow VDN Override? n
COR: 1
TN*: 1
Measured: both
Acceptable Service Level (sec): 20

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

* Follows VDN Override Rules
```

### 6.2.2. Add Vector

Use **change vector x** where x is the vector number to edit the vector entered in **Section 6.2.1**. The example below shows the call queuing to skill 1 (**queue-to skill 1**).

```
change vector 2901                               Page 1 of 6
                                         CALL VECTOR
Number: 2901                                     Name: Support Voice
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 queue-to      skill 1 pri m
03 wait-time      20 secs hearing ringback
04 disconnect     after announcement none
08
09
10
11
12
```

### 6.2.3. Add Hunt Group

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

```

add hunt-group 1                                     Page 1 of 4
                                                    HUNT GROUP

Group Number: 1                                     ACD? y
Group Name: Support_Voice                           Queue? y
Group Extension: 1901                               Vector? y
  Group Type: ucd-mia
    TN: 1
    COR: 1
Security Code:                                     MM Early Answer? n
ISDN/SIP Caller Display:                          Local Agent Preference? n

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

```

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

```

add hunt-group 1                                     Page 2 of 4
                                                    HUNT GROUP

Skill? y      Expected Call Handling Time (sec): 180
AAS? n      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):      After Xfer or Held Call Drops? n

```

## 6.2.4. Add Agent

To add a new agent type **add agent-loginID x**, where x is the login id for the new agent. Enter a suitable password for **Password** as this will be used to log the agent into the phone sets.

```
add agent-loginID 4404                                     Page 1 of 3
                                     AGENT LOGINID

Login ID: 4404                                           AAS? n
Name: Paul                                             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:
Password (enter again):
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
```

On **Page 2** add the required skills. Note that the skill **1** is added to this agent so that when a call to the VDN added in **Section 6.2.1** is initiated, the call is routed correctly to this agent.

```
add agent-loginID 4404                                     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:  1      1    16:      31:      46:
2:      17:      32:      47:
3:      18:      33:      48:
4:      19:      34:      49:
5:      20:      35:      50:
6:      21:      36:      51:
7:      22:      37:      52:
8:      23:      38:      53:
9:      24:      39:      54:
10:     25:      40:      55:
11:     26:      41:      56:
12:     27:      42:      57:
13:     28:      43:      58:
14:     29:      44:      59:
15:     30:      45:      60:
```

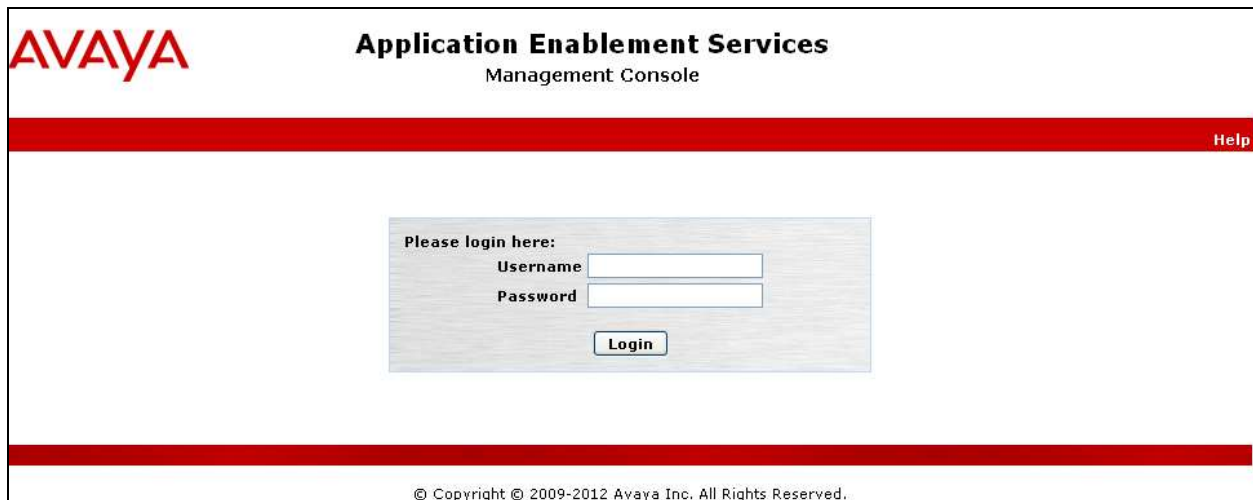
## 7. Configure Avaya Aura® Application Enablement Services

This section provides the procedures for configuring Avaya AES. The procedures fall into the following areas:

- Verify Licensing.
- Create Switch Connection.
- Administer TSAPI link.
- Enable DMCC Ports.
- Create CTI User.
- Associate Devices with CTI User.

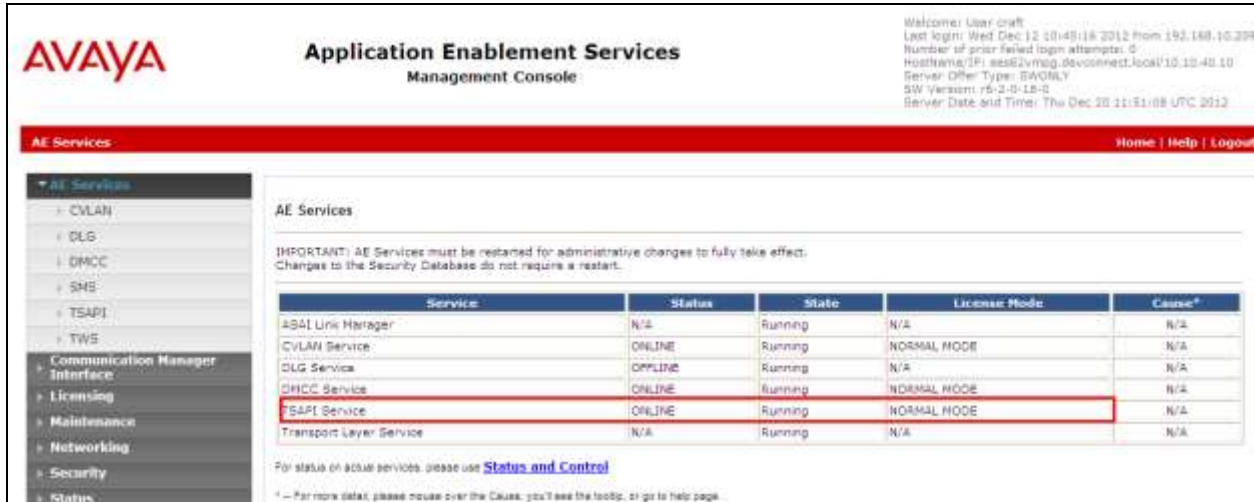
### 7.1. Verify Licensing

To access the Avaya AES Management Console, enter **https://<ip-addr>** as the URL in an Internet browser, where <ip-addr> is the IP address of Avaya AES. At the login screen displayed, log in with the appropriate credentials and then select the **Login** button.



The screenshot shows the Avaya Application Enablement Services Management Console login interface. At the top left is the Avaya logo. The title "Application Enablement Services Management Console" is centered. A red horizontal bar spans the width of the page, with a "Help" link on the right. The main content area contains a login form with the text "Please login here:" followed by "Username" and "Password" labels, each with a corresponding text input field. Below the fields is a "Login" button. At the bottom of the page, a red horizontal bar contains the copyright notice: "© Copyright © 2009-2012 Avaya Inc. All Rights Reserved."

The Application Enablement Services Management Console appears displaying the **Welcome to OAM** screen (not shown). Select **AE Services** and verify that the TSAPI Service is licensed by ensuring that **TSAPI Service** is in the list of **Services** and that the **License Mode** is showing **NORMAL MODE**. If not, contact an Avaya support representative to acquire the proper license for your solution.

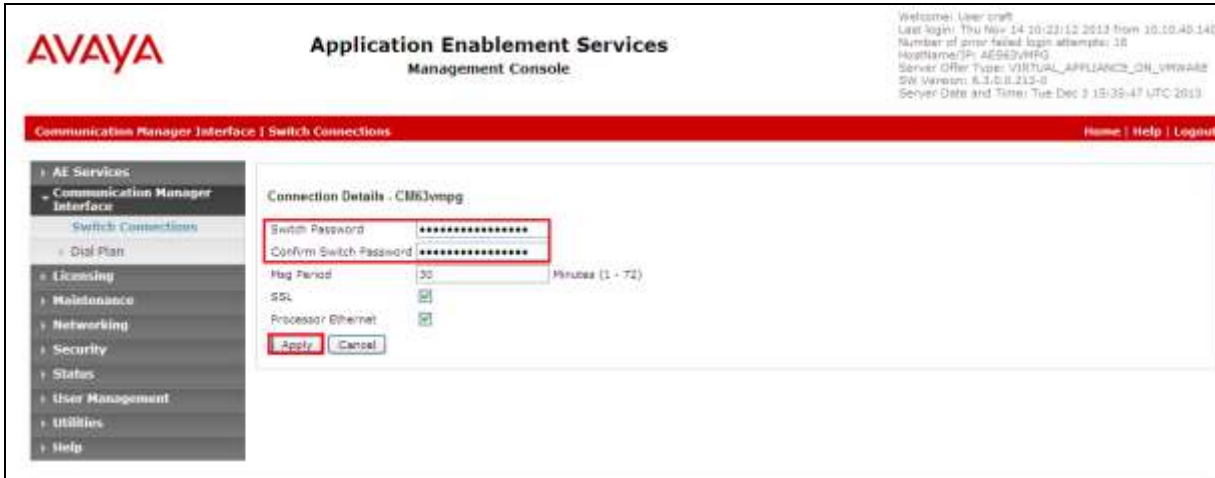


## 7.2. Create Switch Connection

From the Avaya AES Management Console navigate to **Communication Manager Interface** → **Switch Connections** to set up a switch connection. Enter a name for the Switch Connection to be added and click the **Add Connection** button.



In the resulting screen enter the **Switch Password**; the Switch Password must be the same as that entered into Communication Manager AE Services Administration screen via the **change ip-services** command, described in **Section 6.1.3**. Default values may be accepted for the remaining fields. Click **Apply** to save changes.



From the **Switch Connections** screen, select the radio button for the recently added switch connection and select the **Edit PE/CLAN IPs** button (not shown). In the resulting screen, enter the IP address of the procr as shown in **Section 6.1.2** that will be used for the Avaya AES connection and select the **Add/Edit Name or IP** button.



### 7.3. Administer TSAPI link

From the Application Enablement Services Management Console, select **AE Services** → **TSAPI** → **TSAPI Links**. Select **Add Link** button as shown in the screen below.



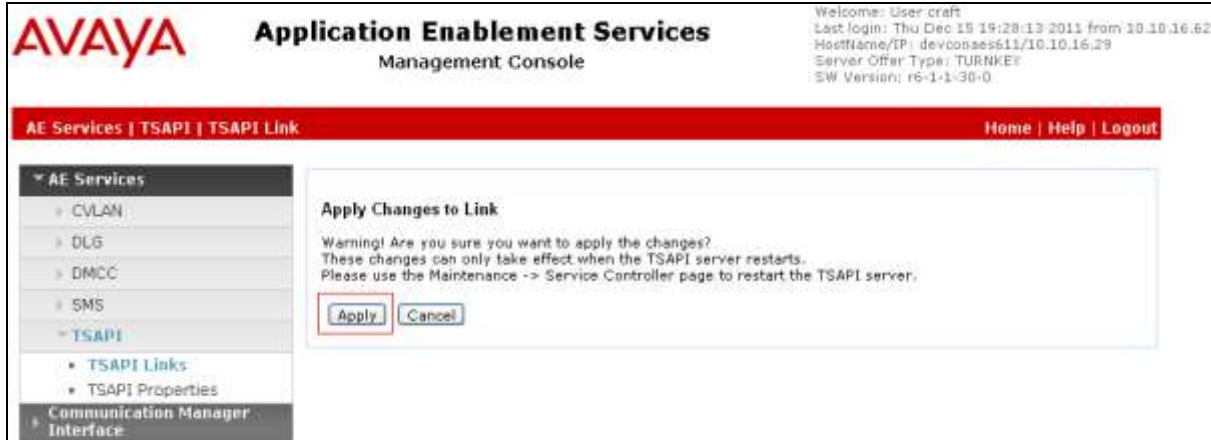
On the **Add TSAPI Links** screen (or the **Edit TSAPI Links** screen to edit a previously configured TSAPI Link as shown below), enter the following values:

- **Link:** Use the drop-down list to select an unused link number.
- **Switch Connection:** Choose the switch connection **CM63VMPPG**, which has already been configured in **Section 7.2** from the drop-down list.
- **Switch CTI Link Number:** Corresponding CTI link number configured in **Section 5.1.4** which is **1**.
- **ASAI Link Version:** This can be left at the default value of **5**.
- **Security:** This can be left at the default value of **both**.

Once completed, select **Apply Changes**.



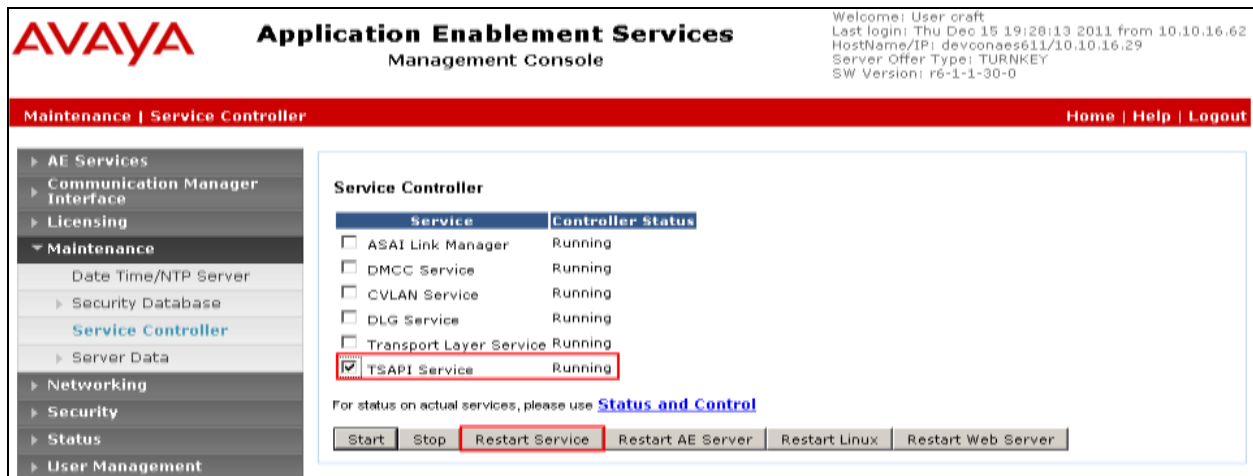
Another screen appears for confirmation of the changes made. Choose **Apply**.



When the TSAPI Link is completed, it should resemble the screen below.



The TSAPI Service must be restarted to effect the changes made in this section. From the Management Console menu, navigate to **Maintenance** → **Service Controller**. On the Service Controller screen, tick the **TSAPI Service** and select **Restart Service**.





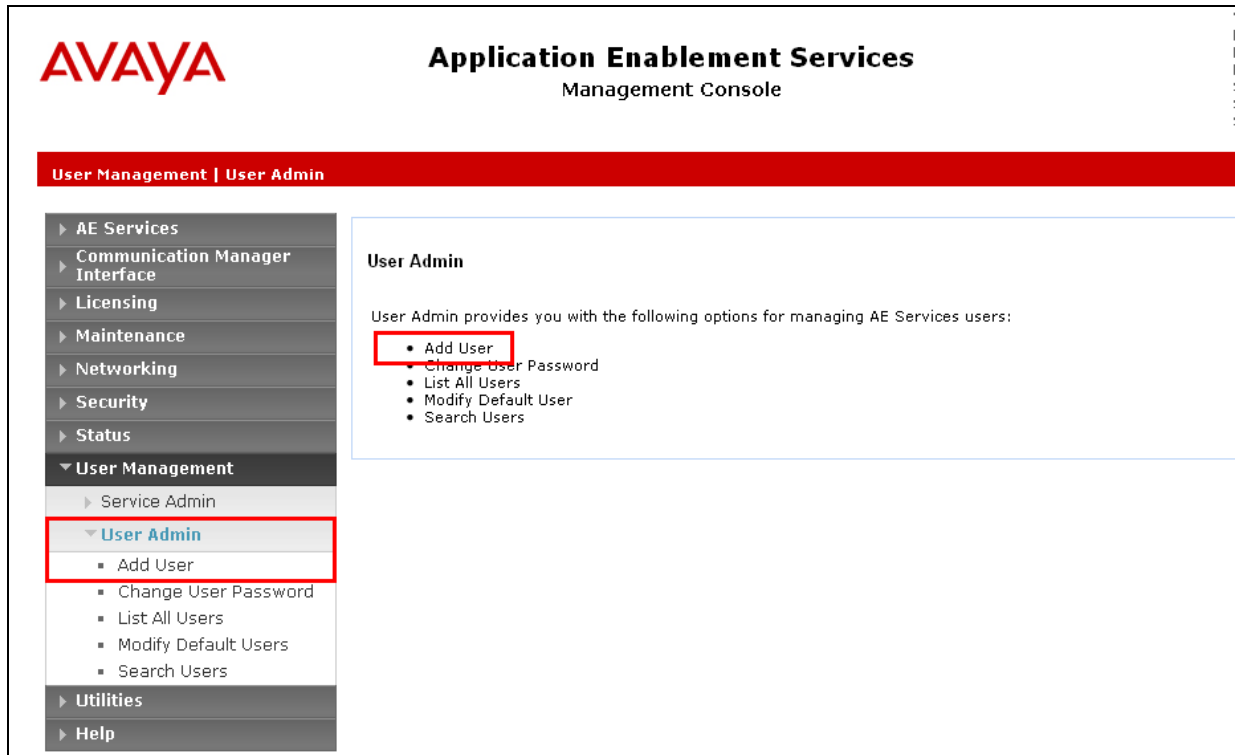
## 7.4. Enable DMCC Ports

To ensure that DMCC ports are enabled, navigate to **Networking** → **Ports**. In the section **DMCC Server Ports**, ensure that the **Unencrypted Port** is set to **Enabled** as shown below.

<b>Interface</b> High Availability ▶ Licensing ▶ Maintenance ▼ Networking AE Service IP (Local IP) Network Configure <b>Ports</b> TCP Settings ▶ Security ▶ Status ▶ User Management ▶ Utilities ▶ Help	CVLAN Ports		Enabled Disabled
	Unencrypted TCP Port	9999	<input checked="" type="radio"/> <input type="radio"/>
	Encrypted TCP Port	<input type="text" value="9998"/>	<input checked="" type="radio"/> <input type="radio"/>
	DLG Port		
	TCP Port	5678	
	TSAPI Ports		Enabled Disabled
	TSAPI Service Port	450	<input checked="" type="radio"/> <input type="radio"/>
	Local TLINK Ports		
	TCP Port Min	1024	
	TCP Port Max	1039	
	Unencrypted TLINK Ports		
	TCP Port Min	<input type="text" value="1050"/>	
	TCP Port Max	<input type="text" value="1065"/>	
	Encrypted TLINK Ports		
	TCP Port Min	<input type="text" value="1066"/>	
TCP Port Max	<input type="text" value="1081"/>		
DMCC Server Ports		Enabled Disabled	
Unencrypted Port	<input type="text" value="4721"/>	<input checked="" type="radio"/> <input type="radio"/>	
Encrypted Port	<input type="text" value="4722"/>	<input checked="" type="radio"/> <input type="radio"/>	
TR/87 Port	<input type="text" value="4723"/>	<input checked="" type="radio"/> <input type="radio"/>	
H.323 Ports			
TCP Port Min	<input type="text" value="20000"/>		
TCP Port Max	<input type="text" value="24999"/>		
Local UDP Port Min	<input type="text" value="30000"/>		
Local UDP Port Max	<input type="text" value="34999"/>		
Server Media		Enabled Disabled	
		<input checked="" type="radio"/> <input type="radio"/>	
RTP Local UDP Port Min*	<input type="text" value="40000"/>		
RTP Local UDP Port Max*	<input type="text" value="49999"/>		
* Note: The number of RTP ports needs to be double the number of extensions using server media.			

## 7.5. Create CTI User

A User ID and password needs to be configured for the Aperio server to communicate as a TSAPI client with the Avaya AES server. Navigate to the **User Management** → **User Admin** screen then choose the **Add User** option.



The screenshot displays the Avaya Application Enablement Services Management Console. The top left features the AVAYA logo, and the top center shows the title "Application Enablement Services Management Console". A red navigation bar at the top indicates the current location: "User Management | User Admin".

On the left side, there is a navigation menu with the following items:

- ▶ AE Services
- ▶ Communication Manager Interface
- ▶ Licensing
- ▶ Maintenance
- ▶ Networking
- ▶ Security
- ▶ Status
- ▼ User Management
  - ▶ Service Admin
  - ▼ User Admin
    - Add User
    - Change User Password
    - List All Users
    - Modify Default Users
    - Search Users
- ▶ Utilities
- ▶ Help

In the **Add User** screen shown below, enter the following values:

- **User Id** - This will be used by the Apero Server to connect to Avaya AES.
- **Common Name** and **Surname** - Descriptive names need to be entered.
- **User Password** and **Confirm Password** - This will again be used by the Apero Server.
- **CT User** - Select **Yes** from the drop-down menu.

The screenshot shows the 'Edit User' form in the Avaya Application Enablement Services Management Console. The form includes fields for User Id, Common Name, Surname, User Password, Confirm Password, Admin Note, Avaya Role (set to None), Business Category, Car License, CH Home, and Ccs Home. The CT User dropdown menu is set to Yes. The left sidebar shows the navigation menu with 'User Management' expanded to 'User Admin' and 'Add User' selected. The top right corner displays system information including the user's name, last login time, and server details.

Complete the process by choosing **Apply** at the bottom of the screen.

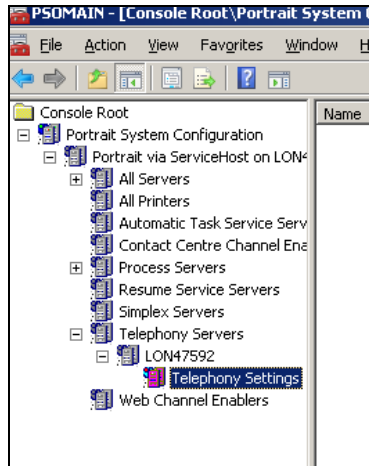
This close-up screenshot focuses on the 'Add User' option in the left sidebar and the 'CT User' dropdown menu, which is set to 'Yes'. The 'Apply Changes' button is highlighted at the bottom of the form. The form fields for Business Category, Car License, CH Home, and Ccs Home are also visible.

The next screen will show a message indicating that the user was created successfully (not shown).

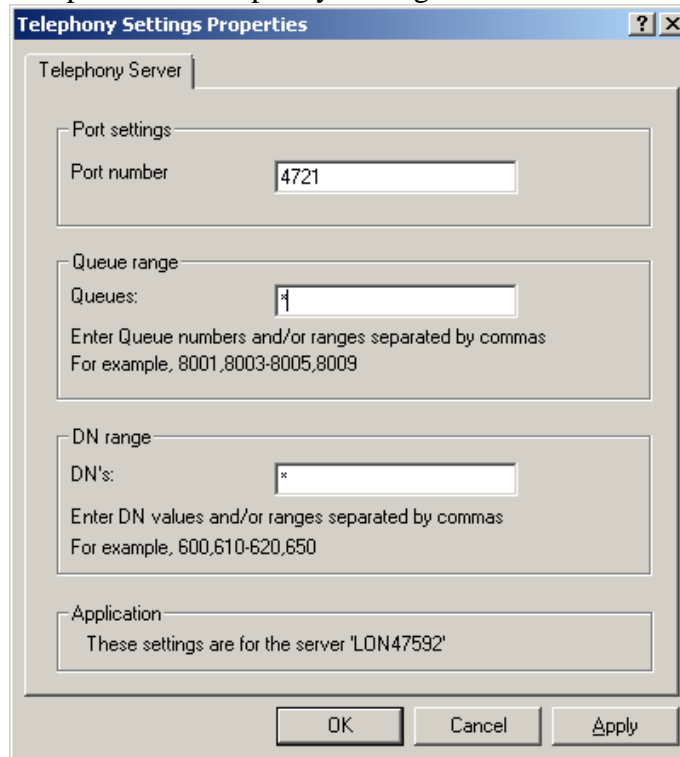
## 8. Configure Aperio

### 8.1. Configure telephony server

Run Portrait management console and create a new telephony server whose name is the server name of the Avaya AES.



The Properties of Telephony Settings should be set as below



Note: If the Portrait MMC does not resolve the server name (or IP address) being added as the telephony server it will refuse to allow the server to be added.

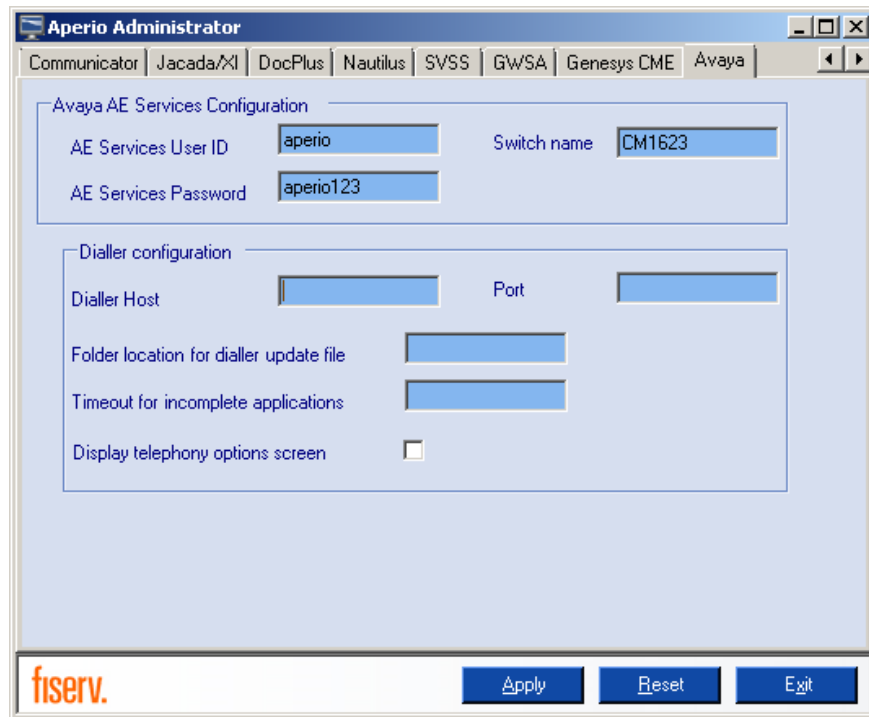
### 8.1.1. Manually Add Telephony Server

Create a telephony server whose name is the name of the local server and set up all other settings as above. Go to the Apero database and update the relevant tables directly in order to add the Avaya AES server as a new telephony server. The following script will create and update the necessary tables, and should be modified beforehand so that the names of the new and configured telephony server are correctly set as indicated by the comments in the script.



### 8.2. Configure Apero Administrator

Configure the **AE Services User ID**, **AE Services Password** and **Switch name** into Apero Administrator. Use the user and Switch created in **Section 7**



### 8.3. Configure Agent in Agent Manager

Each agent will need to be configured in Agent Manager with **Extension number**, **Telephony ID** and **Telephony queue**.

Entries in the above dialogue should be set as follows.

Extension number	The extension of the phone used by the agent.
Telephony ID	The agent ID as configured in CM for the agent.
Telephony password	The password for the agent ID as configured in CM.
Telephony queue	The hunt group number that the agent will log on to as configured in CM.

### 8.4. Configure Teams in Agent Manager

In Agent Manager configure the telephony details for individual teams.

The telephone number for the team should be set to the VDN associated with the hunt group as defined in **Section 6.2.1**.

## 9. Verification Steps

This section provides the steps that can be taken to verify correct configuration of the Avaya solution and Aperio server.

### 9.1. Verify Avaya Aura® Communication Manager CTI Service State

The following steps can validate that the communication between Communication Manager and Avaya AES is functioning correctly. Check the AESVCS link status by using the command **status aesvcs cti-link**. Verify the **Service State** of the CTI link is **established**.

```
status aesvcs cti-link
```

AE SERVICES CTI LINK STATUS						
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd
1	4	no	aes63vmpg	<b>established</b>	18	18

### 9.2. Verify TSAPI Link

On the Avaya AES Management Console verify the status of the TSAPI link by selecting **Status** → **Status and Control** → **TSAPI Service Summary** to display the **TSAPI Link Details** screen. Verify the status of the TSAPI link by checking that the **Status** is **Talking** and the **State** is **Online**.

AVAYA Application Enablement Services Management Console

Welcome! User: cmsh  
Last login: Thu Feb 20 11:01:32 2014 from 192.168.10.223  
Number of prior failed login attempts: 33  
HostName: SP1 AES63VMPG  
Server Offer Type: VIRTUAL\_APPLIANCE\_ON\_VMWARE  
SW Version: 6.3.0.0.213-0  
Server Date and Time: Thu Feb 20 11:04:02 UTC 2014

Status | Status and Control | TSAPI Service Summary

TSAPI Link Details

Enable page refresh every 60 seconds

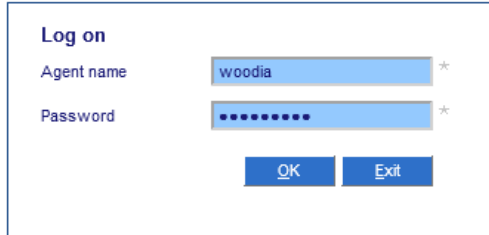
Link	Switch Name	Switch CTI Link ID	Status	Since	State	Switch Version	Associations	Msgs to Switch	Msgs from Switch	Msgs Period
1	CH63vmpg	1	Talking	Tue Feb 18 11:01:49 2014	Online	16	5	15	18	30

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

### 9.3. Aperio connection

Start Aperio client and enter **Agent name** and **Password** as configured in Agent Manager. Note, this is the user ID and password for Communicator / Signature. Press **OK** to validate Agent Name and Password.

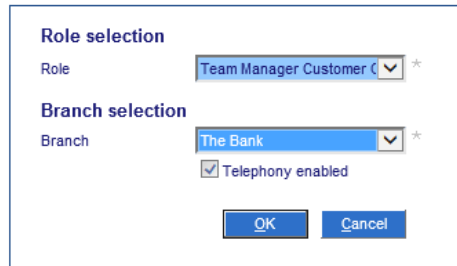
#### Aperio



The screenshot shows a dialog box titled "Log on". It contains two input fields: "Agent name" with the text "woodia" and "Password" with a masked password of ten dots. Both fields have an asterisk to their right. At the bottom, there are two buttons: "OK" and "Exit".

Choose a role and branch for the agent and ensure that the "Telephony enabled" checkbox is ticked. Press **OK**

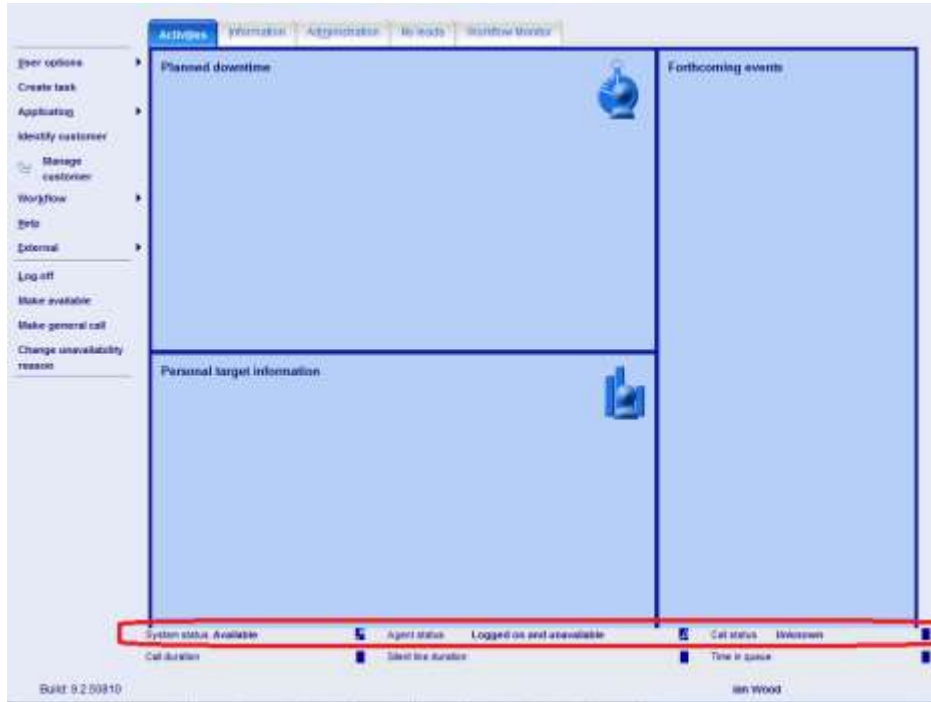
#### Aperio



The screenshot shows a dialog box with two sections. The first section, "Role selection", has a "Role" dropdown menu set to "Team Manager Customer C" with an asterisk to its right. The second section, "Branch selection", has a "Branch" dropdown menu set to "The Bank" with an asterisk to its right, and a checked checkbox labeled "Telephony enabled". At the bottom, there are two buttons: "OK" and "Cancel".



The agent desktop will be displayed. The telephony bar at the bottom of the screen will show the initial status of telephony. **System status** will be **Available** and **Agent status** will be **Logged on and unavailable**.



## 10. Conclusion

These Application Notes describe the configuration steps required for Fiserv Aperio to successfully interoperate with Avaya Aura® Avaya Aura® Communication Manager R6.3 and Avaya Aura® Application Enablement Services R6.3. All feature functionality and serviceability test cases were completed successfully with observations noted in **Section 2.2**.

## 11. Additional References

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

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

- [1] *Administering Avaya Aura® Communication Manager*, Document ID 03-300509.
- [2] *Avaya Aura® Communication Manager Feature Description and Implementation*, Document ID 555-245-205.
- [3] *Avaya Aura® Application Enablement Services Administration and Maintenance Guide Release 6.3*.

Technical documentation can be obtained for fiserv Aperio by contacting Fiserv and / or consulting the following Portrait base documents.

- [1] *Integrating telephony*, Edition 7.1.
- [2] *New Feature Overview*, Edition 1.0.
- [3] *Telephony Client Integration Developers Guide*, Edition 1.0.

# Appendix

## Avaya 9608 H323 Deskphone

This is a printout of the Avaya 9608 H323 Deskphone used during compliance testing.

```
display station 2016                                     Page 1 of 5
                                                    STATION
Extension: 2016                                         Lock Messages? n          BCC: M
Type: 9608                                             Security Code: *         TN: 1
Port: S00102                                          Coverage Path 1:        COR: 1
Name: CCT Agent2                                       Coverage Path 2:        COS: 1
                                                    Hunt-to Station:        Tests? y

STATION OPTIONS
Location:                                             Time of Day Lock Table:
Loss Group: 19                                       Personalized Ringing Pattern: 1
                                                    Message Lamp Ext: 2016
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? y
Short/Prefixed Registration Allowed: default

                                                    Customizable Labels? y
```

### Page 2

```
display station 2016                                     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? n                              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: disabled
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: 2016                           Always Use? n IP Audio Hairpinning? n
```

**Page 3**

```
display station 2016                                     Page 3 of 5
                                                    STATION
    Conf/Trans on Primary Appearance? n
    Bridged Appearance Origination Restriction? n      Offline Call Logging? y
    Require Mutual Authentication if TLS? n

    Call Appearance Display Format: disp-param-default
    IP Phone Group ID:
    Enhanced Callr-Info Display for 1-Line Phones? n

    ENHANCED CALL FORWARDING
    Forwarded Destination      Active
Unconditional For Internal Calls To:      n
    External Calls To:      n
    Busy For Internal Calls To:      n
    External Calls To:      n
    No Reply For Internal Calls To:      n
    External Calls To:      n

    SAC/CF Override: n
```

**Page 4**

```
display station 2016                                     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: ec500      Timer? n
    2: call-appr      6: extnd-call
    3: call-appr      7:
    4: call-park      8:

    voice-mail
```

---

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