

# Avaya Solution & Interoperability Test Lab

# Application Notes for Acqueon iAssist Call Back Manager with Avaya Aura® Application Enablement Service and Avaya Aura® Experience Portal – Issue 1.0

#### **Abstract**

These Application Notes describe the configuration steps required to integrate the Acqueon iAssist Call Back Manager with Avaya Aura® Application Enablement Service and Avaya Aura® Experience Portal. The iAssist Call Back Manager offers callers queued to a call center the option to continue to wait in queue for an agent or request a call back when either an agent becomes available or schedule a call back for a specified date and time.

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

These Application Notes describe the configuration steps required to integrate the Acqueon iAssist Call Back Manager (CBM) with Avaya Aura® Application Enablement Service (AES) and Avaya Aura® Experience Portal (Experience Portal). CBM offers callers queued to a call center the option to continue to wait in queue for an agent or request a call back when either an agent becomes available or schedule a call back for a specified date and time.

CBM integrates with Experience Portal via VoiceXML and CCXML applications to offer call backs requests to callers and place calls to those callers who requested callbacks. iAssist (RapCTI module) integrates with AES via TSAPI interface to monitor the H.323 ports configured for Experience Portal.

CBM consists of two modules: an Inbound module and an Outbound module; both of these modules are installed on iAssist Admin server. The Inbound module is designed to take a call back request from a caller waiting to be serviced by an agent. The Outbound module retrieves the call back request based on priority and time of the callback and then dials the agent queue. If an agent becomes available, the Outbound module places a call to the agent, the call details are voiced to the agent and then an outbound call to the telephone number specified by the caller is made. The incoming call flow is described below.

- Customer calls the contact center and gets routed to an agent queue.
- Call is routed to CBM via Communication Manager (H.323 channels).
- Once the call is answered by the CBM Inbound module (application) configured on Experience Portal, CBM offers various options to leave a call back request. The following are the call back options:
  - o Call back as soon as an agent is available
  - o Call back on same day at a later time
  - o Call back on a future day and time
- CBM then prompts the customer to enter the call back contact number, account information, and appropriate date/time of call back. A request is then registered into the CBM database.
- If a customer decides to decline the callback option, call is routed back in queue on Communication Manager.

The CBM Outbound module running on the iAssist Admin server continuously polls the database on a regular interval to retrieve pending callback requests. The Outbound module then calls the appropriate agent group number to get an agent to process the callback. Once the agent answers the call, CBM plays the customer's information to the agent. CBM then dials the customer's number and conferences the call with the agent. If the customer call cannot be completed, CBM reschedules the call based on a pre-defined schedule interval. CBM reschedules the call for a specified number of times. Once the maximum attempts have been made unsuccessfully, the call is marked as failed.

Another Acqueon related solution is described in Application Notes for Acqueon iAssist Call Survey Manager with Avaya Aura® Experience Portal.

# 2. General Test Approach and Test Results

This section describes the interoperability compliance testing used to verify the CBM applications AES and Experience Portal.

The interoperability compliance test included feature and serviceability testing. The feature testing focused on routing calls to Experience Portal and running the CBM applications to allow the caller the option to request a call back. All of the call back request options available in the CBM Inbound application were tested. In addition, the CBM Outbound application was also verified. The Outbound module initiated the call back to the agent and caller and established a two-way talk path. Conditions where the call back could not be established were also verified. In these cases, the call was either rescheduled or marked as failed, if the number of retries were exceeded. Finally, the registered call back requests and call back status were verified in iAssist reports.

The serviceability testing focused on verifying the ability of iAssist Admin server, and AES and Experience Portal to recover from adverse conditions, such as power failures and disconnecting network.

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.

# 2.1. Interoperability Compliance Testing

Interoperability compliance testing included feature and serviceability testing. The feature testing focused on the following functionality:

- Routing incoming calls to Experience Portal via H.323 channels on Communication Manager.
- Experience Portal successfully running both CBM applications.
- The ability of the caller to continue waiting in queue for an agent.
- The ability of the caller to make a call back request. Various offered call back options were tested.
- CBM servicing pending call back requests.
- The ability to reschedule a call back if the call to the agent or caller is not completed within a specified timeout value.
- iAssist reports showing the registered call back requests and the call back status.

The serviceability testing focused on verifying the ability of the iAssist Admin server and Experience Portal to recover from adverse conditions, such as power and network failures.

#### 2.2. Test Results

All executed test cases passed.

## 2.3. Support

For technical support on the iAssist Call Back Manager, contact Acqueon via phone, email, or internet. You can also raise the ticket in our Acqueon portal by using your Issue Trak Login ID. You can reach our Product Support desk by reaching below Contact number.

• **Phone:** +91 44 3089 4888/+91 44 6108 4888(APAC and MEA)

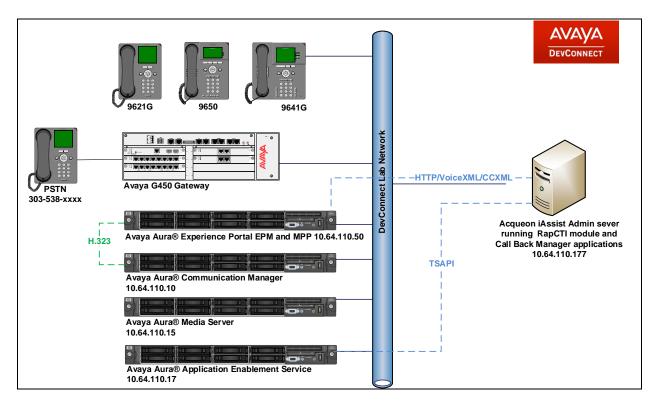
+1 888 946 6878(USA and Europe)

• Email: support@acqueon.com

• Web: http://acqueon.issuetrak.com

# 3. Reference Configuration

Error! Reference source not found. **Figure 1** below depicts the lab configuration used for testing. In this configuration, Experience Portal interfaces with Communication Manager via H.323. The iAssist Admin server hosted the CBM applications supporting the CBM Inbound and Outbound modules. The iAssist Admin server also connected to AES via TSAPI. The iAssist Admin server used the Microsoft SQL Server database.



**Figure 1: Test Configuration Diagram** 

# 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
running on Virtualized Environment	R017x.01.0.532.0 Build 24515
Avaya Aura® Application Enablement	
Services running on Virtualized	7.1.3.0.1.7-0
Environment	
Avaya Aura® Media Server running on	7.8
Virtualized Environment	7.0
Avaya Aura® Experience Portal running	7.2.1.0.0605
on Virtualized Environment	7.2.1.0.0003
Avaya G450 Media Gateway	38.19.0
Avaya 9641GS H323 IP Deskphone	6.6.6
Avaya 9621G SIP IP Deskphone	7.1.29
Acqueon iAssist Admin server running on	Microsoft Windows Server 2012 R2
a Virtualized Environment hosting:	Microsoft SQL Server 2012
RapCTI module	2.2.1.17 AT8 C115
Call Back Manager applications	
Avaya Aura® Orchestration Designer	7.2 Feature Pack 1
(aesconnector and runtimeconfig)	

**Note:** aesconnector.jar was running on Acqueon iAssist Admin Server, is owned by Avaya. This aesconnect.jar file comes bundled with Avaya Aura® Orchestration Designer package.

# 5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager via the System Access Terminal (SAT). The procedures include the following areas:

- Administer System Parameters Features.
- Administer Hunt Groups for Agents.
- Administer Agent IDs for Agents.
- Administer Call Vectoring.
- Administer H.323 Channels for Experience Portal.
  - o Administer Hunt Group
  - Administer Stations
  - o Administer Agent IDs
- Administer AES Connectivity.

# 5.1. Administer System Parameters Features

Configure **System Parameter Features** that were configured during compliance test. On Page 5, enable **Create Universal Call ID** and provide a unique **UCID Network Node.** 

```
change system-parameters features
                                                                 Page
                                                                        5 of
19
                        FEATURE-RELATED SYSTEM PARAMETERS
SYSTEM PRINTER PARAMETERS
 Endpoint:
                          Lines Per Page: 60
SYSTEM-WIDE PARAMETERS
                                     Switch Name:
            Emergency Extension Forwarding (min): 10
          Enable Inter-Gateway Alternate Routing? n
Enable Dial Plan Transparency in Survivable Mode? n
                              COR to Use for DPT: station
                EC500 Routing in Survivable Mode: dpt-then-ec500
MALICIOUS CALL TRACE PARAMETERS
               Apply MCT Warning Tone? n
                                           MCT Voice Recorder Trunk Group:
      Delay Sending RELease (seconds): 0
SEND ALL CALLS OPTIONS
     Send All Calls Applies to: station
                                           Auto Inspect on Send All Calls? n
              Preserve previous AUX Work button states after deactivation? n
UNIVERSAL CALL ID
    Create Universal Call ID (UCID)? y
                                           UCID Network Node ID: 1
```

On Page 6, enable **7434ND**. This is used by H.323 channels configured for Communication Manager to communicate with Experience Portal.

```
change system-parameters features
                                                                      6 of 19
                                                               Page
                       FEATURE-RELATED SYSTEM PARAMETERS
         Public Network Trunks on Conference Call: 5
                                                                Auto Start? n
   Conference Parties with Public Network Trunks: 6
                                                                 Auto Hold? n
Conference Parties without Public Network Trunks: 6
                                                             Attendant Tone? y
        Night Service Disconnect Timer (seconds): 180
                                                             Bridging Tone? n
                Short Interdigit Timer (seconds): 3
                                                            Conference Tone? n
             Unanswered DID Call Timer (seconds):
                                                            Intrusion Tone? n
             Line Intercept Tone Timer (seconds): 30 Mode Code Interface? n
                Long Hold Recall Timer (seconds): 0
                     Reset Shift Timer (seconds): 0
     Station Call Transfer Recall Timer (seconds): 0
                                                            Recall from VDN? n
          Trunk Alerting Tone Interval (seconds): 15
                              DID Busy Treatment: tone
              Allow AAR/ARS Access from DID/DIOD? n
                Allow ANI Restriction on AAR/ARS? n
Use Trunk COR for Outgoing Trunk Disconnect/Alert? n
                 7405ND Numeric Terminal Display? n
                                                                     7434ND? y
    DTMF Tone Feedback Signal to VRU - Connection:
                                                           Disconnection:
```

Note that there were other System Parameters Features were also enabled, but such parameters are standard in nature for a call center configuration and are out of scope for this document.

# 5.2. Administer Hunt Groups

This section provides the Hunt Group configuration for the call center agents. Agents will log into Hunt Group 1 configured below. Provide a descriptive name and set the **Group Extension** field to a valid extension. Enable the **ACD**, **Queue**, and **Vector** options. This hunt group will be specified in the **Agent LoginIDs** configured in **Section 5.3**.

```
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:
 Time Warning Threshold:
SIP URI:
```

On Page 2 of the Hunt Group form, enable the **Skill** option.

```
add hunt-group 1

Skill? y

AAS? n

Measured: both
Supervisor Extension:

Controlling Adjunct: none

VuStats Objective:

Multiple Call Handling: none

Timed ACW Interval (sec): 20

After Xfer or Held Call Drops? n
```

## 5.3. Administer Agent IDs

This section provides the Agent Login IDs for the agents. Add an **Agent Login ID** for each agent in the call center as shown below. In this configuration, agent login IDs 6001 and 6002 were created for two call center agents.

```
add agent-loginID 6001
                                                                      Page 1 of 2
                                     AGENT LOGINID
                  Login ID: 6001
                                                                          AAS? n
                                                                        AUDIX? n
                      Name: Agent 1
                        TN: 1 Check skill TNs to match agent TN? n
            Coverage Path:
Security Code:
                                                              LWC Reception: spe
                                                    LWC Log External Calls? n
            Attribute:
                                                  AUDIX Name for Messaging:
                                             LoginID for ISDN/SIP Display? n
                                                                    Password:
                                                    Password (enter again):
                                                                Auto Answer: station
              emains in LOA Queue: system MIA Across Skills: system nsidered Idle (MIA): system ACW Agent Considered Idle: system Work Mode on Login: system Aux Work Reason Code Type: system
AUX Agent Remains in LOA Queue: system
AUX Agent Considered Idle (MIA): 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 of the **Agent LoginID** form, set the skill number (**SN**) to hunt group 1, which is the hunt group (skill) that the agents will log into.

add agent-lo	oginID 6001		Page 2 of 2		
	AGENT LOGINID				
Direct Agent Skill: 1		Service Objective? n			
Call Handlir	ng Preference: skill-l	evel	Local Call Preference? n		
SN RL	SL SN RL S	L			
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 <b>:</b>	52:		
8:	23:	38:	53:		
9:	24:	39:	54:		
10:	25:	40:	55 <b>:</b>		
11:	26:	41:	56:		
12:	27:	42:	57:		
13:	28:	43:	58:		
14:	29:	44:	59:		
15:	30:	45:	60:		

## 5.4. Administer Call Vectoring

This section describes the procedures for configuring call vectoring for calls queued to agents and inbound calls to CBM.

Configure the **Vector Directory Number** (VDN) that will handle incoming customer calls. The VDN invokes a vector that will queue the call to an agent split and also route the call to the iAssist CBM application on Experience Portal (via H.323 Channels configured later in this section) if the call is queued and the expected wait time exceeds a configured threshold in the associated vector. In this example, VDN 22001 and vector 1 were used for inbound calls that route to Experience Portal. VDN 22002 was configured with vector 2 as well for outbound call backs.

```
add vdn 22001
                                                                           3
                                                             Page
                                                                    1 of
                            VECTOR DIRECTORY NUMBER
                             Extension: 22001
                                Name*: VDN 1
                           Destination: Vector Number
                   Attendant Vectoring? n
                  Meet-me Conferencing? n
                    Allow VDN Override? y
                                   COR: 1
                                   TN*: 1
                              Measured: both Report Adjunct Calls as
ACD*? n
        Acceptable Service Level (sec): 20
        VDN of Origin Annc. Extension*:
                            1st Skill*:
                            2nd Skill*:
                            3rd Skill*:
SIP URI:
```

Vector 1 queues the call to the agent split (skill 1), checks available call center agents on split (skill 1), and depending on the agent availability, the call is either queued to skill 1 or routed to Experience Portal via H.323 channels. Configuration for H.323 channels to Experience Portal is described later in this section.

```
change vector 1
                                                                Page
                                                                       1 of
                                  CALL VECTOR
    Number: 1
                             Name: Acqueon Vector 1
Multimedia? n Attendant Vectoring? n Meet-me Conf? n
     Basic? y EAS? y G3V4 Enhanced? y ANI/II-Digits? y ASAI Routing?
У
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 3 if available 03 queue-to skill 75 pri m 04 wait-time 30 secs hearing ringback
                    if available-agents in skill 1
                                                                         < 1
05 stop
```

#### Vector 2 was configured to queue outbound call back calls to skill 1 with priority set to high.

```
change vector 2

CALL VECTOR

Number: 2

Name: Acqueon Vector 2

Multimedia? n

Basic? y

EAS? y

G3V4 Enhanced? y

ANI/II-Digits? 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 silence

02 queue-to

skill 1

pri h

03 wait-time

30 secs hearing ringback

04 goto step

1 if unconditionally
```

## 5.5. Administer H.323 Channels to Experience Portal

During the compliance test, calls from Communication Manager to Experience Portal were routed via H.323 Channels. These H.323 channels are combinations of hunt group / stations / agents configured on Communication Manager.

#### 5.5.1. Administer Hunt Group

This section provides the Hunt Group configuration for the H.323 channels needed for Communication Manager to communicate with Experience Portal. Virtual Agents will auto log into Hunt Group 75 configured below. Provide a descriptive name and set the **Group Extension** field to a valid extension. Enable the **ACD**, **Queue** and **Vector** options. This hunt group will be specified in the **Agent LoginIDs** configured in **Section 5.3**. Calls are routed to Experience Portal, by the use of this hunt group, as per the configuration in **Section 5.4**.

```
add hunt-group 75
                                                            Page
                                                                   1 of
                                                                          4
                                 HUNT GROUP
           Group Number: 75
                                                          ACD? y
            Group Name: Voice Portal
                                                        Queue? y
        Group Extension: 51112
                                                       Vector? y
             Group Type: ucd-mia
                     TN: 1
                    COR: 1
                                             MM Early Answer? n
          Security Code:
                                      Local Agent Preference? n
ISDN/SIP Caller Display: grp-name
            Queue Limit: unlimited
Calls Warning Threshold: Port:
 Time Warning Threshold:
                            Port:
```

#### One Page 2, enable **Skill** and **AAS**.

```
add hunt-group 75

Skill? y
AAS? y
Measured: none
Supervisor Extension:

Controlling Adjunct: none
Multiple Call Handling: none

Timed ACW Interval (sec):

After Xfer or Held Call Drops? n
```

#### 5.5.2. Administer Stations

This section provides the Stations that will be configured in Experience Portal as H.323 channels. Add a **Station** extension for each H.323 channel that will be configured on Experience Portal. During the compliance test, 5 stations, 65001 – 65005, were configured. Set the **Type** to **7434ND**, set a **Security Code** and enable **IP SoftPhone**. Note that the Security Code must be exactly same for all the stations configured for Experience Portal connectivity.

add station 65001		Page	1 of 6	)
		STATION		
Extension: 65001		Lock Messages? n	BCC:	0
Type: 7434ND		Security Code: *	TN:	1
Port: S00079		Coverage Path 1:	COR:	1
Name: H.323 VP 1		Coverage Path 2:	COS:	1
		Hunt-to Station:		
STATION OPTIONS				
		Time of Day Lock Table:		
Loss Group:	2	Personalized Ringing Pattern:	1	
Data Module?	n	Message Lamp Ext:	65001	
Display Module?	У			
Display Language:	english	Coverage Module?	n	
Survivable COR:	internal	Media Complex Ext:		
Survivable Trunk Dest?	У	IP SoftPhone?	У	
		Remote Office Phone?	n	
		IP Video Softphone?	n	
	Short/	Prefixed Registration Allowed:	default	

#### 5.5.3. Administer Agent IDs

This section provides the Agent Login IDs for each configured Station above. Add an **Agent Login ID** for each agent used by Experience Portal stations. In this configuration, agent login IDs 6501 - 6502 were created. Enable **AAS**, set **Auto Answer** to **none**, and set the **Port Extension** to each corresponding station extensions configured above (65001 – 65005).

```
add agent-loginID 6501
                                                                 Page
                                                                        1 of
                                                                                2
                                   AGENT LOGINID
                 Login ID: 6501
                                                                     AAS? y
                    Name: VP Agent 1
                                                                   AUDIX? n
                       TN: 1 Check skill TNs to match agent TN? n
                      COR: 1
           Coverage Path:
                                                          LWC Reception: none
           Security Code:
                                                LWC Log External Calls? n
           Attribute:
                                              AUDIX Name for Messaging:
          Port Extension: 65001
                                          LoginID for ISDN/SIP Display? n
                                                            Auto Answer: none
AUX Agent Remains in LOA Queue: system MIA Across Skills: system AUX Agent Considered Idle (MIA): system ACW Agent Considered Idle: system
             Work Mode on Login: system Aux Work Reason Code Type: system
                                               Logout Reason Code Type: system
                        Maximum time agent in ACW before logout (sec): system
                                              Forced Agent Logout Time: :
    WARNING: Agent must log in again before changes take effect
```

One Page 2, configure the **SN** to the skill configured in **Section 5.5.1.** 

add age:	nt-loginID	6501		Page 2 of 2
			AGENT LOGINID	
Direct Agent Skill:			Service Objective? n	
Call Ha	ndling Pref	erence: sl	cill-level	Local Call Preference? n
SN	RL SL	SN	RL SL	
1: 75	1	16:	31:	46:
2:		17:	32:	47:
3:		18:	33:	48:
4:		19:	34:	49:
5 <b>:</b>		20:	35 <b>:</b>	50 <b>:</b>
6:		21:	36:	51 <b>:</b>
7:		22:	37:	52 <b>:</b>
8:		23:	38:	53 <b>:</b>
9:		24:	39:	54 <b>:</b>
10:		25:	40:	55 <b>:</b>
11:		26:	41:	56 <b>:</b>
12:		27:	42:	57 <b>:</b>
13:		28:	43:	58 <b>:</b>
14:		29:	44:	59 <b>:</b>
15:		30:	45:	60:

# 5.6. Administer AES Connectivity

Configuration for AES and CTI link used during compliance test is standard in nature and is outside of scope for this document.

# 6. Configure Avaya Aura® Application Enablement Services

This section provides the procedures for configuring AES. Switch connection and TSAPI configuration for connectivity to Communication Manager was preconfigured and standard in nature; thus, not mentioned in this document.

iAssist Admin server connected to AES via TSAPI to monitor stations configured on Communication Manager. This includes:

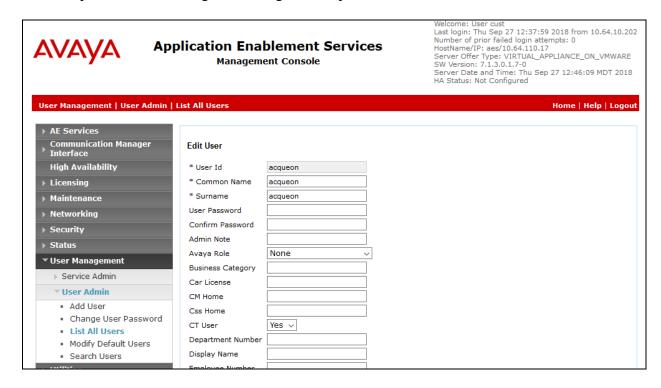
- Administer User
- Obtain Tlink

Access the AES OAM web interface by using the URL "https://ip-address" in a web browser, where "ip-address" is the IP address of AES. Log on using appropriate credentials.

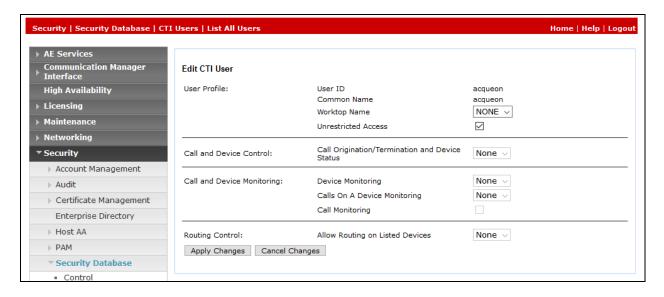


#### 6.1. Administer User

Once logged on, navigate to User Management  $\rightarrow$  User Admin  $\rightarrow$  Add User. Screen capture below depicts the user configured during the compliance test. Note that CT User is set to Yes.



Navigate to Security → Security Database → CTI Users → List All Users, and edit the user added above; check box for Unrestricted Access.



## 6.2. Obtain Tlink

Obtain the Tlink that will be used by iAssist Admin server to connect to AES. Navigate to **Security Security Database Tlinks** and note the Tlink.

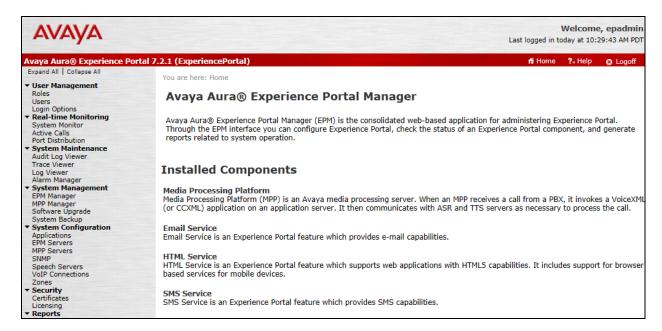


# 7. Configure Avaya Aura® Experience Portal

Experience Portal is configured via the Experience Portal Manager (EPM) web interface, to access the web interface, enter http://"ip-address"/ as the URL in a web browser, where "ip-address" is the IP address of Experience Portal. Log in using the appropriate credentials.

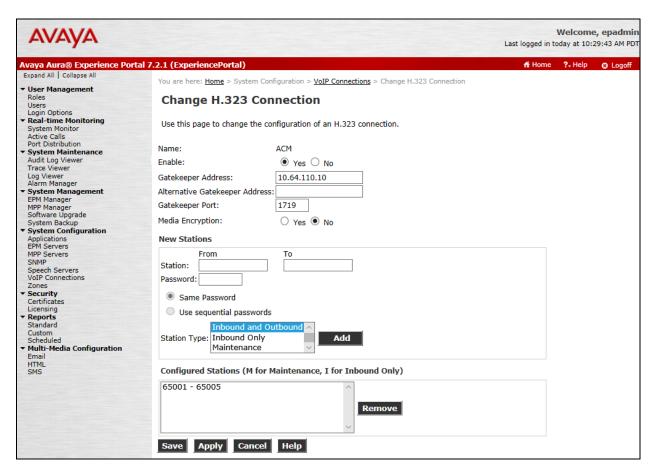


**Note:** Some of the screens in this section are shown after the Experience Portal had been configured. Don't forget to save the screen parameters as you configure Experience Portal.



#### 7.1. Administer VolP Connection

On the left pane, click on the VoIP Connections under System Configuration (not shown). To add an H.323 Connection, click on H.323 tab on VoIP Connections page (not shown). Fill in Name, in the Gatekeeper Address and Gatekeeper Port, type in the IP Address of Communication Manager and default port of 1719, repsectively. Under New Stations section, type in the range of stations, as configured in Section 5.5.2, in From and To fields; type in the Password as configured in Section 5.5.2. Select Inbound and Outboud for Station Type, and select Add. Click Save to save changes.



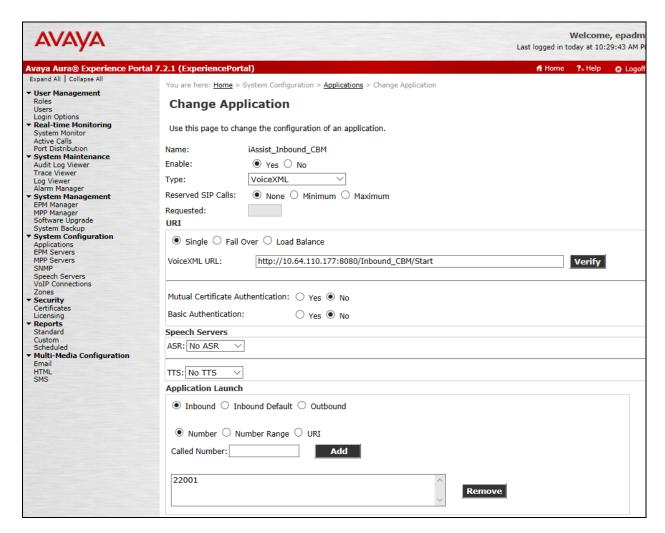
# 7.2. Configure iAssist CBM Applications

Two applications are configured in Experience Portal, one to handle inbound calls that are queued to the agent split and the second one to handle the call back request (i.e., outbound calls to agent and caller).

## 7.2.1. Configure the Inbound CBM Application

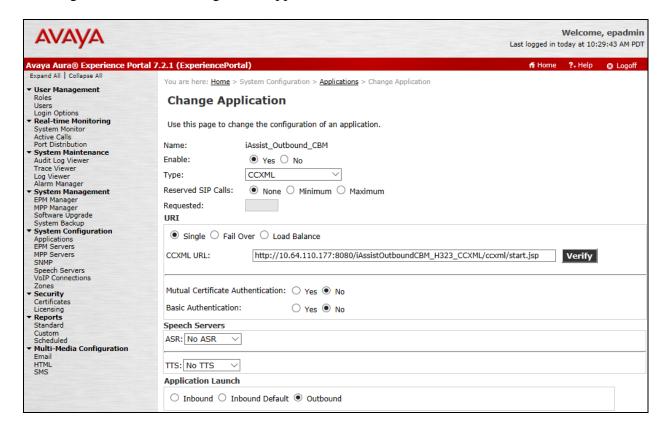
In the **Applications** page, add an Experience Portal application to handle incoming. This application will provide the caller the option to either continue waiting in the agent queue or to request a call back. Configure the application as shown below.

Note that the **Called Number** configured is the inbound VDN Extension as configured in **Section 5.4.** 



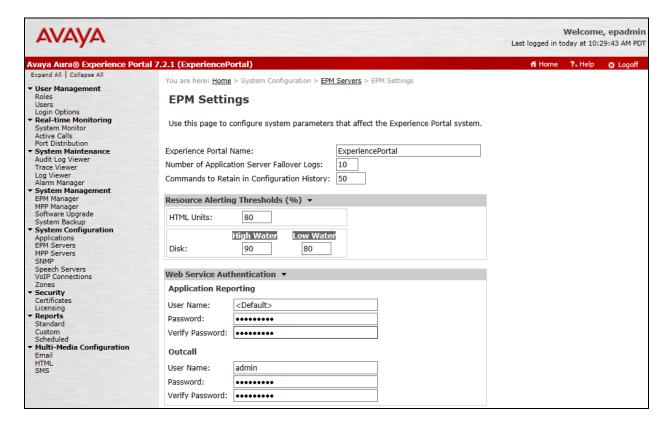
## 7.2.2. Configure the Outbound CBM Application

In the **Applications** page, add another Experience Portal application to handle the outbound calls to the agent and caller. Configure the application as shown below.



# 7.3. Configure the Outcall Authentication

Configure the Outcall User Name and Password that will be sent by CBM Outbound module to initiate a call back. Click on **EPM Servers** in the left pane, in the resulting page, click on **EPM Settings** to display the page below. Under the **Outcall** section, configure the **User Name** and **Password** used by CBM when it makes an outcall request to Experience Portal.



# 7.4. Configure Avaya Aura® Orchestration Designer

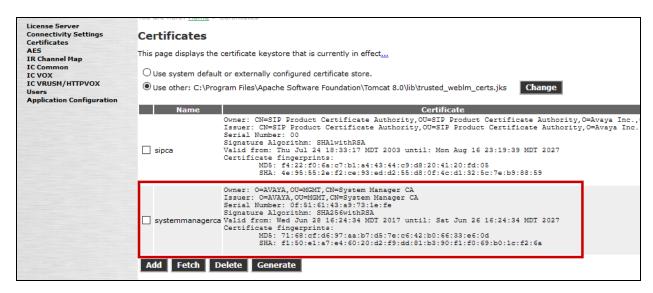
iAssist Admin server hosted the runtimeconfig and aesconnector connectors. Access the runtimeconfig via a web browser and log on using appropriate credentials.



On the left pane, select **License Server** and configured the URL for WebLM server that is hosting the licenses. Select **Verify** to ensure that licenses are retrieved.



On the left pane, select **Certificates** and update the root certificate of the certificate authority that is used for signing certificates, for secure connectivity, in the lab environment. During compliance test, Avaya Aura® System Manager was used as the Certificate Authority. System Manager root certificate was added as shown below.



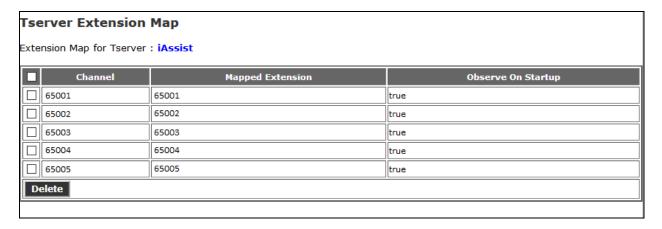
On the left pane, select **AES** to configure AES connectivity. Configure the AES parameters as per **Section 6.** Select **Add Tserver/AES** once done.

Name:	iAssist	A unique name to identify this entry. The tserver and failover names cannot contain '*'.		
Service Name:	AVAYA#CM15014#CSTA#AES15019	Identifies the service provider in the format: vendor#switch#type#server.		
User Name:	acqueon	Username to connect to this tserver/AES.		
Password:	••••••	Unencrypted password to connect to this tserver/AES.		
Confirm Password:	•••••	Confirm password must match password.		
Add TServer/AES  Note: You will need to restart the AES Connector for changes to take affect You will also need to modify tsapi.pro that is included with your runtimesupport files before connecting to a TServer/AES. Please read Orchestration Designer documentation for correct location to place this file.				

#### Once AES Connector has been added, select **map** under **Ext map**.



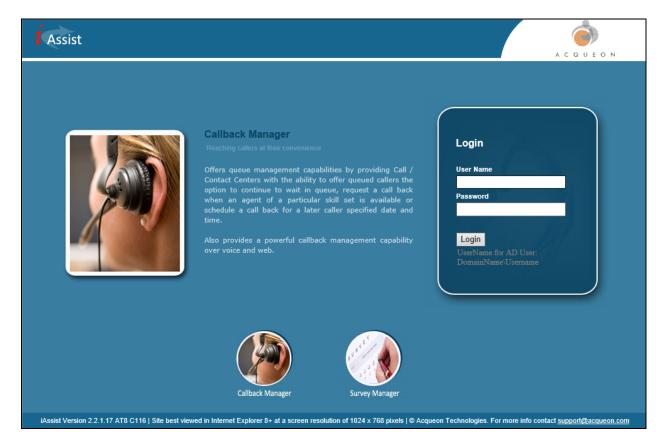
#### Add the H.323 Channels (Extensions) that were added in Section 5.5.2.



# 8. Configure Acqueon iAssist CallBack Manager

This section provides the procedures for configuring CBM via the iAssist Admin web console. Access the iAssist Admin web console by using the URL "https://ip-address" in a web browser, where "ip-address" is the IP address of iAssist server. Log on using appropriate credentials.

**Note**: The current version of Acqueon iAssist Callback Manager only supports Microsoft Internet Explorer.

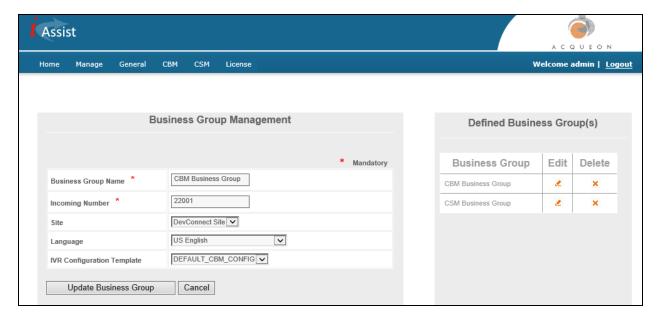


# 8.1. Add a Business group

Business Group refers to the type of business the application caters. Each business group will have a language and a unique number where the call will be routed to so that the application can identify the caller.

Business Group Management enables configuration and management of a business group. Use the **Business Group** option under the **General** tab to add, modify or delete a business group.

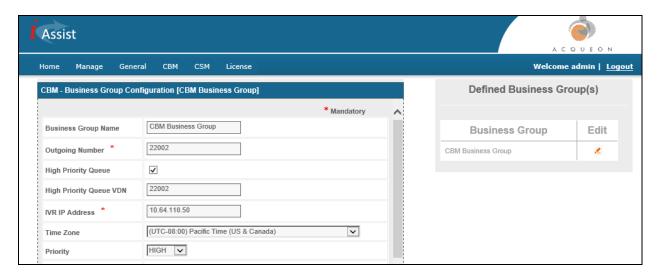
- Enter a valid **Business Group Name**.
- Set the Incoming Number to the inbound VDN extension number configured in Section 5.4.
- Select a pre-configured **Site** to from the dropdown menu to associate the business group to a site.
- Select an appropriate **Language**.
- Select a pre-configured **IVR Configuration Template**.



# 8.2. Configure Business Group

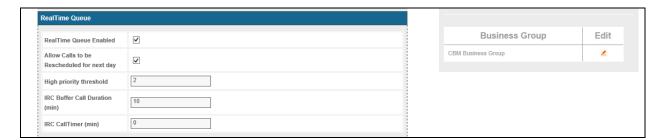
Access the **Business Group Configuration** option from the **CBM** tab. Click the **Edit** icon of the Business Group configured above under the **Defined Business Group(s)** displayed in the right pane. The Business Group Name will be populated automatically.

- Enter an **Outgoing Number** (VDN number configured to reach the available agent who is configured/ logged into a particular skill, as per the outbound VDN configured in **Section 5.4**).
- Select the **High Priority Queue** check box.
- Provide the **High Priority Queue VDN Number**, same as the **Outgoing Number**.
- Enter **IVR IP Address**, which is the IP Address of Experience Portal EPM.
- **Time Zone** (Time zone of system in which iAssist application is deployed).
- Select **High** from the **Priority** drop down menu.



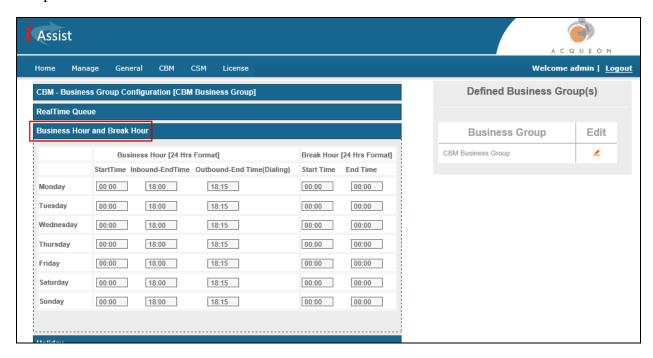
#### 8.3. RealTime Queue

Continuing from above, select the **RealTime Queue** option. Check box for **RealTime Queue Enabled** to enable the RealTime Queue. This ensures that the callback requester remains in a virtual queue.



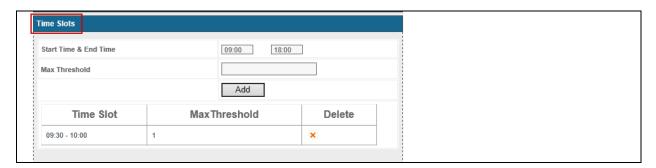
#### 8.4. Business Hours and Break Hours

Continuing from above, select the **Business Hour and Break Hour** option. It should be entered in the 24-hour format, the break hour is an interval within the business hours, for example, lunch break. Call back request options will be offered to the callers based on the business hours and will not be allowed outside of this schedule. Business hours and break hours should be configured for each day of the week separately as shown. Following was configured during the compliance test.



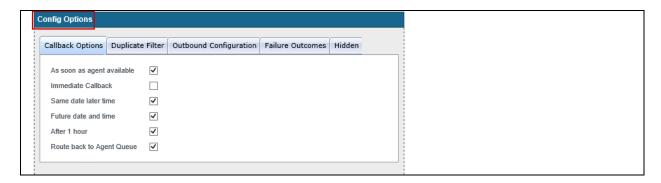
#### 8.5. Time Slots

Continuing from above, select the **Time Slot** option. Time Slot is a defined interval, or slot of time that is offered to callers to choose the call back time. If this is configured, the Inbound CBM will offer the caller the list of configured time slots and the caller can choose one. If this is not configured, the caller will be prompted to enter a time to receive the call back. Timeslots will be played to the caller for the callback options (S- same date and later time and F- Future date and time), if configured.



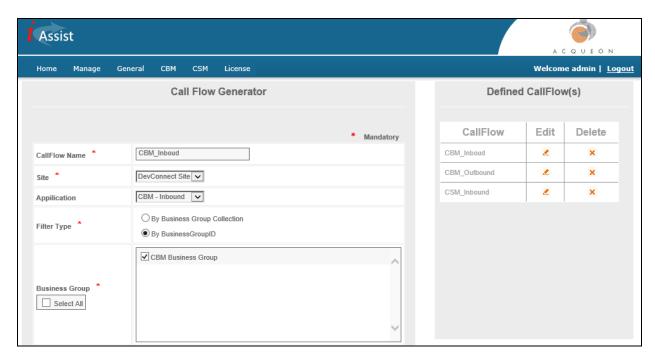
# 8.6. Config Options

Continuing from above, select the **Config Options** option. In Config Options, the **Callback Options** tab allows setting of the various options to be offered to the caller to log a callback request and receive a callback. These options will be dynamically offered based on the settings like Business Hours and Holidays, which are configured. Following were configured as shown in the screen capture below.



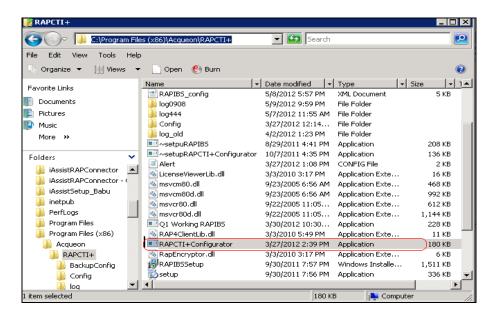
#### 8.7. Call Flow Generator

Select the **CallFlow Generator** option under the **General tab**. Under this section, call flows are generated for a business group or business group collection. During the compliance test, two call flows were configured; one for inbound calls and another for outbound calls.

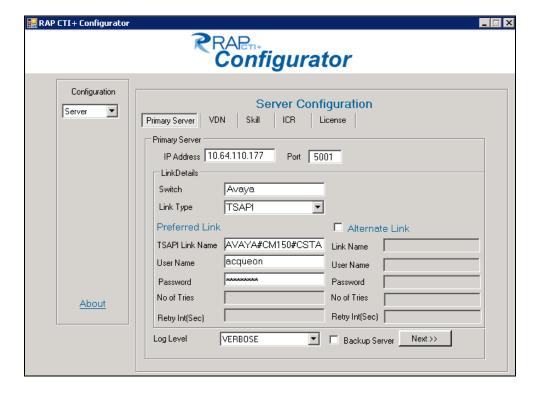


# 8.8. Configure RapCTI

On the iAssist Admin server, open RAPCTI+Configurator from the path ( $C:\Program\ Files\ (x86)\Acqueon\RAPCTI+$ ) to configure the VDN that will be used for monitoring.

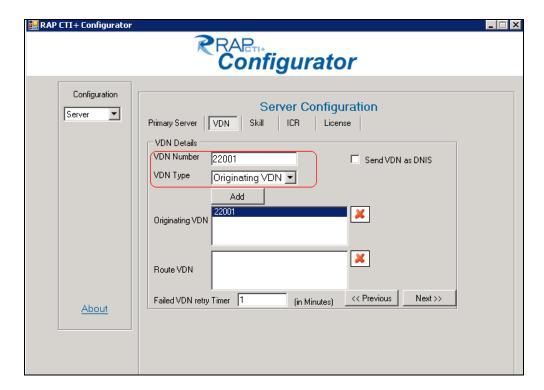


Double click on RAPCTI+Configurator to open the screen below. Under the **Primary Server** tab, configure AES connectivity as per **Section 6.** 



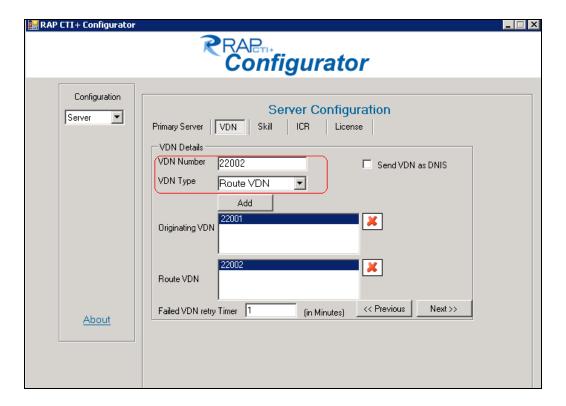
#### Select the **VDN** tab:

- Configure the VDN that was configured in **Section 5.4** for incoming calls (22001).
- Select Originating VDN from the VDN Type drop down list
- Select Add.

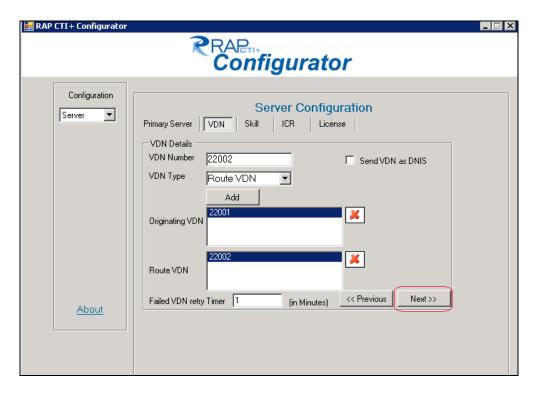


#### Select the **VDN** tab:

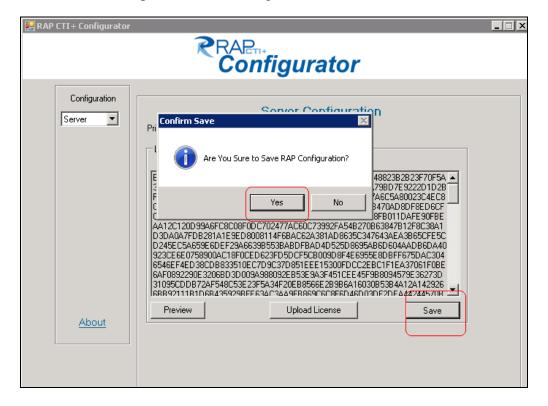
- Configure the VDN that was configured in **Section 5.4** for callback requests (22002).
- Select Route VDN from the VDN Type drop down list
- Select Add.



Select **Next** >> 3 times.



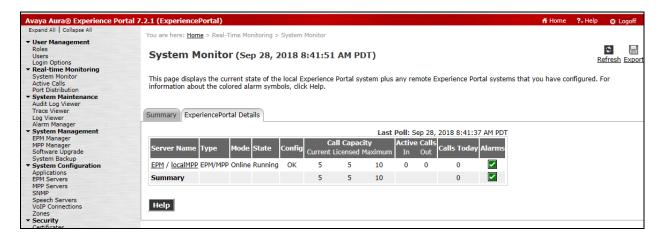
Select **Save** and **Yes** to complete save the configuration.



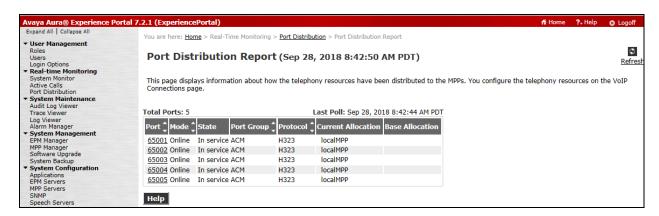
# 9. Verification Steps

This section provides the verification steps that may be performed to verify that Experience Portal can run iAssist CBM applications.

1. From the EPM web interface, verify that the EPM/MPP server is online and running in the **System Monitor** page shown below.

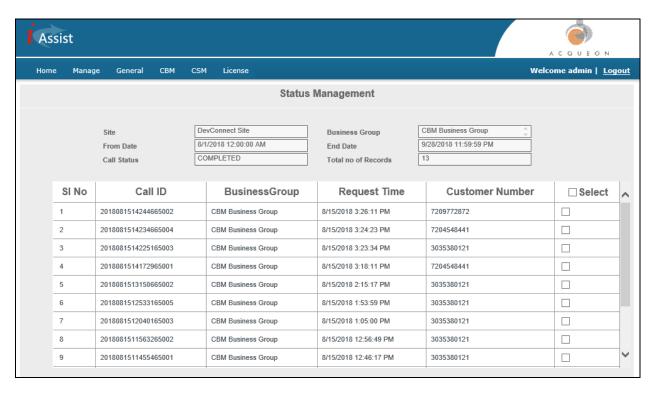


2. From the EPM web interface, verify that the ports on the MPP server are in-service in the **Port Distribution** page shown below.



- 3. Place a call to the inbound VDN configured in **Section 5.4** and verify call back options are played by the CBM Inbound module.
- 4. Continuing from above, select a call back option so the CBM Outbound module adds a call back request in the database.

5. To check the status of callback, select **General** → **Status Management**, in the Call Status field (not shown) select a status to display, e.g. "Pending", "Completed", or "Failed". The screenshot below shows the "Completed" call back.



## 10. Conclusion

These Application Notes describe the configuration steps required to integrate the Acqueon iAssist Call Back Manager application with Avaya Aura® Application Enablement Services and Avaya Aura® Experience Portal. All feature and serviceability test cases were completed successfully refer to **Section 2.2** for details.

#### 11. Additional References

This section references the Avaya documentation relevant to these Application Notes. The following Avaya product documentation is available at <a href="http://support.avaya.com">http://support.avaya.com</a>.

- [1] Administering Avaya Aura® Communication Manager, Release 7.1.3, Issue 7, May 2018
- [2] Administering and Maintaining Avaya Aura® Application Enablement Services, Release 7.1.3, Issue 5, May 2018
- [3] Administering Avaya Aura® Experience Portal, Release 7.2.1, Issue 1, March 2018

Product Documentation for Acqueon iAssist Callback Manager can be obtained directly from Acqueon.

[4] Acqueon iAssist Configuration Guide – AVP, Version 2.2, January 2014

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