



Avaya Solution & Interoperability Test Lab

Application Notes for Telesoft PAudium Classic with Avaya Aura® Communication Manager 6.3 - Issue 1.0

Abstract

These Application Notes describe the procedure for configuring PAudium Classic to monitor and record calls placed to and from stations and agents on Avaya Aura® Communication Manager. PAudium Classic uses a combination of digital logger hardware and software for voice recordings.

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 a compliance-tested configuration comprised of Avaya Aura® Communication Manager and PAudium Classic.

PAudium Classic uses a combination of digital logger hardware and software solution for voice recordings. The digital logger is a PCI based hardware installed on personal computer. It facilitates terminating of digital extension connected in parallel with the digital phones with a junction box with 24 ports.

2. General Test Approach and Test Results

The general approach was to place various types of calls to and from stations, agents, and Vector Directory Numbers (VDNs), monitor and record them using PAudium Classic, and verify the recordings.

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 feature and serviceability testing.

For feature testing, the types of calls included internal calls, inbound and outbound trunk calls, transferred calls, and conference calls. On-Demand and Scheduled recording capability are also tested. For serviceability testing, failures such as disconnecting the LAN and digital cable to the PAudium PC, as well as rebooting the PAudium PC and of Communication Manager were applied.

2.2. Test Results

All test cases passed successfully. Only numeric digits are captured for Caller ID. If the Caller ID involves name, the alphabets would not be captured.

2.3. Support

For technical support on PAudium Classic, contact Telesoft at:

- Phone: +91-22-26155139/41/53/54
- Email: helpdesk@telesoft.in
- Web: www.telesoft.in

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the PAudium Classic solution. PAudium Classic software was installed on a personal computer running Microsoft Windows XP Service Pack 3. Calls were placed to the Vector Directory Numbers (VDNs) or directly to the agents' extensions, which were then recorded by PAudium Classic software. Call related information was also captured by the PAudium Classic software based on DTMF and display information received.

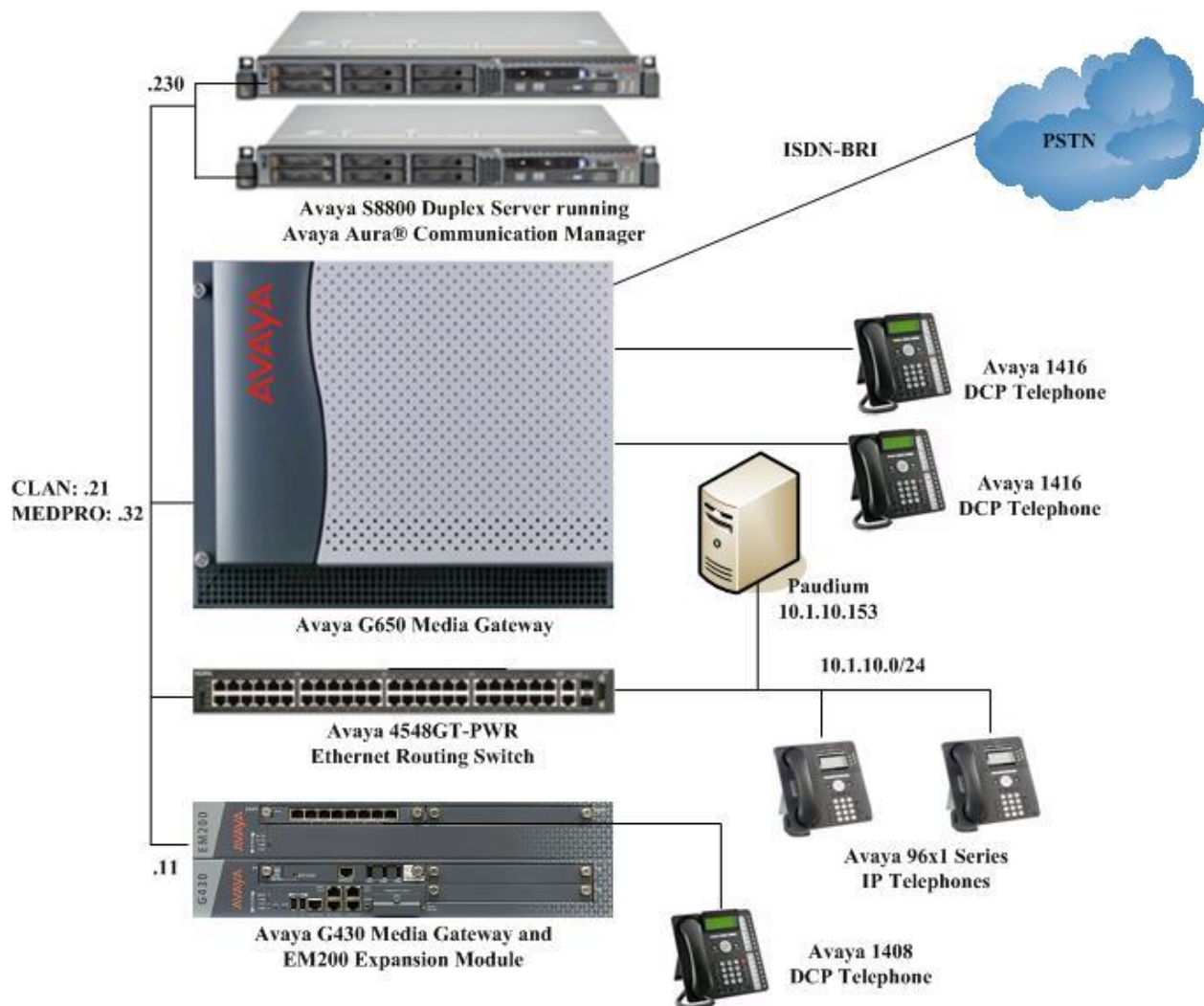


Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager running on S8800 Duplex server	R6.3 SP3
Avaya G650 Media Gateway - TN2214CP Digital Line	- HW08, FW016
Avaya G430 Media Gateway - MM712AP DCP MM	34.5.1 HW04 FW015
Avaya 96x1 Series H323 Telephones	R6.3.1
Avaya 1408 IP Telephone	R32
Avaya 1416 Digital Telephone	R32
Avaya 4548GT-PWR Ethernet Routing Switch	V5.6.1.052
PAudium running on Microsoft® Windows XP SP3	Classic

5. Configure Avaya Aura® Communication Manager

This section provides the procedure for configuring Communication Manager. The procedure includes the following areas:

- Configure Class of Restriction (COR)
- Configure Agent Work Modes and Service-Observing Feature Access Code
- Configure Agent Station

The detailed administration of contact center devices such as Skilled Hunt Group, VDN, Vector, and Agents are assumed to be in place. These Application Notes will only cover the steps to the Service-Observing feature access codes (FAC).

5.1. Configure Class of Restriction (COR)

Enter the **change cor 1** command. Ensure that the **Can Be Service Observed?** and **Can Be A Service Observer?** are set to “y”. This is to allow station under this COR to be service observed or as can be an observer.

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

COR Number: 1
COR Description: All Users

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

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

5.2. Configure Service-Observing Feature Access Code

Enter the **change feature-access-codes** command. On Page 5, configure feature access codes (FAC) for the list of features under **Agent Work Modes** and **Service Observing Listen Only Access Code** field valid under the provisioned dial plan. In this compliance testing, *68 was used.

```
change feature-access-codes                       Page 5 of 9
                                     FEATURE ACCESS CODE (FAC)

                                     Call Center Features

AGENT WORK MODES
    After Call Work Access Code: *61
    Assist Access Code: *62
    Auto-In Access Code: *63
    Aux Work Access Code: *64
    Login Access Code: *65
    Logout Access Code: *66
    Manual-in Access Code: *67

SERVICE OBSERVING
    Service Observing Listen Only Access Code: *68
    Service Observing Listen/Talk Access Code: *69
    Service Observing No Talk Access Code: *70
    Service Observing Next Call Listen Only Access Code:
```

5.3. Configure Agent Station

Enter the **add station n** command, where **n** is an available extension. Set the **Type** 1408, and specify the **Name**. Specify the **Port** to any available digital port. Check the **COR** is set to 1.

add station 10016		Page	1 of	5
STATION				
Extension: 10016	Lock Messages? n	BCC:	0	
Type: 1416	Security Code: 111222	TN:	1	
Port: 01A0701	Coverage Path 1:	COR:	1	
Name: Agent 3	Coverage Path 2:	COS:	1	
	Hunt-to Station:			
STATION OPTIONS				
Loss Group: 2	Time of Day Lock Table:			
	Personalized Ringing Pattern: 1			
	Message Lamp Ext: 10016			
Speakerphone: 2-way	Mute Button Enabled? y			
Display Language: english	Button Modules: 0			
Survivable COR: internal				
Survivable Trunk Dest? y	IP SoftPhone? n			
	Remote Office Phone? n			
	IP Video? N			

Configure the appropriate feature button for the station as in page 4 and 5 for the Agent Work Modes setup in **Section 5.2**. Also, program in the **serv-obsrv** feature button necessary for **service observing**. Repeat this section to create additional agent station. For this testing, extensions 10016 to 10018 were created.

add station 10016		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: system	List2:	List3:		
BUTTON ASSIGNMENTS				
1: call-appr	5: abrv-dial	List: 1	DC: 02	
2: call-appr	6: auto-in	Grp:		
3: call-appr	7: aux-work	RC:	Grp:	
4: abrv-dial	8: after-call	Grp:		
voice-mail				

add station 10016

Page 5 of 5

STATION

FEATURE BUTTON ASSIGNMENTS

9: manual-in	Grp:
10: assist	Grp:
11: release	
12:	
13:	
14:	
15:	
16: serv-obsrv	

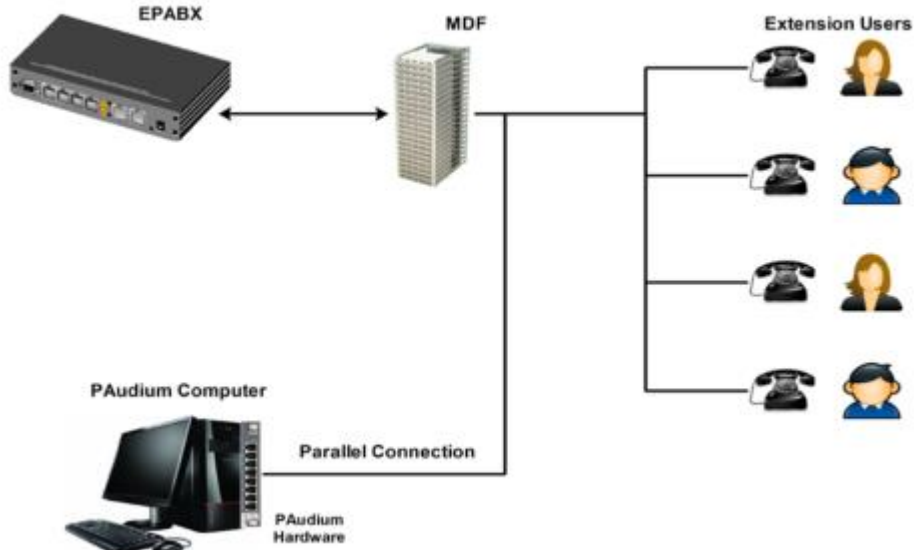
6. Configure PAudium Classic

This section provides the procedure for configuring PAudium Classic. It includes the following:

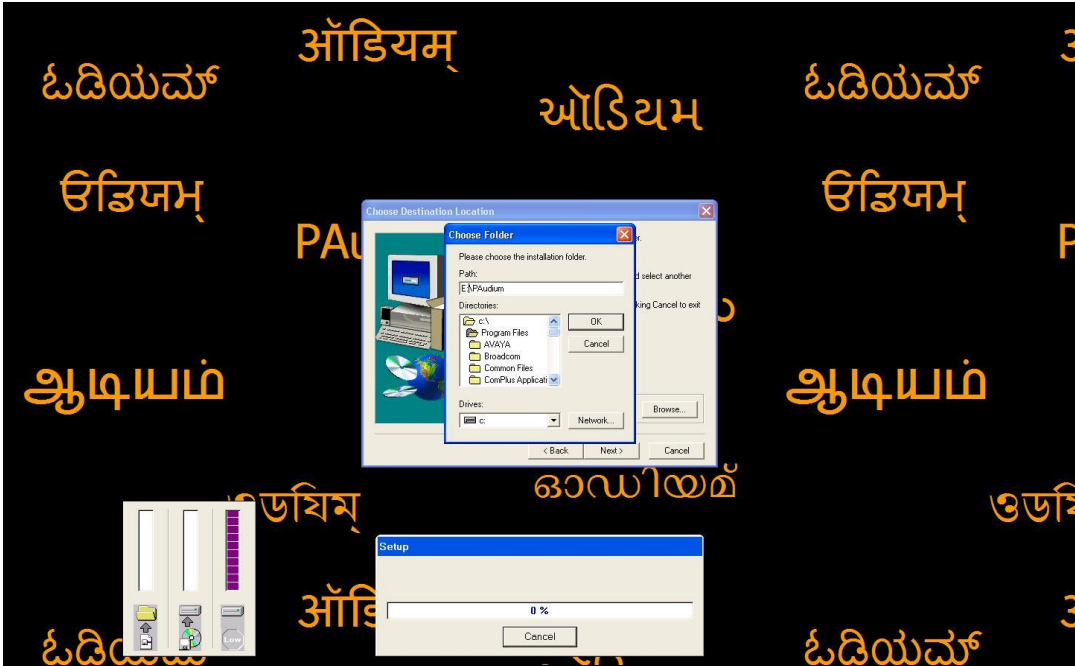
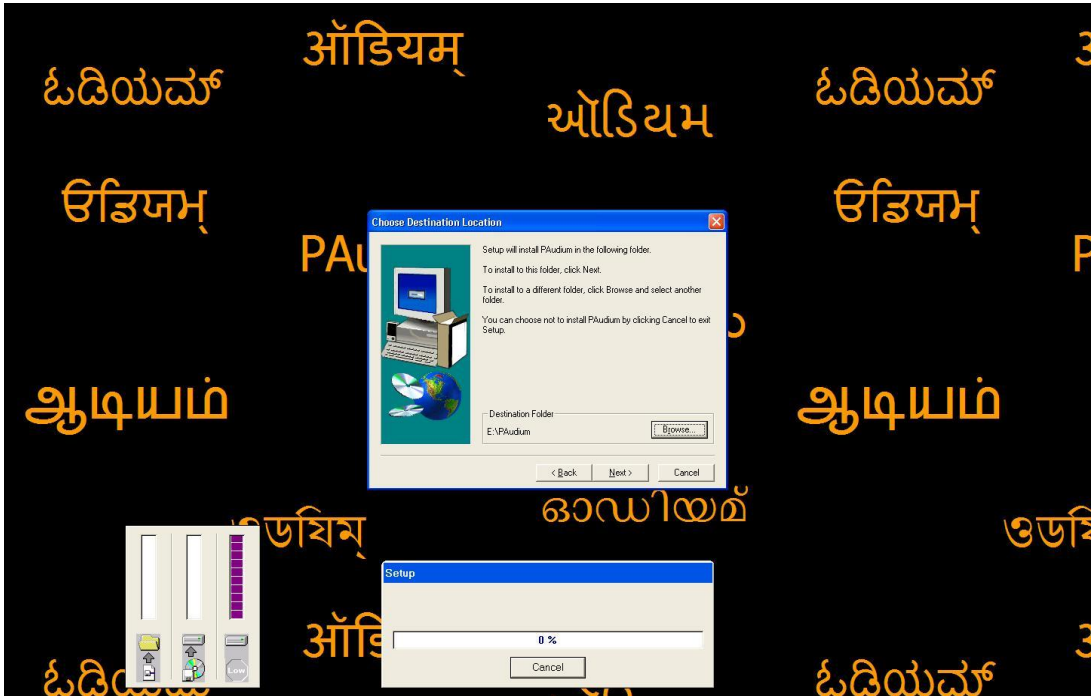
- PAudium Installation
- PAudium Configuration

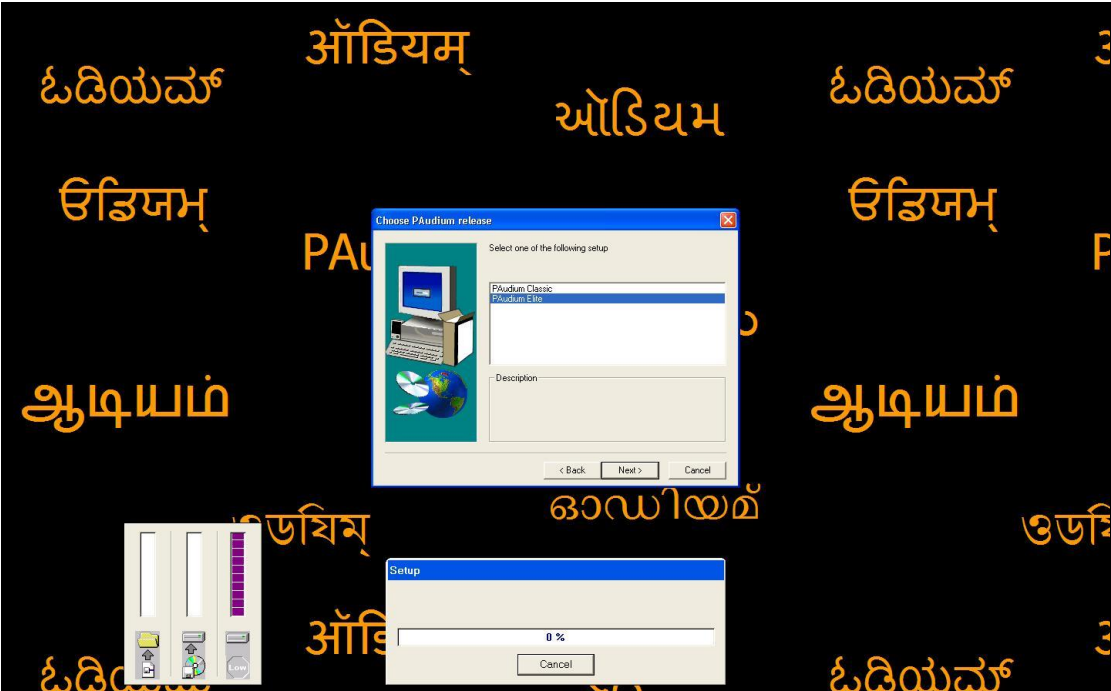
License generation will be done by Telesoft executive and will not be detailed here. Further details can be found in the PAudium Classic Install Guide specified in **Reference [3]**.

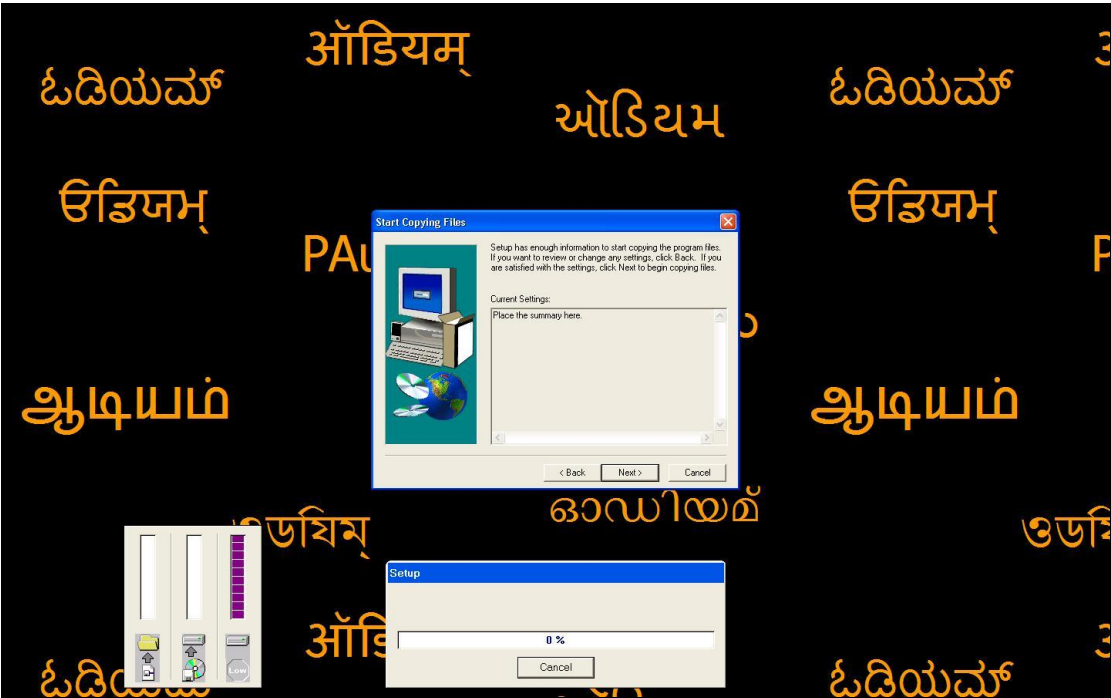
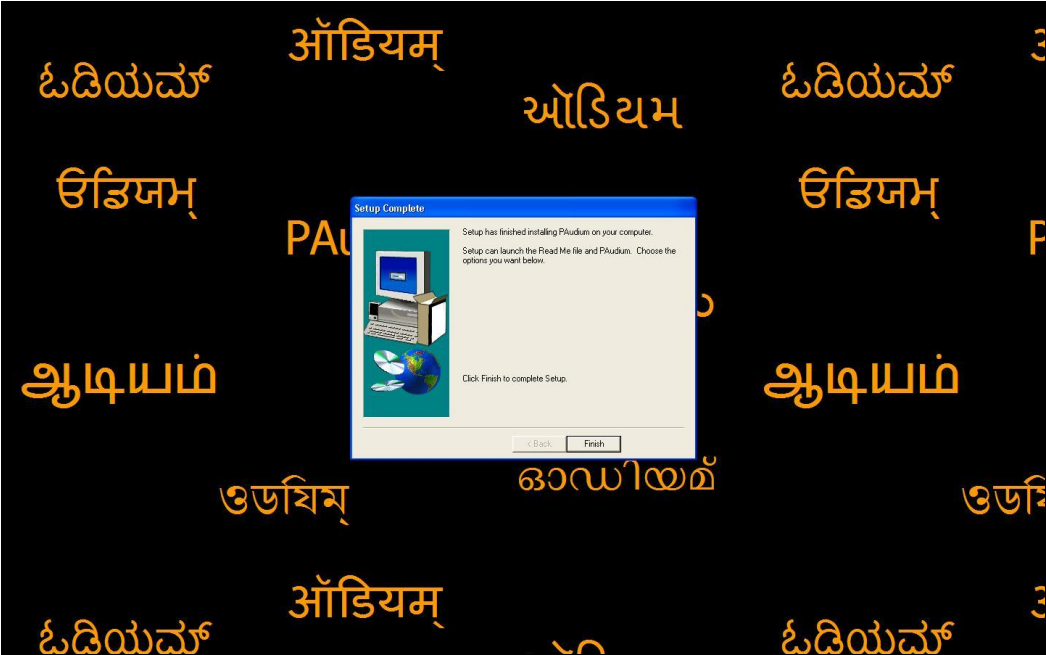
6.1. PAudium Installation

Step	Description
1.	<p>Install the PAudium hardware similar to the schematic below.</p>  <p>The diagram illustrates the hardware setup for PAudium. An EPABX (Electronic Private Automatic Branching eXchange) is connected to an MDF (Main Distribution Frame). The MDF is connected to four Extension Users, each represented by a phone icon and a person icon. The MDF is also connected to a PAudium Computer via a Parallel Connection. The PAudium Computer is labeled as PAudium Hardware.</p>




Step	Description
2.	<p>Run the setup.exe program from CD or the software provided. Click Next to continue.</p> 
3.	<p>Input the relevant Name and Company. Click Next to continue.</p> 

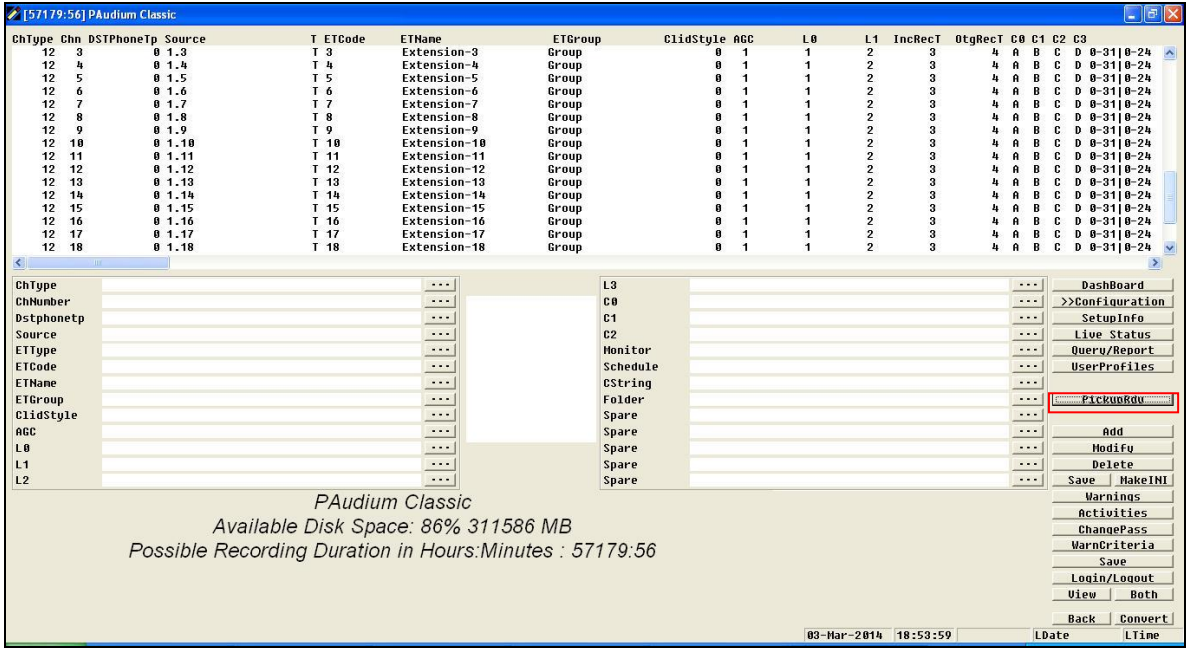
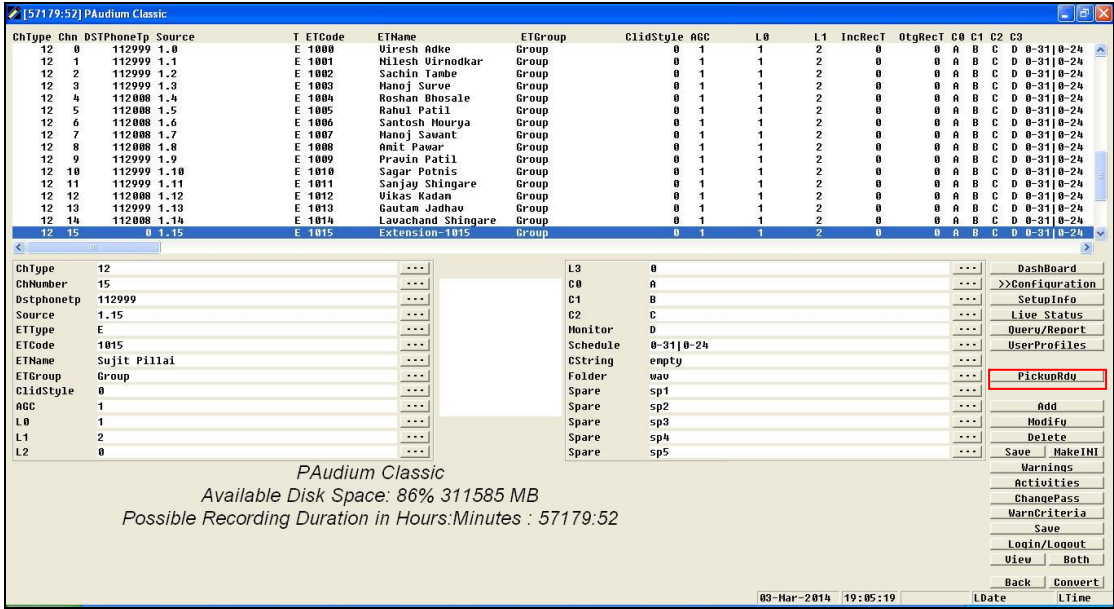
Step	Description
4.	<p>Change to the appropriate path for the installation location.</p> 
5.	<p>After changing the installation path, e.g. 'E:\PAudium'; Click on Next to continue.</p> 

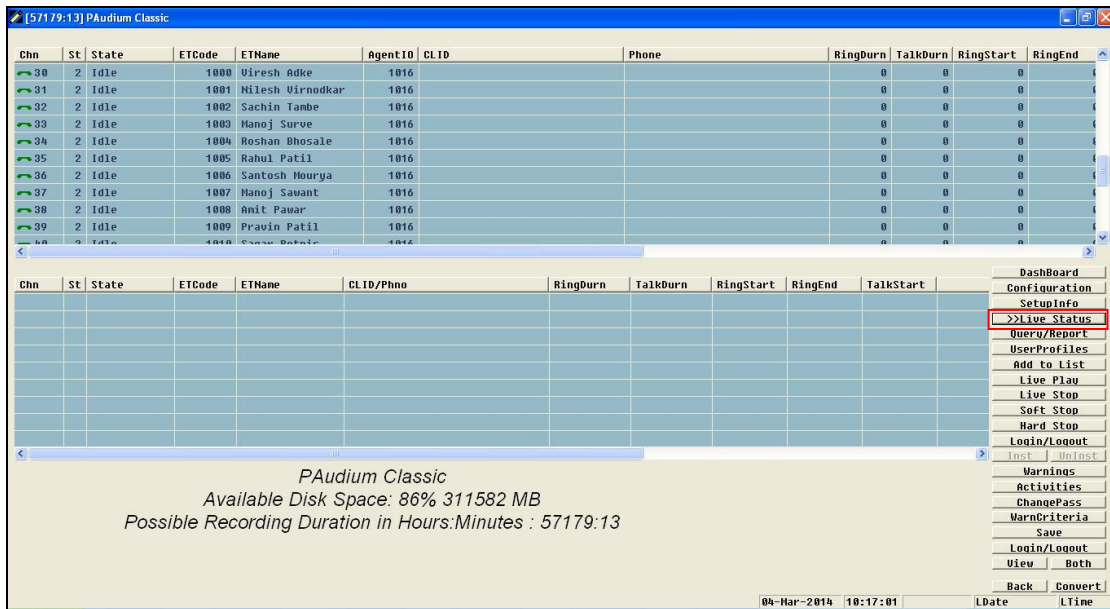
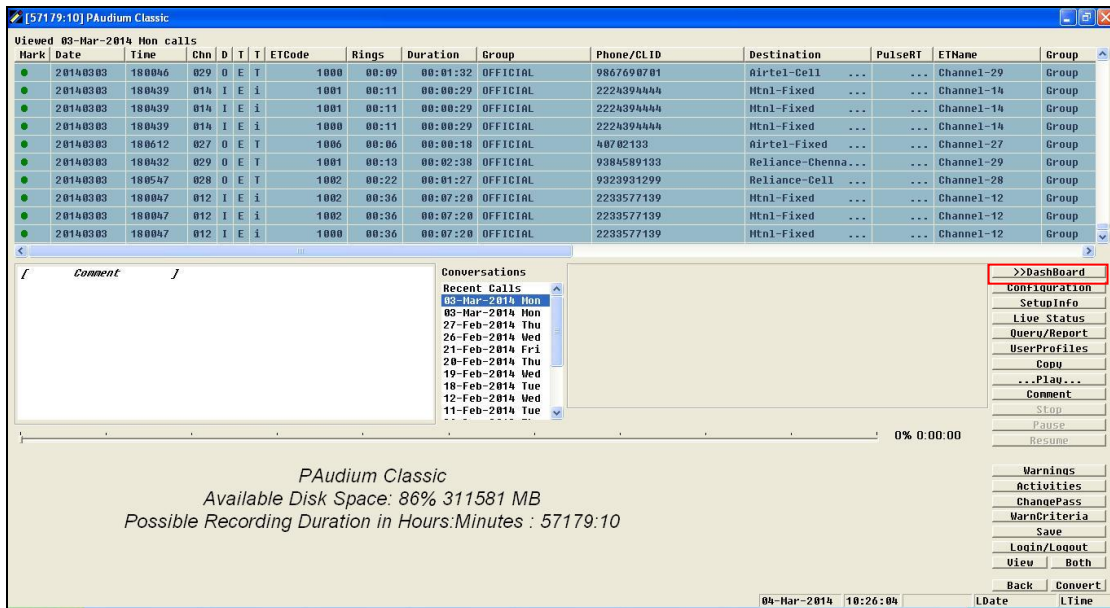
Step	Description
6.	<p>Choose PAudium Classic and then click Next to continue.</p> 
7.	<p>Keep the default folder name and click Next to continue.</p> 

Step	Description
8.	<p>Click Next to start copying files.</p> 
9.	<p>Installation is completed. Click Finish to end setup.</p> 

6.2. PAudium Configuration

Step	Description
1.	<p>Click the  icon running on the system tray. The PAudium Login / Logout will pop out. Enter the appropriate credentials for User Name and Password.</p> 
2.	<p>The following screen will be shown. Click '>>SetupInfo' on the right panel for configuration of the PAudium hardware. Usually this option would be disabled for the customer. It is recommended to get Telesoft for cases of hardware changes.</p> 

Step	Description
3.	<p>Configuration button allows making changes in the configuration of channels</p>  <p>The screenshot shows the PAudium Classic Configuration window. It features a table of channels with columns: ChType, Chn, DSTPhoneTp, Source, T, ETCode, ETName, ETGroup, ClidStyle, AGC, L0, L1, IncRecT, OtgRecT, C0, C1, C2, C3. Below the table is a configuration panel with fields for ChType, ChNumber, DSTphonetp, Source, ETType, ETCode, ETName, ETGroup, ClidStyle, AGC, L0, L1, L2. To the right of these fields are buttons for L3, C0, C1, C2, Monitor, Schedule, CString, Folder, Spare, and a 'PickupRdy' button which is highlighted with a red box. At the bottom, it displays 'PAudium Classic', 'Available Disk Space: 86% 311586 MB', and 'Possible Recording Duration in Hours:Minutes : 57179:56'.</p>
4.	<p>After installation “PickupRdy” (Pickup Ready) button can be used to automatically pickup configuration of channels. This option checks the available hardware and available port license and then automatically adds those many entries in the configuration with some default configuration. Once the default entries are added, then user can edit the channel details as per the requirement.</p>  <p>The screenshot shows the PAudium Classic Configuration window after using the 'PickupRdy' button. The channel list is now populated with 15 entries. The configuration panel on the right shows updated values: ChType 12, ChNumber 15, DSTphonetp 112999, Source 1.15, ETType E, ETCode 1015, ETName Sujit Pillai, ETGroup Group, ClidStyle 0, AGC 1, L0 1, L1 2, L2 0. The 'PickupRdy' button remains highlighted. The bottom status bar shows 'PAudium Classic', 'Available Disk Space: 86% 311585 MB', and 'Possible Recording Duration in Hours:Minutes : 57179:52'.</p>

Step	Description
5.	<p>“>>Live Status” button shows the current status of individual channel monitored by PAudium. This status is show on a real time basis.</p>  <p>The screenshot shows the PAudium Classic application window. The main table displays a list of channels with columns: Chn, St, State, ETCode, ETName, AgentID, CLID, Phone, RingDurn, TalkDurn, RingStart, and RingEnd. The right-hand menu has several buttons, with ">>Live Status" highlighted by a red rectangle. Below the table, the status bar shows "PAudium Classic", "Available Disk Space: 86% 311582 MB", and "Possible Recording Duration in Hours:Minutes : 57179:13". The bottom status bar shows the date "04-Mar-2014" and time "10:17:01".</p>
6.	<p>Dashboard lists the recorded conversations. The list is sorted on time of call after a particular day is chosen. User can select to playback any particular conversations recorded.</p>  <p>The screenshot shows the PAudium Classic application window. The main table displays a list of recorded conversations with columns: Mark, Date, Time, Chn, D, T, ETCode, Rings, Duration, Group, Phone/CLID, Destination, PulseRT, ETName, and Group. The right-hand menu has several buttons, with ">>Dashboard" highlighted by a red rectangle. Below the table, the status bar shows "PAudium Classic", "Available Disk Space: 86% 311581 MB", and "Possible Recording Duration in Hours:Minutes : 57179:10". The bottom status bar shows the date "04-Mar-2014" and time "10:26:04".</p>

7. Verification Steps

Place an incoming call to the VDN which routes to any of the agents' extension that is being recorded. Click on the **DashBoard** and select the recording to playback. Verify that the recording can be played back successfully.

The screenshot displays the PAudium Classic application window. At the top, a table titled 'Viewed 19-Feb-2014 Wed calls' lists several calls. The call with Mark '20140219' and Time '141046' is highlighted with a red border. Below the table, a 'Recent Calls' list shows '19-Feb-2014 Wed' and '18-Feb-2014 Tue'. To the right, a detailed call information box shows: Date: 20140219, Time: 141046, Channel: 007, T/O/E: I, E/T: E, SubType: i, ETNumber: 10016, Rings: 00:04, Duration: 00:00:48, Group: OFFICIAL, and Dialed: 67746430. On the far right, a vertical menu includes options like '>>DashBoard', 'Configuration', 'SetupInfo', 'Live Status', 'Query/Report', 'UserProfiles', 'Copsu', '...Play All...', 'Comment', 'Stop', 'Pause', 'Resume', 'Abandon', 'Warnings', 'Activities', 'ChangePass', 'WarnCriteria', 'Save', 'Login/Logout', 'View', 'Both', 'Back', and 'Convert'. The main playback area shows 'AKSTATIC' and a progress bar at 83% 0:00:41. The Windows taskbar at the bottom shows the start button and several open applications including PAudium, Telesoft Quick..., and LOGAR - Not...

Mark	Date	Time	Chn	D	T	ETCode	Rings	Duration	Group	Phone/CLID	Destination	PulseRT	ETName	Group
20140219	140351	007	0	E	L	10016	00:00	00:00:05	Personal	65	Destination Un...	...	Extension-1	Group
20140219	140626	007	0	E	L	10016	00:00	00:00:13	Personal	65	Destination Un...	...	Extension-1	Group
20140219	140646	006	0	E	L	10017	00:00	00:00:14	Personal	65	Destination Un...	...	Extension-1	Group
20140219	140808	005	0	E	L	10018	00:00	00:00:10	Personal	65	Destination Un...	...	Extension-1	Group
20140219	140833	005	0	E	L	10018	00:00	00:00:05	Personal	65	Destination Un...	...	Extension-1	Group
20140219	140841	005	0	E	L	10018	00:00	00:00:04	Personal	65	Destination Un...	...	Extension-1	Group
20140219	141046	007	I	E	I	10016	00:04	00:00:48	OFFICIAL	67746430	Indicom-Fixed	...	Extension-1	Group

8. Conclusion

These Application Notes describe the configuration steps required for PAudium Classic to successfully interoperate with Avaya Aura® Communication Manager 6.3. All features and serviceability test cases were completed with observations noted in **Section 2.2**.

9. Additional References

This section references documentation relevant to these Application Notes. Avaya product documentation is available at <http://support.avaya.com>.

- [1] *Administering Avaya Aura® Communication Manager*, Release 6.3, Doc ID 03-300509, October 2013.
- [2] *Administering Avaya Aura® Call Center Elite*, Release 6.3, Issue 1, May 2013.
- [3] *PAudium Classic Install Guide*.

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