



Avaya Solution & Interoperability Test Lab

Application Notes for Exceptional Innovation Life|point® InTouch with Avaya Aura® Communication Manager Using Avaya Aura® Session Manager – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Exceptional Innovation Life|point® InTouch to interoperate with Avaya Aura® Communication Manager using Avaya Aura® Session Manager. Exceptional Innovation Life|point® InTouch is a tabletop VoIP touch-screen telephone for hospitality applications. In the compliance testing, each Exceptional Innovation Life|point® InTouch registered with Avaya Aura® Session Manager as a SIP endpoint.

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 for Exceptional Innovation Life|point® InTouch to interoperate with Avaya Aura® Communication Manager using Avaya Aura® Session Manager. Exceptional Innovation Life|point® InTouch is a tabletop VoIP touch-screen telephone for hospitality applications.

In the compliance testing, each Exceptional Innovation Life|point® InTouch registered with Avaya Aura® Session Manager as a SIP endpoint.

1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing included registration, basic call, display, mute/un-mute, drop, media shuffling, G.711, codec negotiation, music on hold, DTMF, feature access code dialing with pause, and coverage scenarios.

The serviceability testing focused on verifying the ability of Exceptional Innovation Life|point® InTouch to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to Life|point® InTouch.

1.2. Support

Technical support on Exceptional Innovation Life|point® InTouch can be obtained through the following:

- **Phone:** (877) 901-8886
- **Email:** lifesupport@life-ware.com

2. Reference Configuration

As shown in the test configuration below, the Exceptional Innovation solution consists of a Life|ware Hospitality Server running the Life|ware Visual Project configuration tool, and one or more Life|point® InTouch telephones. The Life|point InTouch telephones have a touch-screen display, and the screen information along with the phone configuration and settings are obtained from the Life|ware Hospitality Server.

The configuration of Avaya Aura® Session Manager is performed via the web interface of Avaya Aura® System Manager. The detailed administration of basic connectivity between Avaya Aura® Communication Manager, Avaya Aura® System Manager, and Avaya Aura® Session Manager is not the focus of these Application Notes and will not be described.

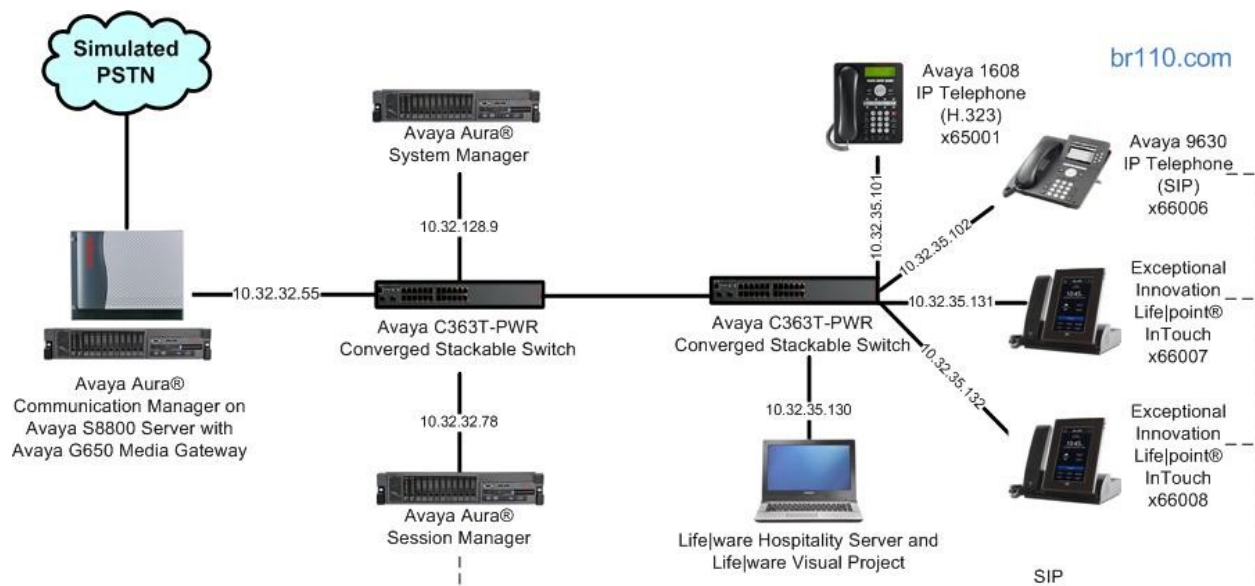


Figure 1: Network Configuration

3. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager on Avaya S8800 Server	6.0 (R016x.00.0.345.0-18246)
Avaya G650 Media Gateway <ul style="list-style-type: none">TN799DP C-LAN Circuit PackTN2302AP IP Media Processor	HW01 FW038 HW20 FW121
Avaya Aura® Session Manager	6.0.1 (6.0.1.0.601016)
Avaya 1608 IP Telephone (H.323)	1.3
Avaya 9630 IP Telephone (SIP)	2.6.2
Exceptional Innovation Life ware Hospitality Server on Windows 7 Professional <ul style="list-style-type: none">Life ware Visual Project	3.0.1 3.0.1.5
Exceptional Innovation Life point® InTouch	3.1

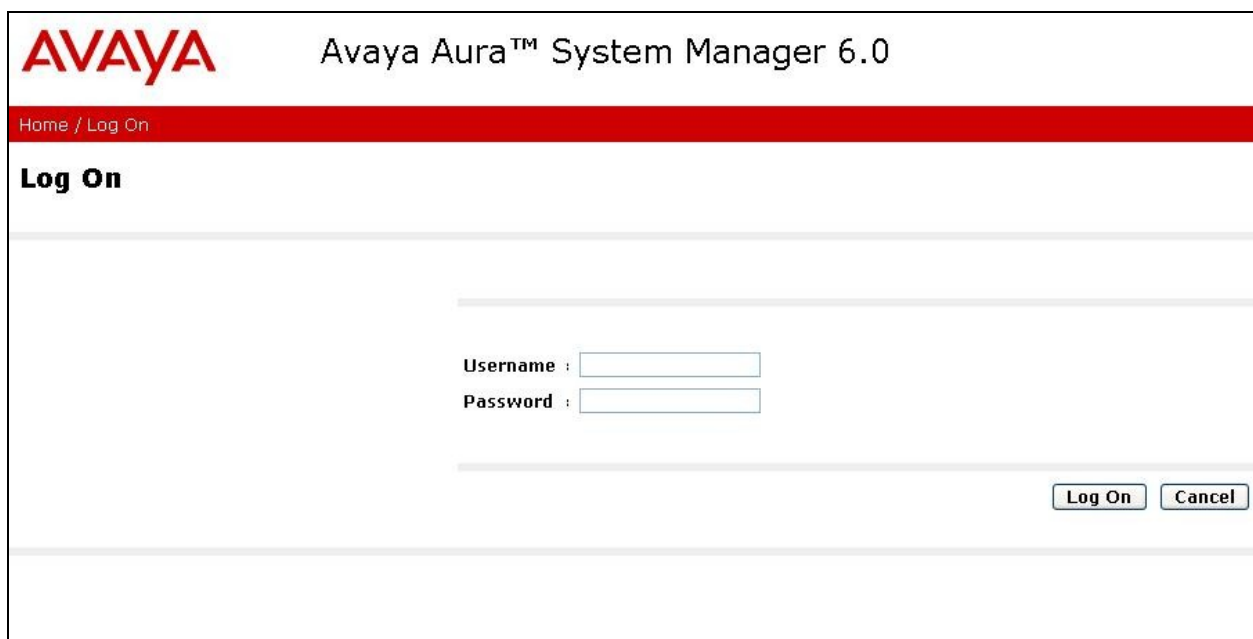
4. Configure Avaya Aura® Session Manager

This section provides the procedures for configuring Avaya Aura® Session Manager. The procedures include the following areas:

- Launch System Manager
- Administer users

4.1. Launch System Manager

Access the System Manager Web interface by using the URL “https://ip-address” in an Internet browser window, where “ip-address” is the IP address of the System Manager server. Log in using the appropriate credentials.



The screenshot shows the Avaya Aura System Manager 6.0 login interface. At the top left is the Avaya logo, and to its right is the text "Avaya Aura™ System Manager 6.0". Below this is a red navigation bar with the text "Home / Log On". The main content area has the heading "Log On" in bold. Below the heading are two input fields: "Username :" and "Password :". At the bottom right of the form are two buttons: "Log On" and "Cancel".

4.2. Administer Users

In the subsequent screen, select **Users > Manage Users** from the left pane to display the **User Management** screen. Click **New** to add a user.

The screenshot shows the Avaya Aura™ System Manager 6.0 interface. The top header includes the Avaya logo, the product name, and a welcome message for the 'admin' user. A red navigation bar contains the breadcrumb 'Home / Users / Manage Users'. On the left, a sidebar lists various system components, with 'Users' expanded and 'Manage Users' selected. The main area is titled 'User Management' and features a 'Users' section with buttons for 'View', 'Edit', 'New' (circled in red), 'Duplicate', 'Delete', and 'More Actions'. Below these buttons is a table of existing users with columns for Status, Name, Login Name, E164 Handle, and Last Login. The table lists three users: Avaya 78005, Avaya A175, and Avaya SIP.

Status	Name	Login Name	E164 Handle	Last Login
	Avaya 78005	78005@avaya.com	78005	
	Avaya A175	78300@avaya.com	78300	
	Avaya SIP	66006@br110.com	66006	

4.2.1. User General

The **New User Profile** screen is displayed. In the **General** sub-section, enter desired **Last Name** and **First Name**, as shown below.

The screenshot shows the 'New User Profile' screen in the Avaya Aura™ System Manager 6.0. The breadcrumb is 'Home / Users / Manage Users / New User'. The left sidebar is the same as the previous screen. The main area is titled 'New User Profile' and has tabs for 'General', 'Identity', 'Communication Profile', 'Roles', 'Group Membership', 'Default Contact List', and 'Private Contacts'. The 'General' tab is active, showing input fields for 'Last Name' (filled with 'Lifepoint'), 'First Name' (filled with 'Intouch7'), 'Middle Name' (empty), and 'Description' (empty). The 'Description' field has up and down arrow icons.

4.2.2. User Identity

Scroll down to the **Identity** sub-section. For **Login Name**, enter “n@x”, where “n” is the desired SIP user extension and “x” is the applicable domain name. Retain “Basic” as the **Authentication Type**.

For the first two **SMGR Login Password** fields, enter the administrative password for the applicable Session Manager.

For the **Shared Communication Profile Password** fields, enter the desired password for the SIP user to use for registration.

The screenshot displays the Avaya Aura™ System Manager 6.0 interface. The top header includes the Avaya logo, the product name, and a welcome message for the 'admin' user. A navigation breadcrumb shows the path: Home / Users / Manage Users / New User. On the left, a sidebar menu lists various system management options, with 'Users' and 'Manage Users' highlighted. The main content area is titled 'New User Profile' and contains several tabs: General, Identity, Communication Profile, Roles, Group Membership, Default Contact List, and Private Contacts. The 'Identity' tab is currently active. It contains the following fields and options:

- General** (selected tab)
- Identity** (sub-section header)
- * Login Name:** 66007@br110.com
- * Authentication Type:** Basic (dropdown menu)
- SMGR Login Password:** (password field)
- * Password:** (password field)
- * Confirm Password:** (password field)
- Shared Communication Profile Password:** (password field)
- Confirm Password:** (password field)
- Localized Display Name:** (text field)
- Endpoint Display Name:** (text field)
- Honorific:** (text field)
- Language Preference:** (dropdown menu)
- Time Zone:** (text field)

4.2.3. User Communication Profile

Scroll down to the **Communication Profile** sub-section. Under **Communication Address**, click **New** to add a new address. For **Type**, retain “Avaya SIP”. For **Fully Qualified Address**, enter and select the SIP user extension and domain name from **Section 4.2.2**. Click **Add**.

The screenshot shows the 'Communication Profile' configuration page. At the top, there are buttons for 'New', 'Delete', 'Done', and 'Cancel'. Below this is a table with a single row labeled 'Primary' and a status icon. Underneath, it says 'Select : None'. The main section is titled 'Communication Address' and contains a 'New' button (circled in red), 'Edit', and 'Delete' buttons. Below these is a table with columns 'Type', 'Handle', and 'Domain'. The table is currently empty, showing 'No Records found'. Below the table, there are fields for 'Type' (set to 'Avaya SIP') and 'Fully Qualified Address' (set to '66007' and 'br110.com'). There are 'Add' and 'Cancel' buttons at the bottom right. At the bottom of the page, there are three checkboxes: 'Session Manager Profile', 'Endpoint Profile', and 'Messaging Profile'.

Type	Handle	Domain
No Records found		

Type: Avaya SIP

* Fully Qualified Address: 66007 @ br110.com

Add Cancel

☐ Session Manager Profile

☐ Endpoint Profile

☐ Messaging Profile

Scroll down to check and expand **Session Manager Profile**. For **Primary Session Manager**, **Origination Application Sequence**, **Termination Application Sequence**, and **Home Location**, select the values corresponding to the applicable Session Manager. Retain the default values in the remaining fields.

Scroll down to check and expand **Endpoint Profile**. For **System**, select the value corresponding to the applicable Communication Manager. For **Extension**, enter the SIP user extension from **Section 4.2.2**. For **Template**, select “DEFAULT_9630_CM_6_0”. For **Port**, click and select “IP”.

Scroll up to the beginning of the **Communication Profile** sub-section, and click **Done** to complete the profile (shown in the beginning of this section). Click **Commit** at the top or bottom of the screen (not shown).

Repeat **Section 4.2** to add a user for each Lifepoint® InTouch. In the compliance testing, two users with extensions “66007” and “66008” were added.

☒ **Session Manager Profile**

* Primary Session Manager

BR110-SM

Secondary Session Manager

(None)

Origination Application Sequence

DEVCON App Sequence

Termination Application Sequence

DEVCON App Sequence

Survivability Server

(None)

* Home Location

BR-1C110

Primary	Secondary	Maximum
5	0	5

Primary	Secondary	Maximum

☒ **Endpoint Profile**

* System

BR110-CM-ES

Use Existing Endpoints

☐

* Extension

66007

Endpoint Editor

* Template

DEFAULT_9630_CM_6_0

Set Type

9630

Security Code

* Port

IP

Voice Mail Number

Delete Endpoint on Unassign of Endpoint from User

☐

5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager. The procedures include the following areas:

- Verify Communication Manager license
- Administer IP codec set
- Administer stations

5.1. Verify Communication Manager License

Log in to the System Access Terminal (SAT) to verify that the Avaya Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the “display system-parameters customer-options” command to verify that there is sufficient capacity for SIP stations by comparing the **Maximum Off-PBX Telephones - OPS** field value with the corresponding value in the **USED** column. The difference between the two values needs to be greater than or equal to the number of Exceptional Innovation Life|point InTouch.

The license file installed on the system controls the maximum permitted. If there is insufficient capacity, contact an authorized Avaya sales representative to make the appropriate changes.

```
display system-parameters customer-options                                Page 1 of 11
                                OPTIONAL FEATURES

G3 Version: V16                                     Software Package: Enterprise
Location: 2                                           System ID (SID): 1
Platform: 28                                          Module ID (MID): 1

                                USED
Platform Maximum Ports: 65000 174
Maximum Stations: 36000 39
Maximum XMOBILE Stations: 41000 0
Maximum Off-PBX Telephones - EC500: 36000 0
Maximum Off-PBX Telephones - OPS: 36000 8
Maximum Off-PBX Telephones - PBFMC: 36000 0
Maximum Off-PBX Telephones - PVFMC: 36000 0
Maximum Off-PBX Telephones - SCCAN: 0 0
Maximum Survivable Processors: 313 1

(NOTE: You must logoff & login to effect the permission changes.)
```

5.2. Administer IP Codec Set

Use the “change ip-codec-set n” command, where “n” is the existing codec set number associated with the SIP trunk group to Session Manager. Update the audio codec types in the **Audio Codec** fields as necessary to include G.711. Note that Life|point® InTouch only supports the G.711 codec variant.

change ip-codec-set 1				Page 1 of 2	
IP Codec Set					
Codec Set: 1					
Audio Codec	Silence Suppression	Frames Per Pkt	Packet Size (ms)		
1: G.711MU	n	2	20		
2:					

5.3. Administer Stations

Use the “change station n” command, where “n” is the first user extension from **Section 4.2**, in this case “66007”. Navigate to **Page 4**, and modify **BUTTON ASSIGNMENTS** to retain only one call appearance button, as shown below.

Repeat this section for all users.

change station 66007			Page 4 of 6	
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:		
2:		6:		
3:		7:		
4:		8:		

6. Configure Exceptional Innovation Life|point® InTouch

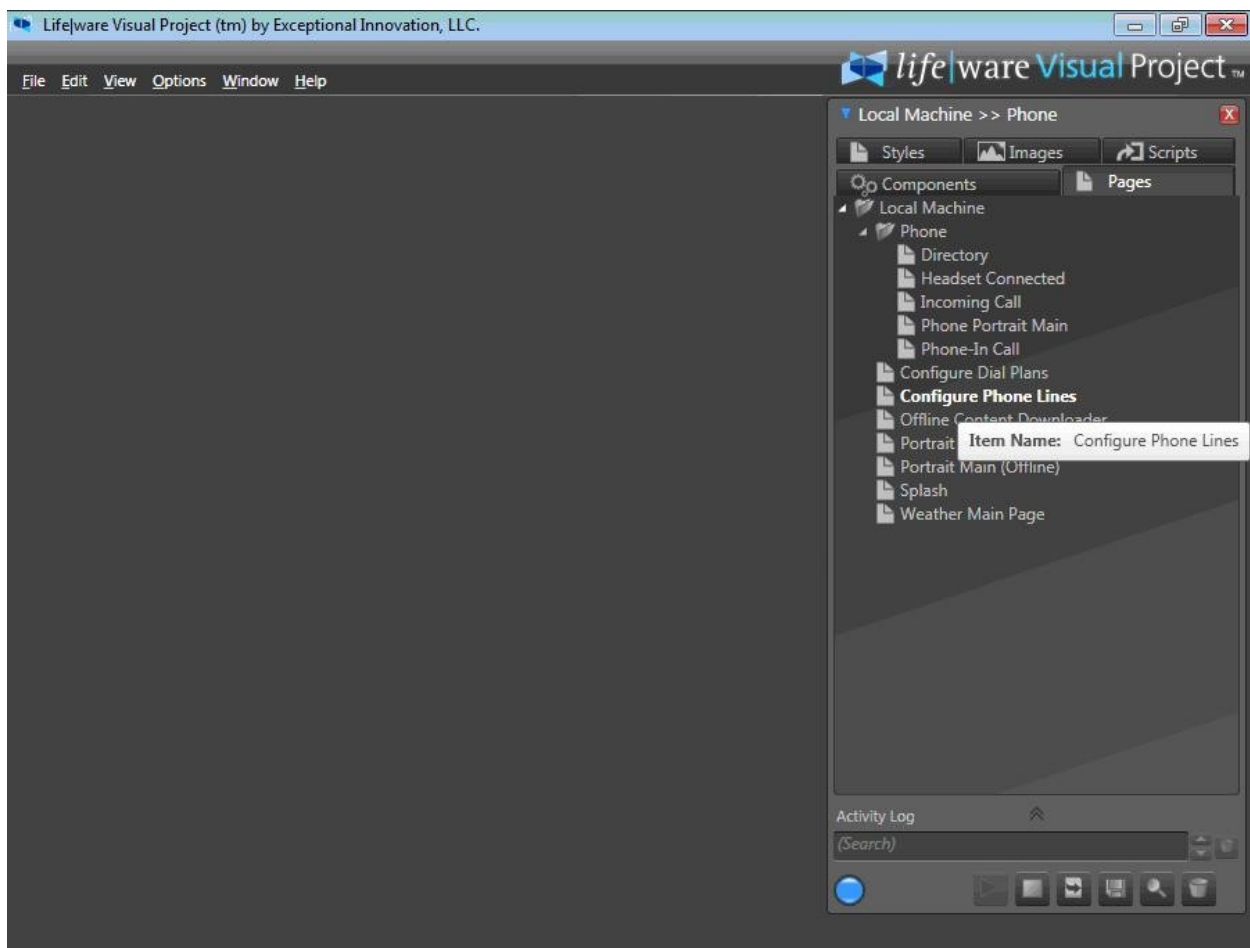
This section provides the procedures for configuring Exceptional Innovation Life|point InTouch. The procedures include the following areas:

- Launch Visual Project
- Configure phone lines
- Restart service

6.1. Launch Visual Project

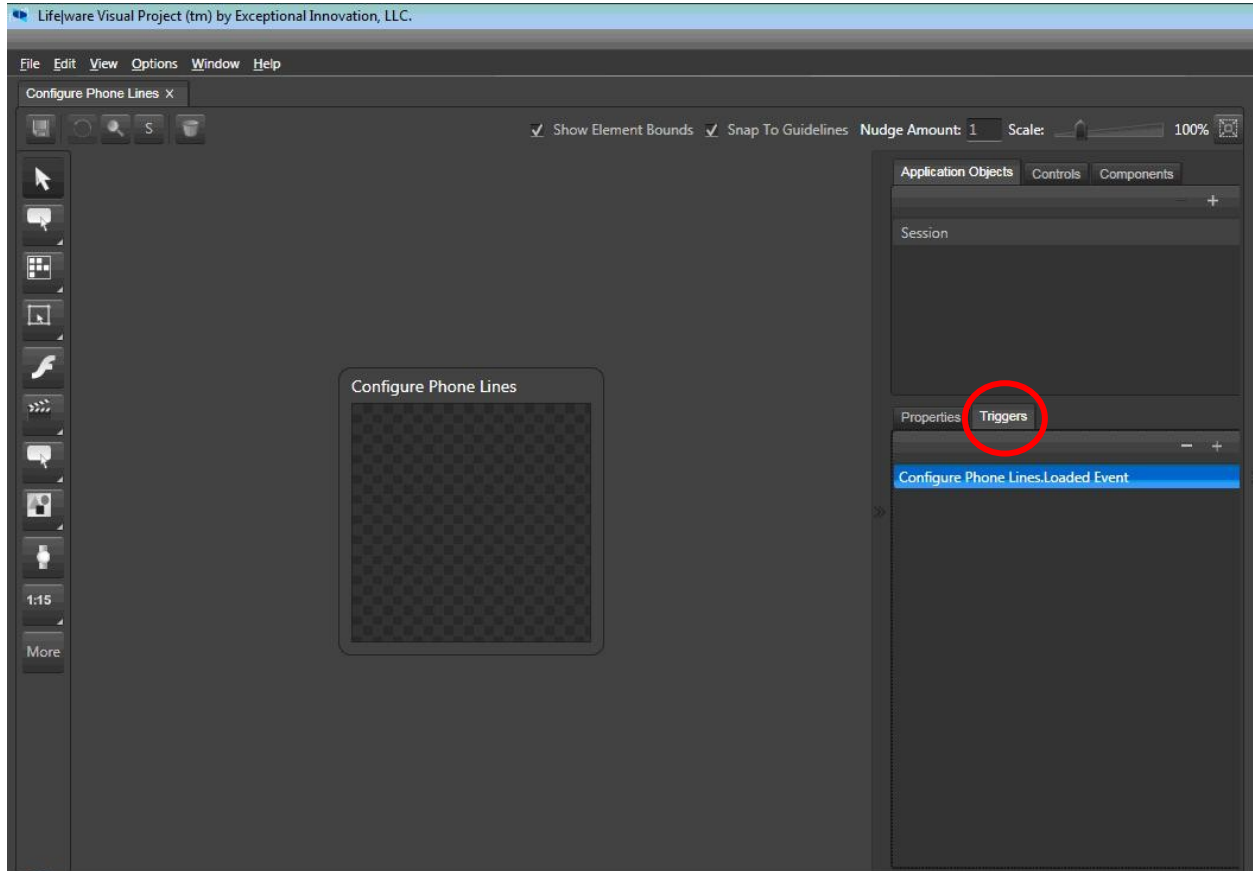
From the Life|ware server, select **Start > Program Files > EI > Lifeware > Applications > EI.VisualProject.exe** to launch the Visual Project configuration tool.

The **Life|ware Visual Project** screen is displayed. Expand and select **Local Machine > Configure Phone Lines** in the right pane.

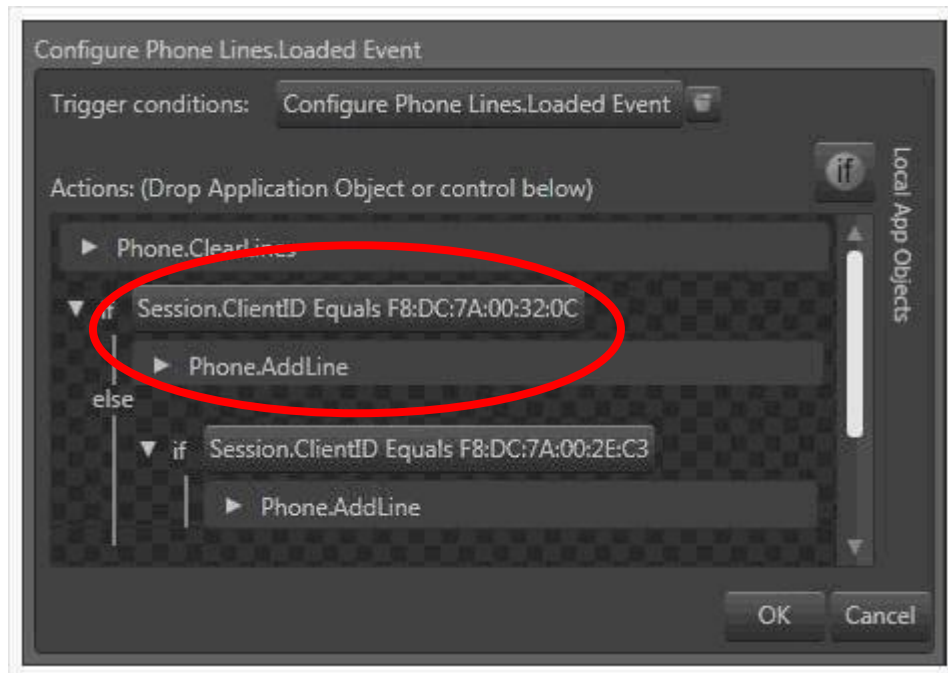


6.2. Configure Phone Lines

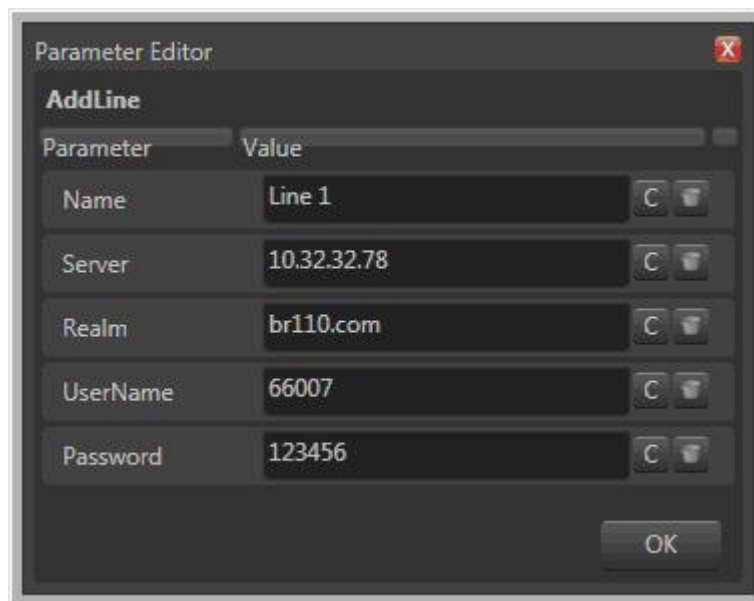
The screen is updated as shown below. Select the **Triggers** tab in the right pane, followed by **Configure Phone Lines.Loaded Event**.



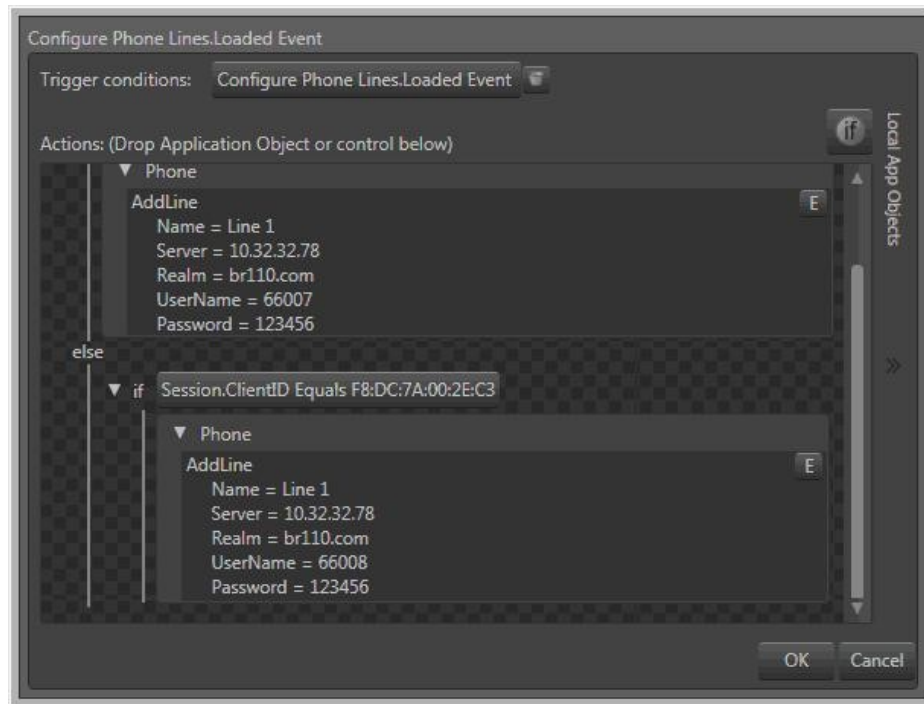
The **Configure Phone Lines.Loaded Event** screen is displayed. Scroll the screen as necessary to find the entry with **Session.ClientID** matching to the MAC address of the first Lifepoint® InTouch, in this case the MAC address is “F8:DC:7A:00:32:0C”. Click the associated **Phone.AddLine**.



The **Parameter Editor** screen is displayed next. For **Server**, enter the IP address of the Session Manager signaling interface. For **Realm**, **UserName**, and **Password**, enter the domain name, user extension and user registration password respectively from **Section 4.2.2**.

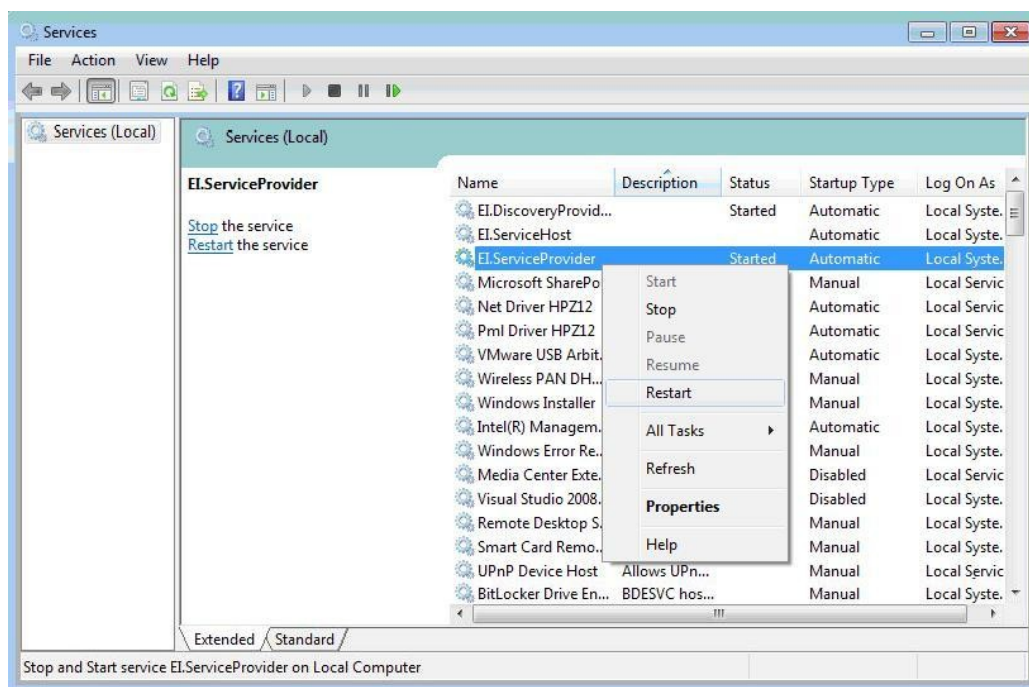


Repeat this section for all Life|point InTouch. In the compliance testing, two Life|point InTouch were configured as shown below.



6.3. Restart Service

Select **Start > Control Panel > System and Security > Administrative Tools > Services** to display the **Services** screen. Restart the **EI.ServiceProvider** service, as shown below.



7. General Test Approach and Test Results

The feature test cases were performed manually. Calls were manually established between Life|point InTouch users with Avaya SIP, Avaya H.323, Avaya Digital, and/or PSTN users. Call controls were performed from the various users to verify the call scenarios.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN cable to Life|point InTouch.


All test cases were executed. The following were the observations on Life|point InTouch from the compliance testing.

- Calls with Avaya SIP users did not shuffle.
- When using the speakerphone in conjunction with DTMF digits outpulse, the background noise picked up from the microphone could impact the quality and recognition of the DTMF tones.
- The current release does not support hold, multiple calls, conference, and transfer features.

8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Aura® Session Manager, Avaya Aura® Communication Manager, and Exceptional Innovation Life|point InTouch.

From the System Manager Web interface, select **Elements > Session Manager > System Status > User Registrations** from the left pane to display the **User Registrations** screen. Verify that the users from **Section 4.2** are registered, as shown below with a check in the **Registered Prim** column.

 Avaya Aura™ System Manager 6.0

Welcome, **admin** Last Logged on at December 8, 2010 2:06 PM
[Help](#) | [About](#) | [Change Password](#) | [Log off](#)

Home / Elements / Session Manager / System Status / User Registrations

User Registrations

Select to send notifications to AST devices. Click on row to display registration detail.

AST Device Notifications: As of 4:41 PM [Advanced Search](#)

46 Items | Refresh | Show 15 | Filter: Enable

<input type="checkbox"/>	Address	Login Name	First Name	Last Name	Location	IP Address	Registered			AST
							Prim	Sec	Surv	
<input type="checkbox"/>	---	51106@dev4.com	sipera	test106	Dev4 Infrastructure	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	66008@br110.com	66008@br110.com	InTouch 8	Lifepoint	BR-1C110	10.32.35.132:5060	<input checked="" type="checkbox"/> (AC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	---	55005@dev4.com	test	Sipera5	Dev4 Infrastructure	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	---	66009@br110.com	InTouch 9	Lifepoint	BR-1C110	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	---	51119@dev4.com	sipera	test119	Dev4 Infrastructure	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	---	51118@dev4.com	sipera	test118	Dev4 Infrastructure	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	66007@br110.com	66007@br110.com	InTouch 7	Lifepoint	BR-1C110	10.32.35.131:5060	<input checked="" type="checkbox"/> (AC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Conclusion

These Application Notes describe the configuration steps required for Exceptional Innovation Life|point® InTouch to successfully interoperate with Avaya Aura® Communication Manager using Avaya Aura® Session Manager. All feature and serviceability test cases were completed with observations noted in **Section 7**.

10. Additional References

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

1. *Administering Avaya AuraTM Communication Manager*, Document 03-300509, Issue 6.0, Release 6.0, June 2010, available at <http://support.avaya.com>.
2. *Administering Avaya AuraTM Session Manager*, Document Number 03-603324, Issue 3, Release 6.0, August 2010, available at <http://support.avaya.com>.
3. *Life|point InTouch Phone User Guide*, Manual Version Release 1.0, available at <http://support.exceptionalinnovation.com>.

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