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.

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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

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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.

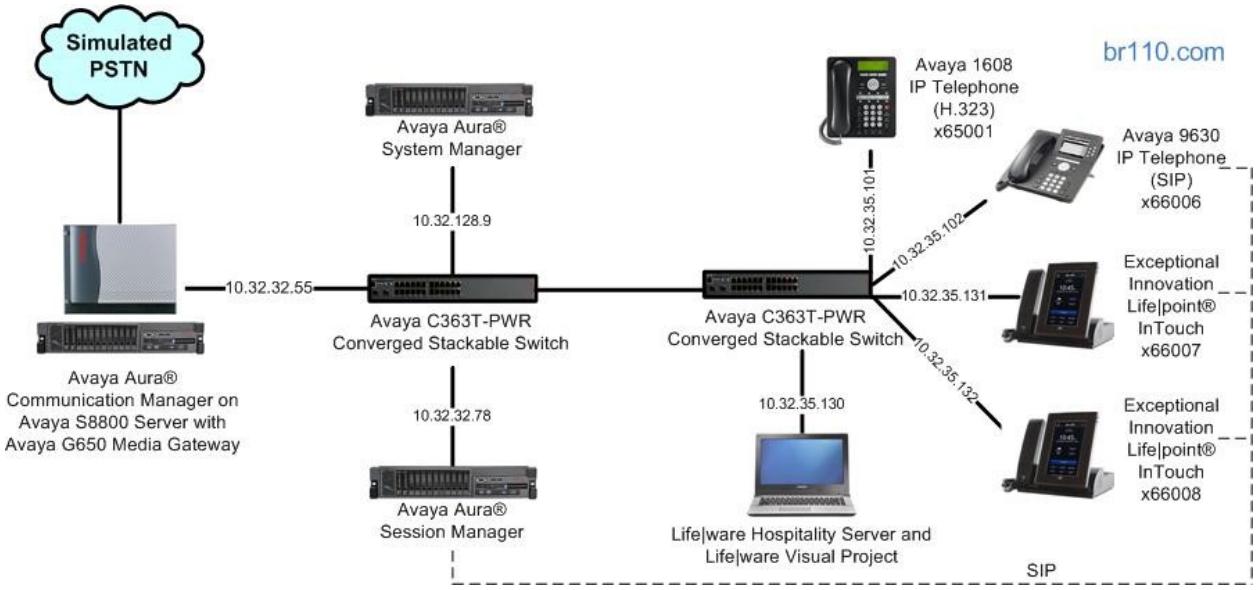

Figure 1: Network Configuration

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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 • TN799DP C-LAN Circuit Pack • TN2302AP 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 • Life|ware Visual Project	3.0.1 3.0.1.5
Exceptional Innovation Life|point® InTouch	3.1

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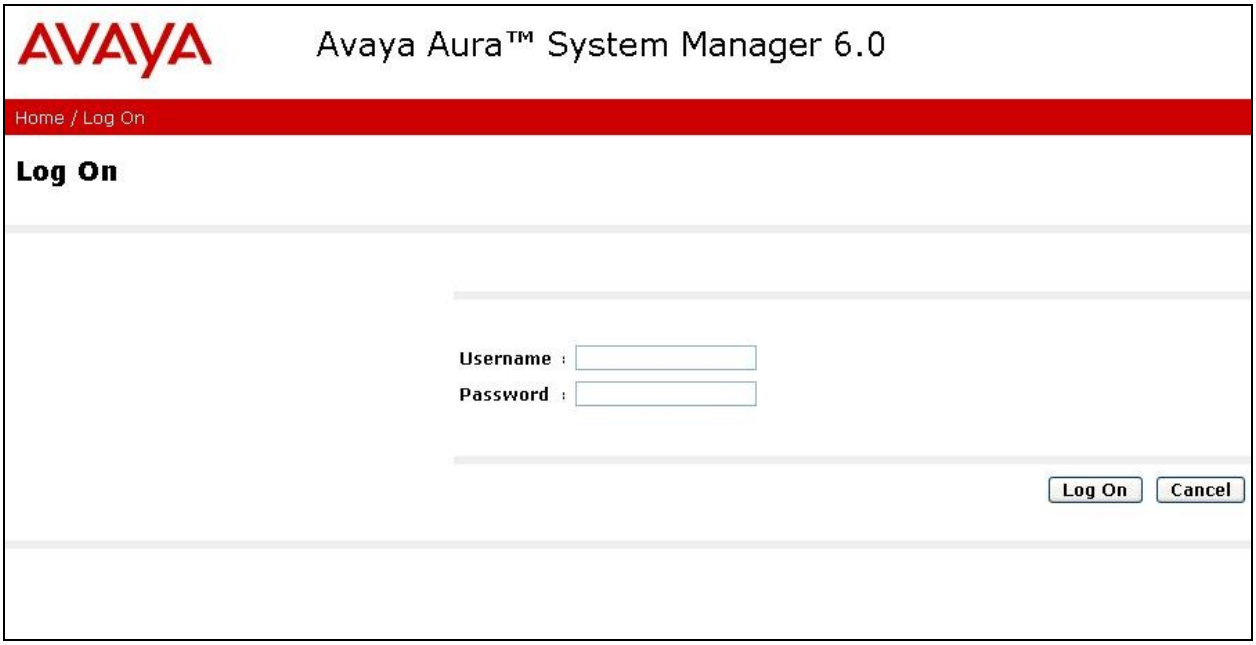
4. Configure Avaya Aura® Session Manager

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.



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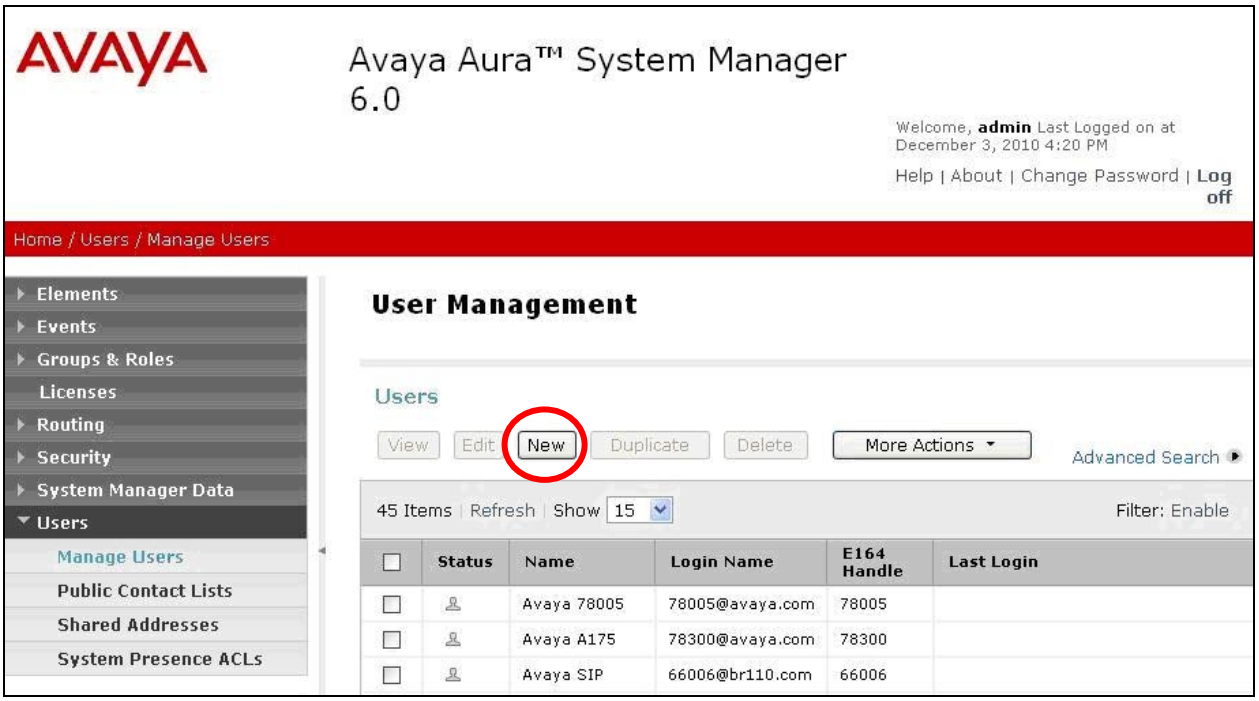
4.2. Administer Users

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



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.

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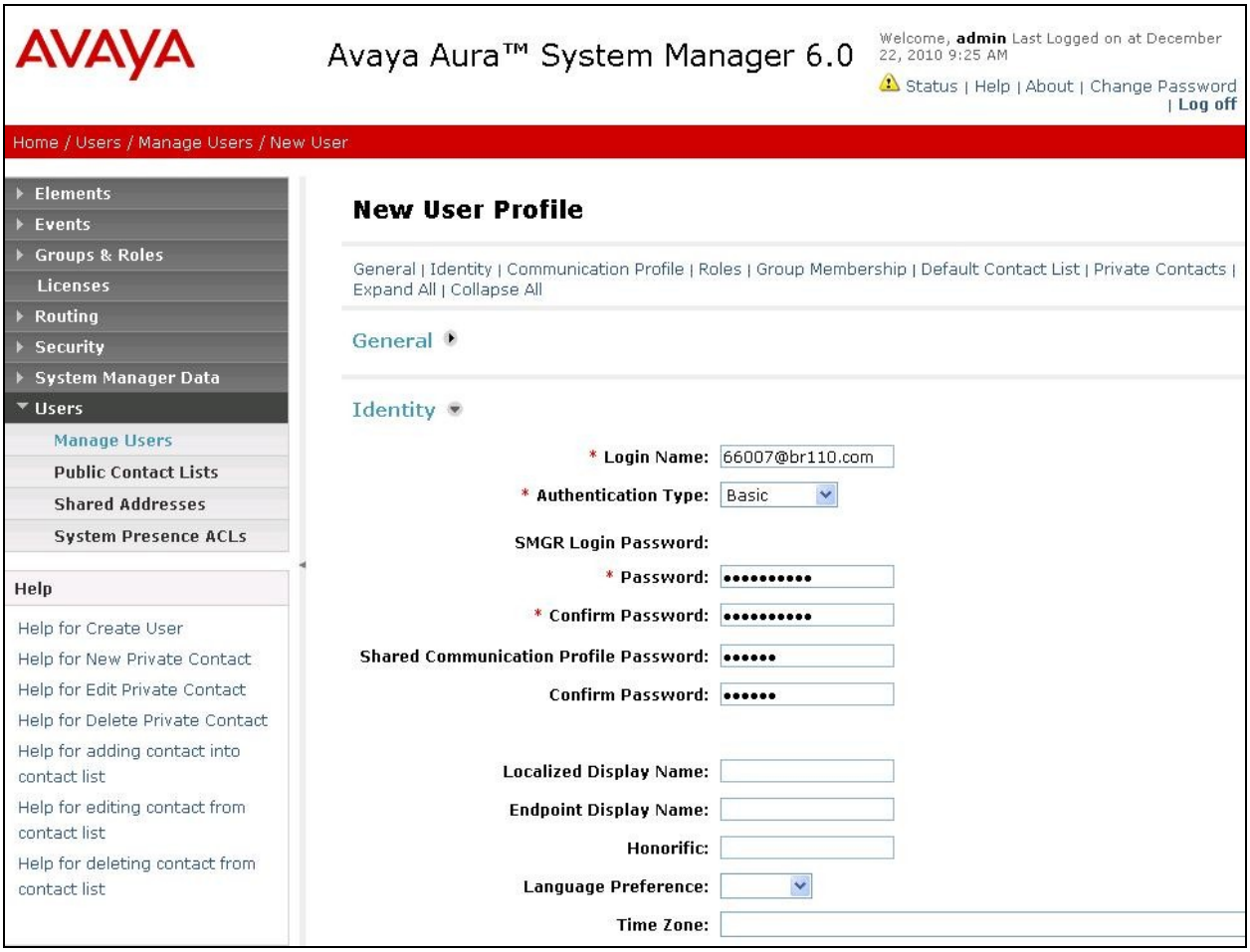
4.2.2. User Identity

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.



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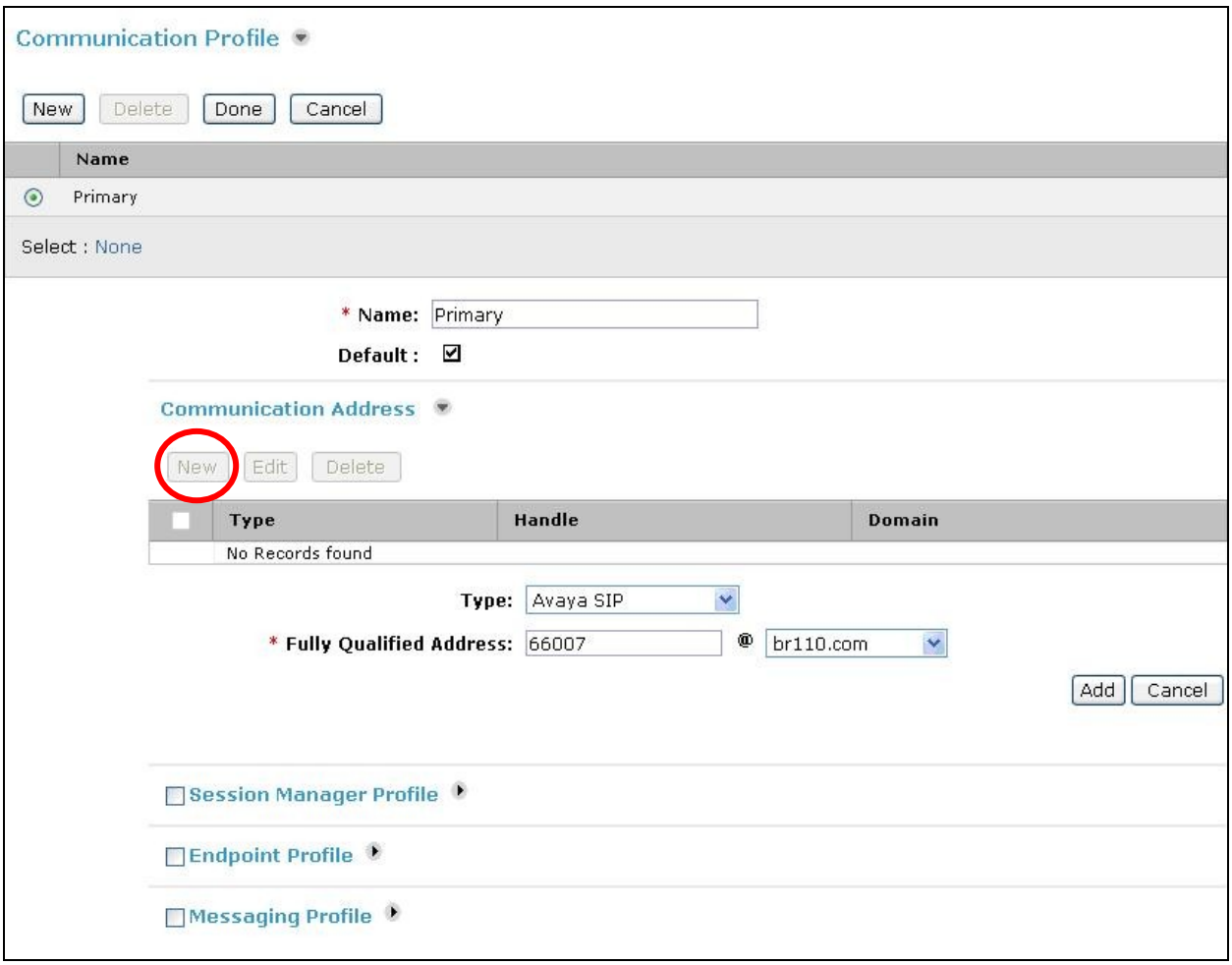
4.2.3. User Communication Profile

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**.



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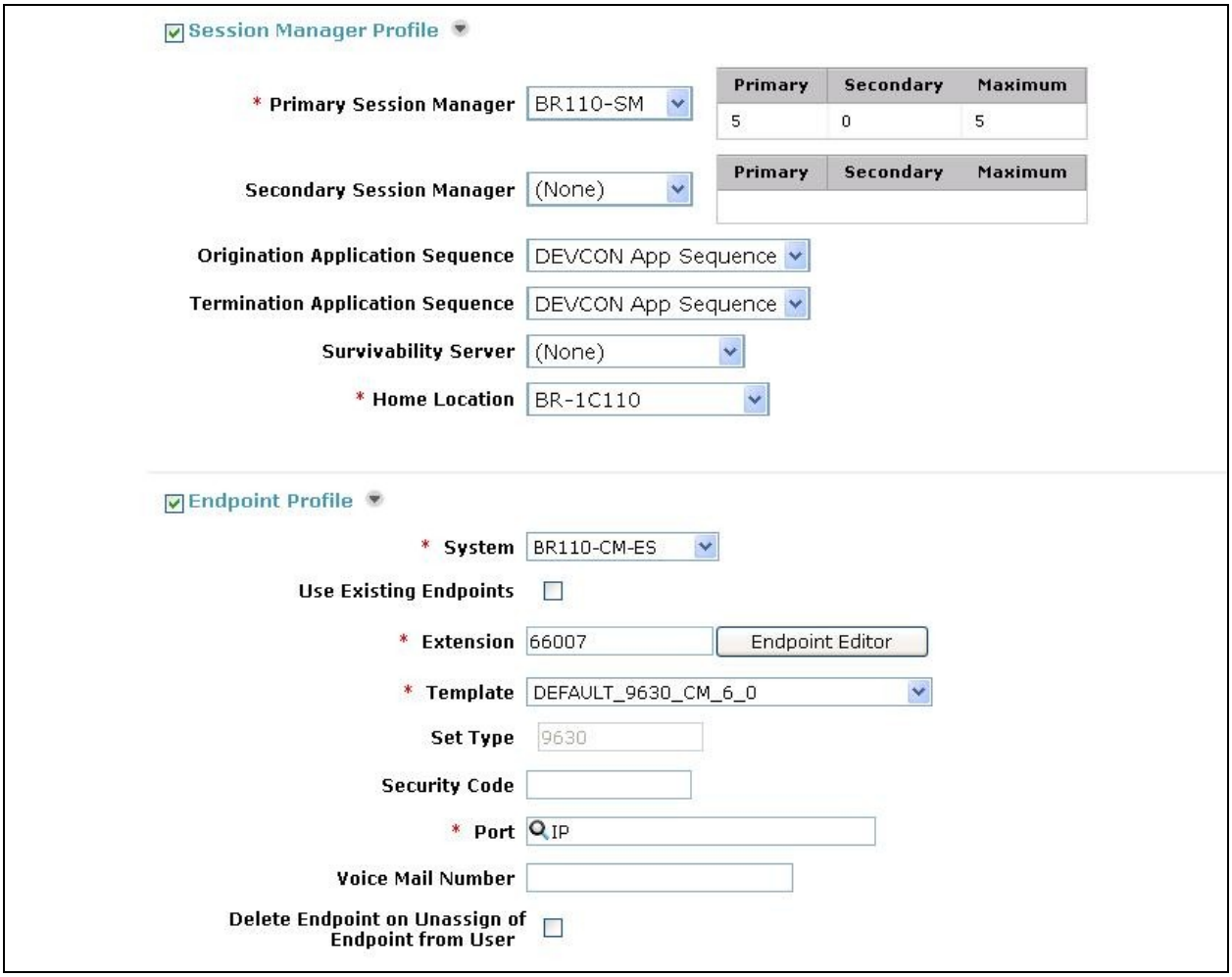
Scroll down to check and expand **Session Manager Profile**. For **Primary Session Manager**, **Origination Application Sequence**, **Termination Application Sequence**, and **Home Location**, select the values corresponding to the applicable Session Manager. Retain the default values in the remaining 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 Life|point® InTouch. In the compliance testing, two users with extensions "66007" and "66008" were added.



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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.)
```


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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        Silence      Frames   Packet
   Codec        Suppression  Per Pkt  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:
```


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6. Configure Exceptional Innovation Life|point® InTouch

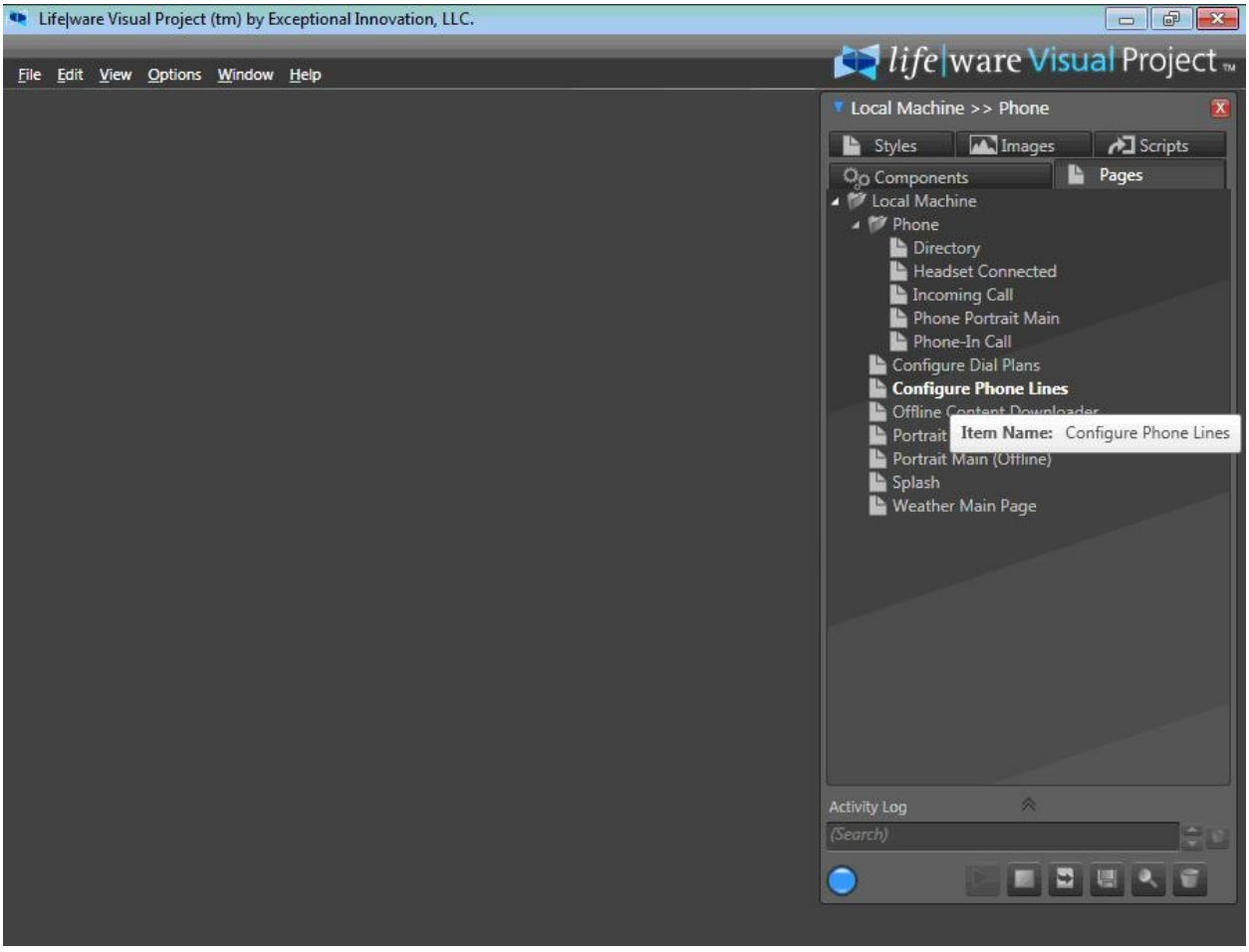
This section provides the procedures for configuring Exceptional Innovation Life|point InTouch. The procedures include the following areas:

- 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.



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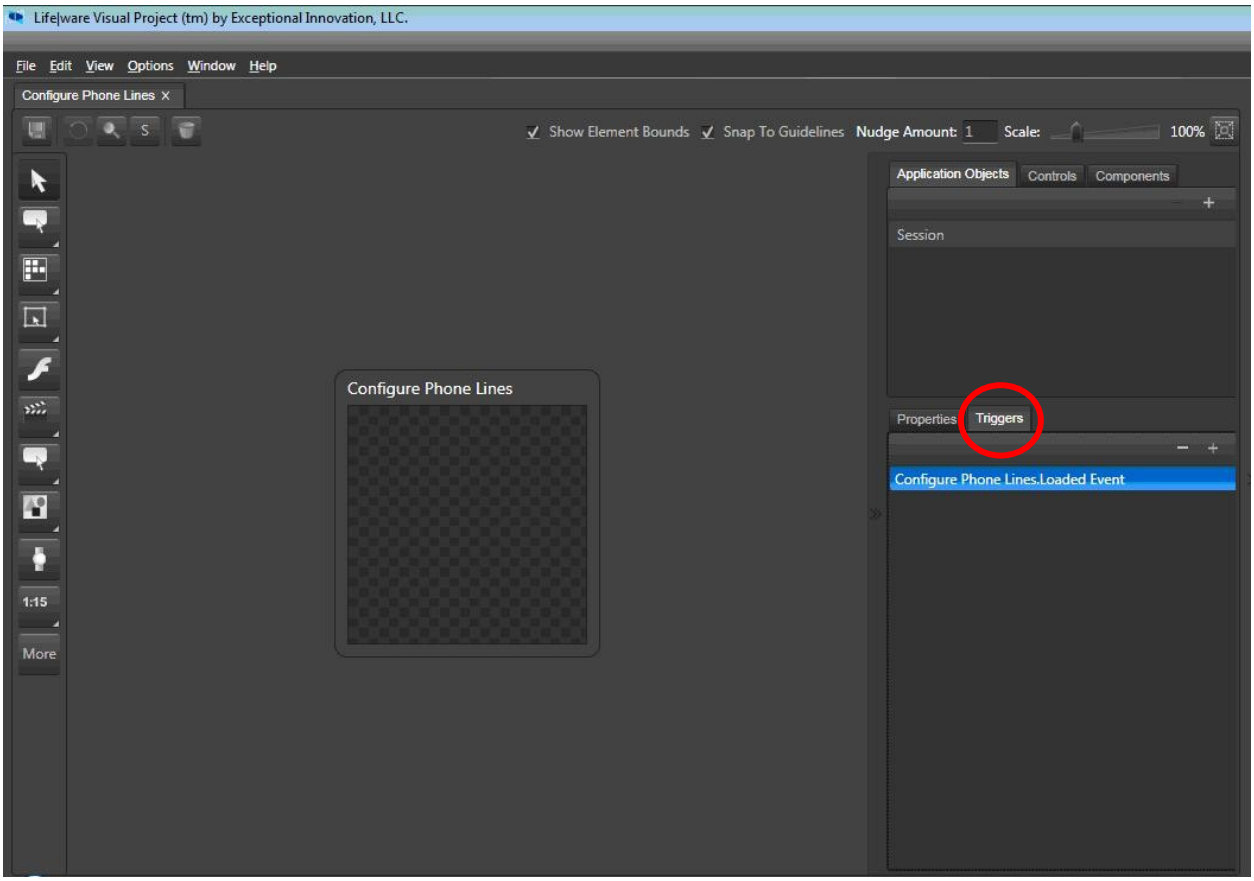
6.2. **Configure Phone Lines**

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



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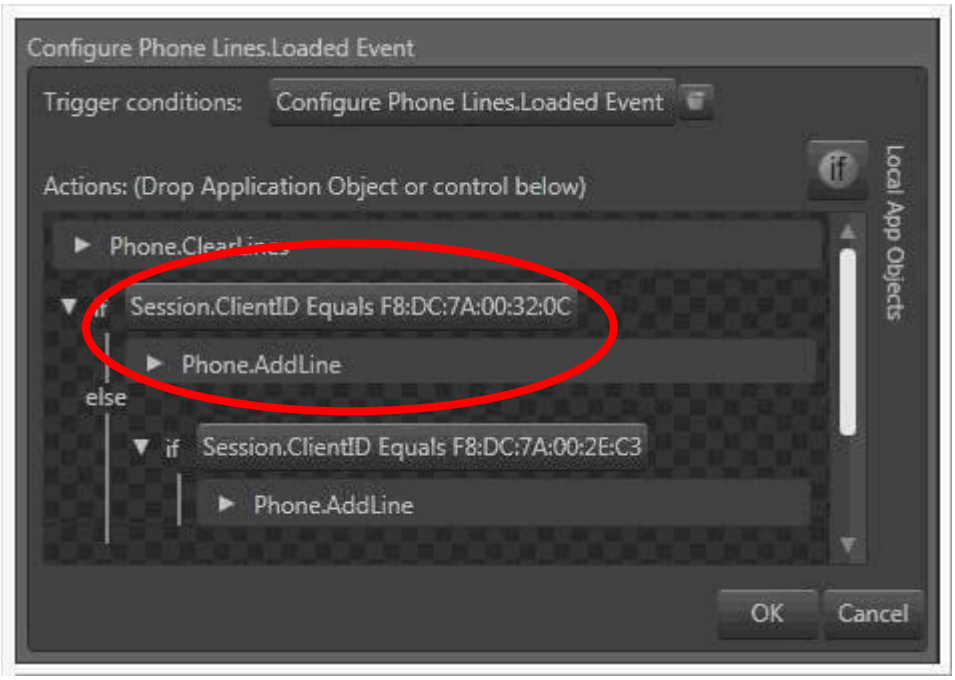
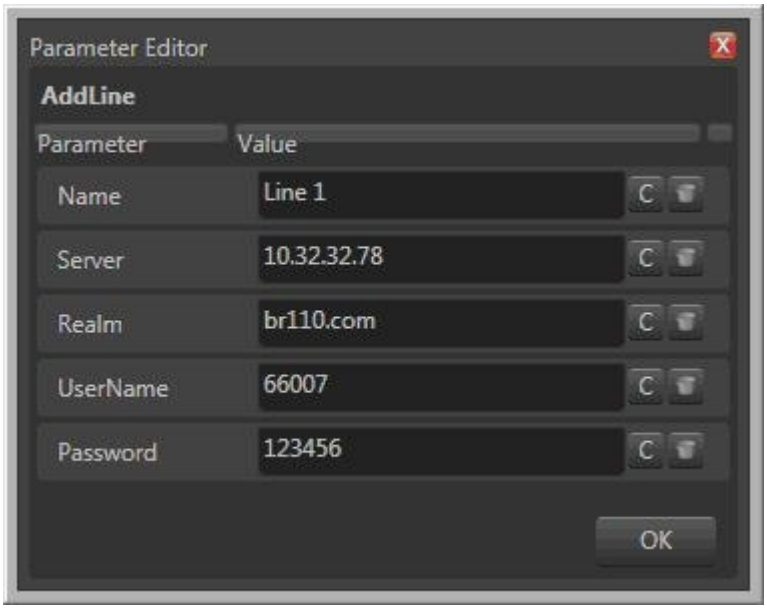
The **Configure Phone Lines.Loaded Event** screen is displayed. Scroll the screen as necessary to find the entry with **Session.ClientID** matching to the MAC address of the first Life|point® InTouch, in this case the MAC address is "F8:DC:7A:00:32:0C". Click the associated **Phone.AddLine**.



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**.



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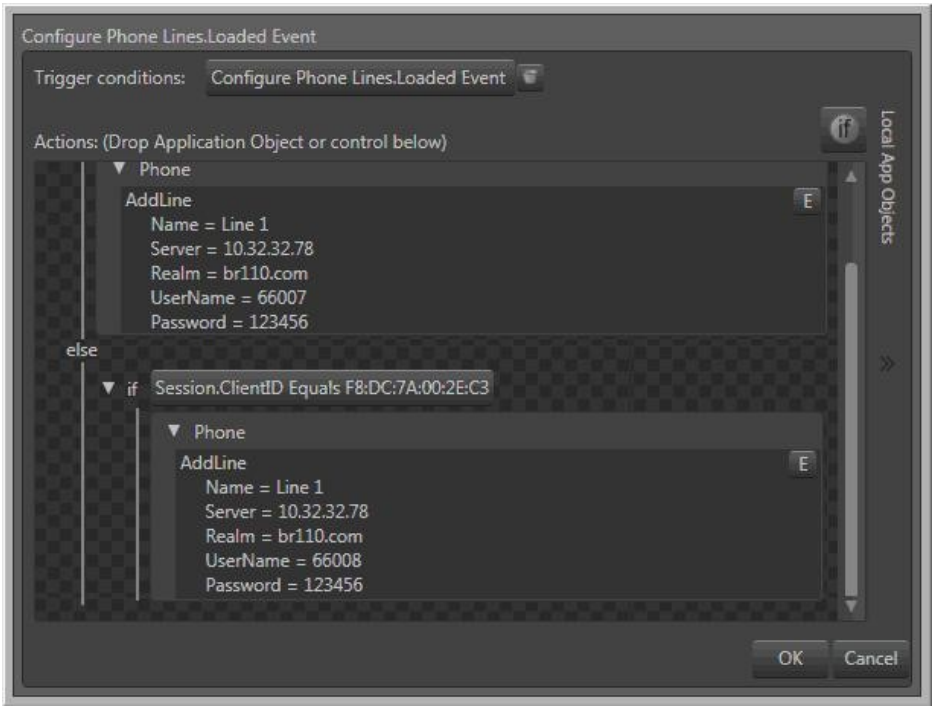
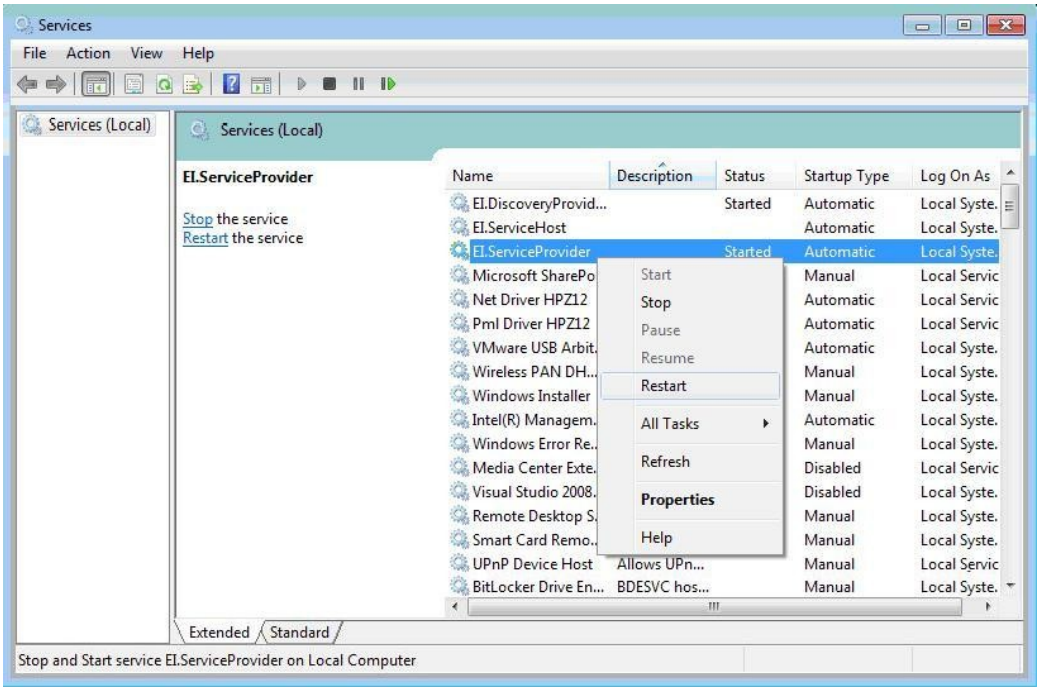
Repeat this section for all Life|point InTouch. In the compliance testing, two Life|point InTouch were configured as shown below.



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.



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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.

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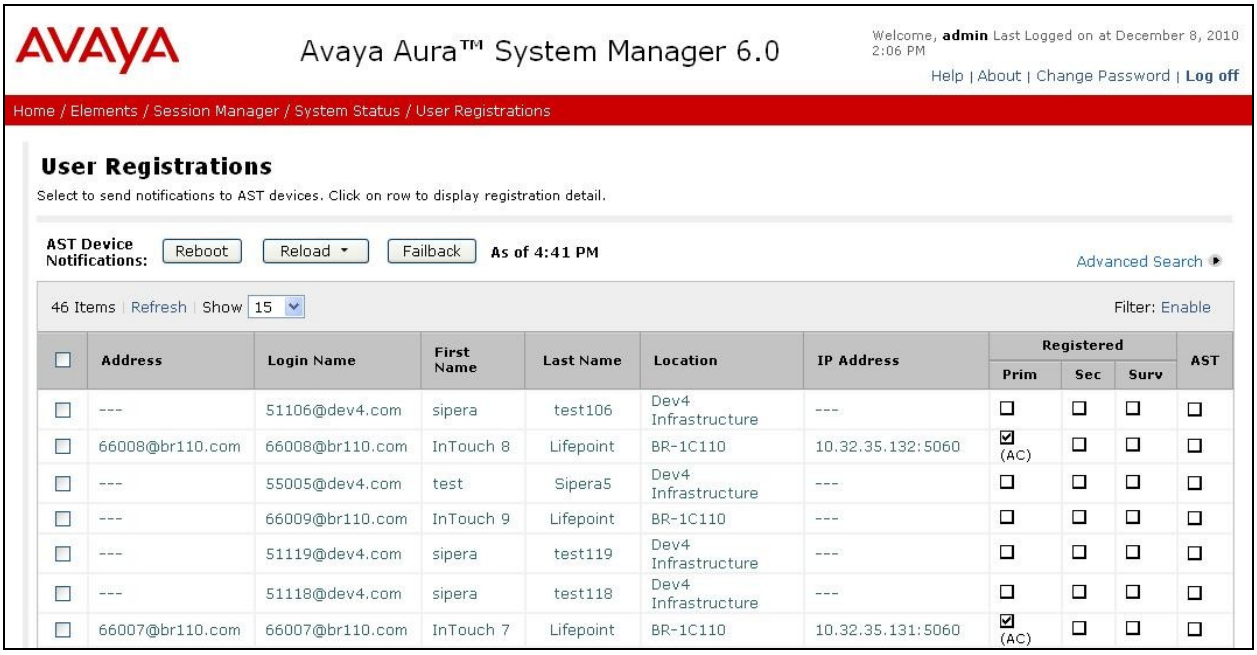
8. Verification Steps

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.



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

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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 Aura™ Communication Manager*, Document 03-300509, Issue 6.0, Release 6.0, June 2010, available at http://support.avaya.com.

2. *Administering Avaya Aura™ 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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