



**Application Notes for Configuring G-Tek/AEi
Communications SSP-9210-SMG SIP Phone/DECT Base
Station with SGR-8206-SPBU DECT Handset with Avaya
Aura® Session Manager 6.3 and Avaya Aura®
Communication Manager 6.3 - Issue 1.0**

Abstract

These Application Notes describe the configuration steps required for configuring G-Tek/AEi Communications SSP-9210-SMG SIP Phone/DECT Base Station with SGR-8206-SPBU DECT Handset to interoperate with Avaya Aura® Session Manager 6.3 and Avaya Aura® Communication Manager 6.3.

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 steps required to configure G-Tek/AEi Communications SSP-9210-SMG SIP Phone/DECT Base Station with SGR-8206-SPBU DECT Handset to interoperate within an Avaya SIP infrastructure including Avaya Aura® Session Manager 6.3 and Avaya Aura® Communication Manager 6.3. G-Tek/AEi's SSP-9210-SMG SIP Phone/DECT Base Station with SGR-8206-SPBU DECT Handset is a phone used in the hospitality industry.

2. General Test Approach and Test Results

To verify interoperability of G-Tek/AEi's device with Session Manager and Communication Manager, calls were made between G-Tek/AEi telephones and Avaya SIP, H.323, analog and digital telephones using various codec settings and exercising common PBX features. Various telephony features were also activated and deactivated using speed-dial buttons.

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

Interoperability compliance testing covered the following features and functionality:

- Successful registration of G-Tek/AEi's device with Session Manager.
- Calls between G-Tek/AEi telephones and Avaya SIP, H.323, analog, and digital telephones.
- G.711Mu, G.711A and G729 codec support and negotiation.
- Basic features including phone display, mute/un-mute, answer, hang up, music on hold, DTMF transmission, Message Waiting Indicator (MWI) subscription and feature access code dialing.
- PBX features including Multiple Call Appearances, Hold, Transfer, and Conference.
- Proper system recovery after a G-Tek/AEi telephone restart and loss of IP connection.

2.2. Test Results

All test cases were executed and passed successfully.

2.3. Support

Technical support from G-Tek/AEi Communications can be obtained through the following:

- Phone: +1-650-552-9516

- E-mail: techsupport@aeicomunications.com

3. Reference Configuration

The diagram illustrates an enterprise site with an Avaya SIP-based network, including Session Manager, an S8300 Board installed in an Avaya G450 Media Gateway running Communication Manager, and Avaya SIP, H.323, analog, and digital endpoints. Two G-Tek/AEi SSP-9210-SMG SIP Phone/DECT Base Stations with SGR-8206-SPBU DECT Handsets, registered with Session Manager, were also used during the compliance test.

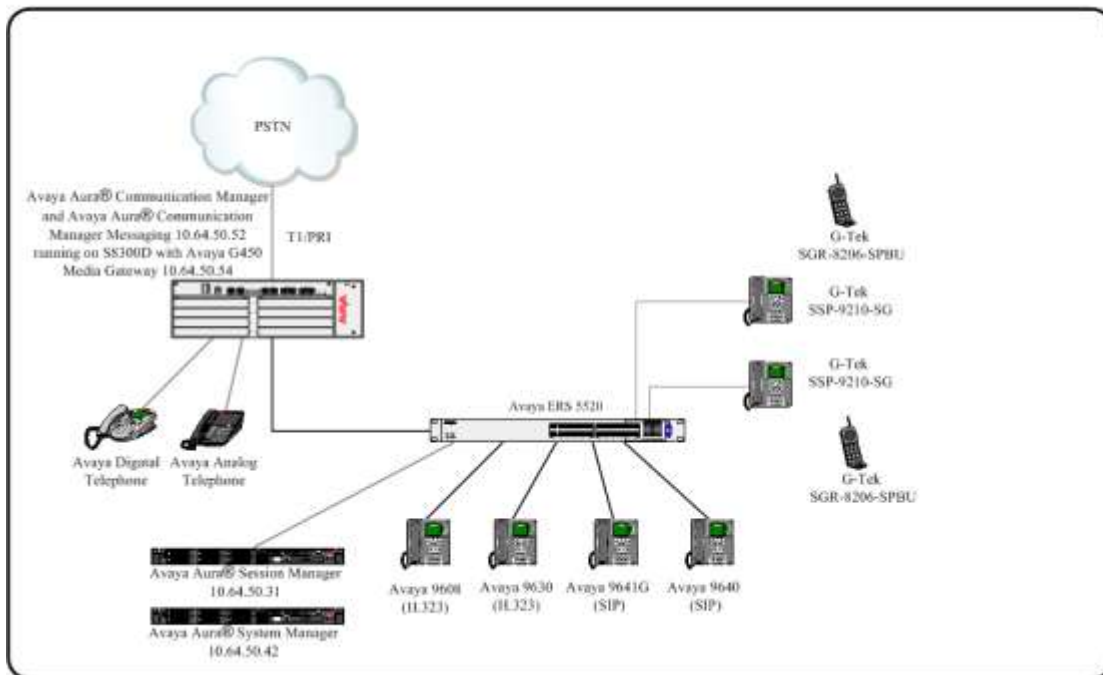


Figure 1: G-Tek/AEi SSP-9210-SMG SIP Phone/DECT Base Station with SGR-8206-SPBU DECT Handset Reference Configuration

4. Equipment and Software Validated

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

Equipment	Software/Firmware
<i>Avaya PBX Products</i>	
Avaya Aura® Communication Manager	6.3 SP6
Avaya Aura® Session Manager	6.3.8
<i>Avaya Messaging (Voice Mail) Products</i>	
Avaya Aura® Communication Manager Messaging	6.3 SP6

Equipment	Software/Firmware
<i>Avaya Endpoints</i>	
Avaya 96xx Series IP Deskphone	(H.323 3.2) (SIP 2.6)
Avaya 96x1 Series IP Deskphone	(H.323 6.4) (SIP 6.4)
Avaya Digital Telephone	R39
Avaya Analog Telephone	NA
<i>G-Tek/AEi Products</i>	
SSP-9210-SMG	SSP9210SG_V27
SGR-8206-SPBU	2.57

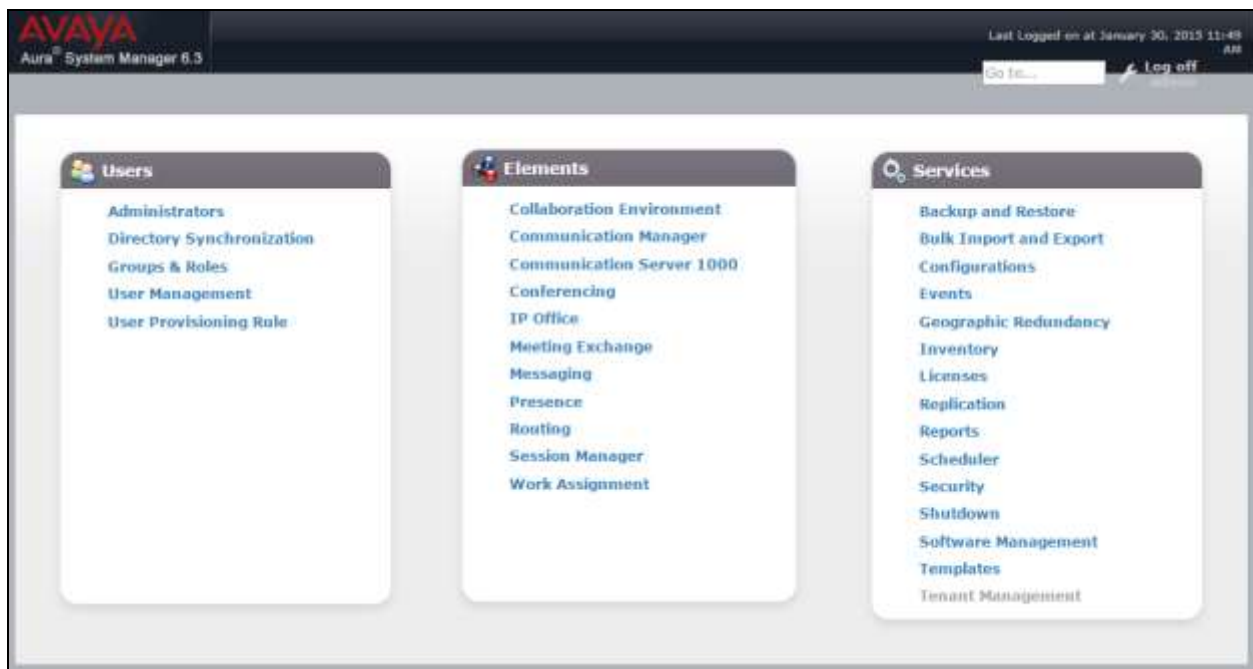
5. Configure Avaya Aura® Session Manager

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

- Launch System Manager
- Administer users

5.1. 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 and the following screen should be displayed.



5.2. Administer Users

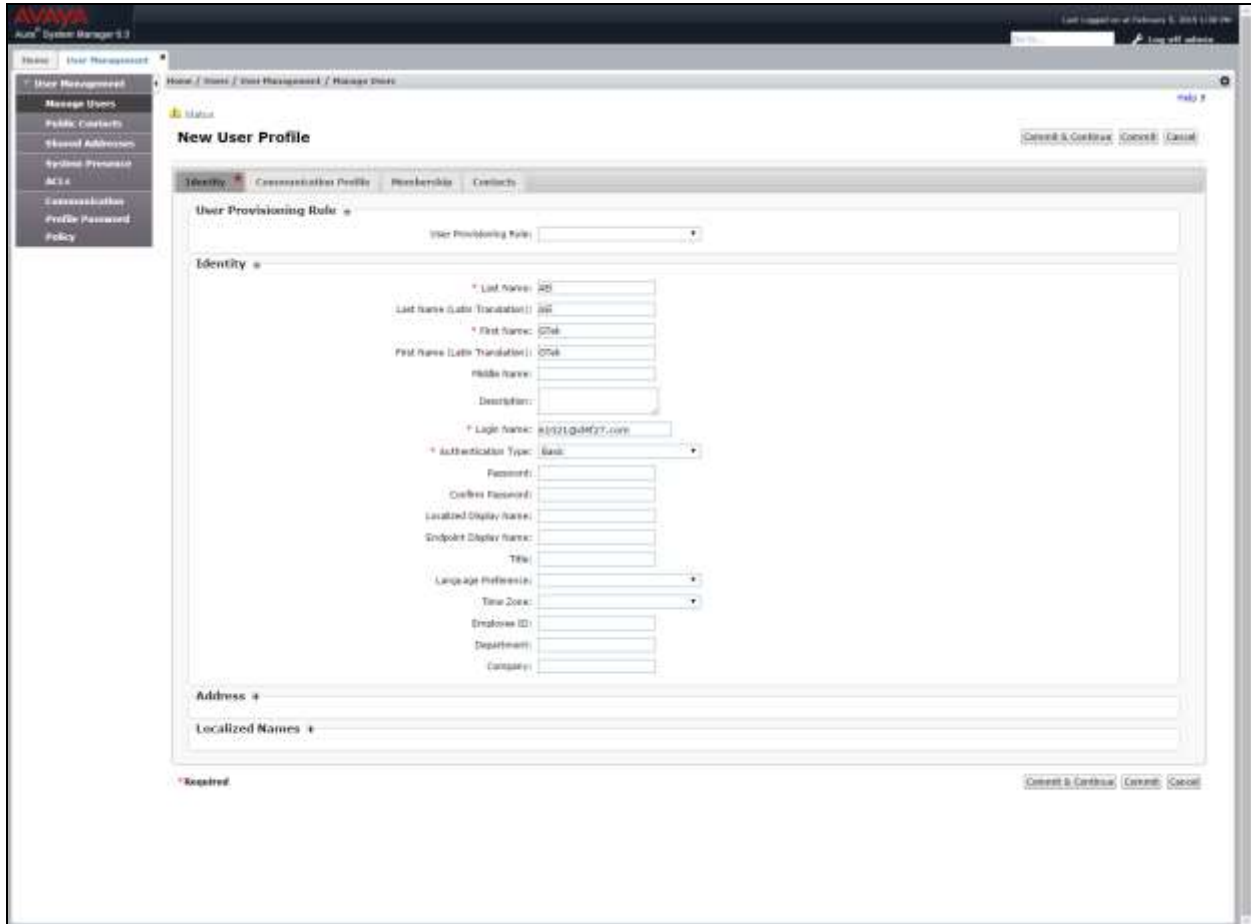
From the main screen select **Users** → **User Management** → **Manage Users** to display the **User Management** screen below. Click **New** to add a user.

The screenshot displays the Avaya System Manager 6.3 User Management interface. The page title is "User Management" and the breadcrumb trail is "Home / Users / User Management / Manage Users". A search bar is located at the top right. The main content area shows a table of users with the following columns: Last Name, First Name, Display Name, Login Name, SIP Handle, and Last Login. The table contains 33 items, with 15 items displayed on the current page. The interface includes a "New" button and a "More Actions" dropdown menu.

Last Name	First Name	Display Name	Login Name	SIP Handle	Last Login
36101	SP	36101, Station	36101@4427.com	36101	
36102	Station	36102, Station	36102@4427.com	36102	
36103	Station	36103, Station	36103@4427.com	36103	
36104	Station	36104, Station	36104@4427.com	36104	
36105	Station	36105, Station	36105@4427.com	36105	
36106	Station	36106, Station	36106@4427.com	36106	
36107	Station	36107, Station	36107@4427.com	36107	
36200	Analog	36200, Analog	36200@4427.com	36200	
36201	Analog	36201, Analog	36201@4427.com	36201	
36301	Analog Line 1	36301, Analog Line 1	36301@4427.com	36301	
Avaya	ana-X Agent 1	Avaya, ana-X Agent 1	45001@br113.com	+9099445001	
Avaya	ana-X Agent 2	Avaya, ana-X Agent 2	45002@br113.com	+9099445002	
Avtec	Avtec	Avtec Line1	61009@4427.com	61009	
Avtec	Avtec	Avtec Line2	61010@4427.com	61010	
Avtec	Avtec	Avtec Line3	61011@4427.com	61011	

5.2.1. Identity

The **New User Profile** screen is displayed. Enter desired **Last Name** and **First Name**. For **Login Name**, enter “n@z”, where “n” is the first G-Tek/AEi SSP-9210-SMG user extension and “z” is the domain name used for compliance testing, in this case “**d4f27.com**”. Retain the default values in the remaining fields.



5.2.2. Communication Profile

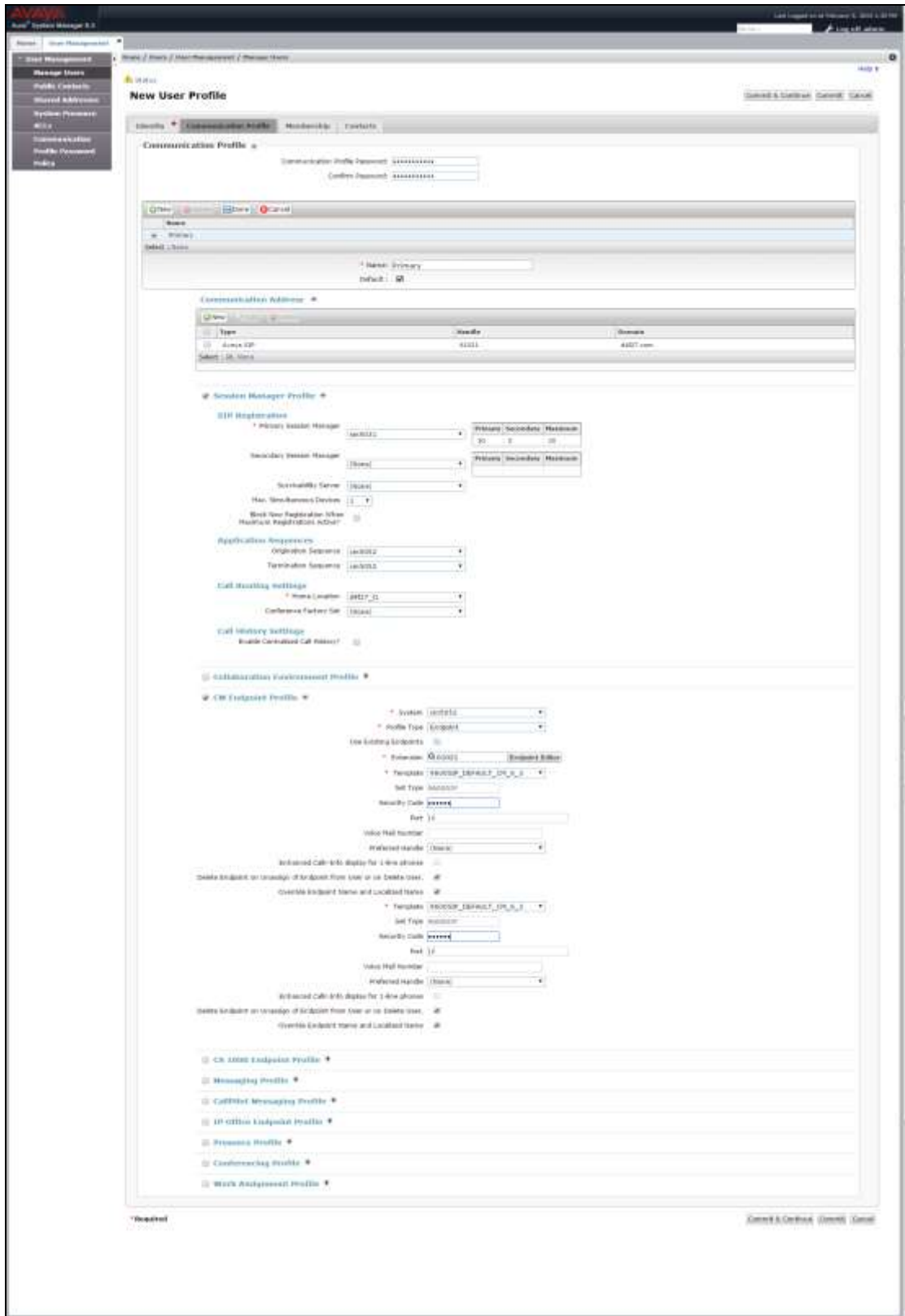
Select the **Communication Profile** tab. For **Communication Profile Password** and **Confirm Password**, enter the desired password for the SIP user to use for registration. Scroll down to the **Communication Address** sub-section, and click **New** to add a new address.

For **Type**, retain “Avaya SIP”. For **Fully Qualified Address**, enter and select the SIP user extension and domain name from **Section 5.2.1**. Click **Add**.

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. These settings are configured during the initial setup of Session Manager.

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 5.2.1**. For **Template**, select “9600SIP_DEFAULT_CM_6_3”. Retain the default values in the remaining fields.

Click **Commit** to complete the creation of the new user.



Repeat **Section 5.2** to add a user for each G-Tek/AEi SSP-9210-SMG.

6. 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

6.1. Verify Communication Manager License

Log in to the System Access Terminal (SAT) to verify that the 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 G-Tek/AEi SSP-9210-SMG SIP Phone extensions.

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: 6400 126
Maximum Stations: 2400 60
Maximum XMOBILE Stations: 2400 0
Maximum Off-PBX Telephones - EC500: 9600 0
Maximum Off-PBX Telephones - OPS: 9600 29
Maximum Off-PBX Telephones - PBFMC: 9600 0
Maximum Off-PBX Telephones - PVFMC: 9600 0
Maximum Off-PBX Telephones - SCCAN: 0 0
Maximum Survivable Processors: 313 0

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

6.2. 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.711MU, G.711A, and G.729.

```
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: G.711A      n             2           20
3: G.729       n             2           20
4:
5:
6:
7:

Media Encryption
1: none
2:
3:
```

7. Configure G-Tek/AEi SSP-9210-SMG SIP Phone/DECT Base Station with SGR-8206-SPBU DECT Handset

This section provides the procedures for configuring G-Tek/AEi's SSP-9210-SMG SIP Phone with DECT Base Station with an SGR-8206-SPBU DECT Handset. The procedures include the following areas:

- Access Web Interface
- Configure SIP Account and DTMF Settings
- Configure Audio Codecs
- Configure Tone Settings
- Reboot after configuration
- Pairing SGR-8206-SPBU with SSP-9210-SMG

7.1. Access Web Interface

Enter <http://<ip-addr>:8000/>, where <ip-addr> is the IP address of the G-Tek/AEi phone, into the address bar of web browser and log in using a valid account. The **System Information** screen is displayed.



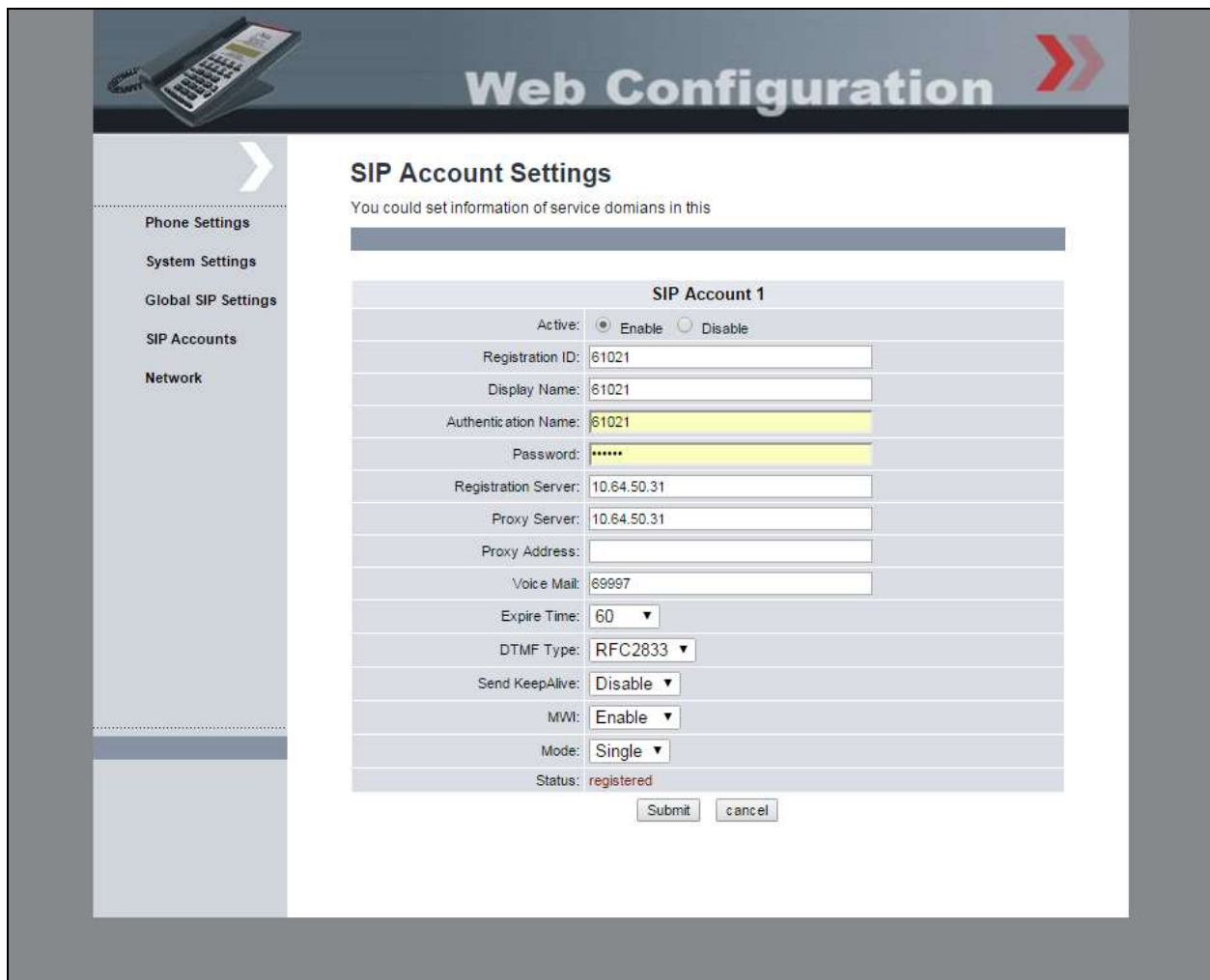
7.2. Configure SIP Account

Select **SIP** → **SIP Accounts** from the left menu, and click **Add**.



Set **Active:** to **Enable**. Enter username configured on Session Manager for **Registration ID:**, **Display Name:**, and **Authentication Name:**. Provide user password for **Password:** In the **Registration Server** and **Proxy Server** fields enter the IP Address of Session Manager's signaling interface. Enter **Voice Mail:** Number, select **RFC2833** for **DTMF Type:** and select **Enable** for **MWI:**

Click **Submit**, and **Status:** should display **Registered**.



Web Configuration

SIP Account Settings

You could set information of service domains in this

SIP Account 1	
Active:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Registration ID:	61021
Display Name:	61021
Authentication Name:	61021
Password:	*****
Registration Server:	10.64.50.31
Proxy Server:	10.64.50.31
Proxy Address:	
Voice Mail:	69997
Expire Time:	60
DTMF Type:	RFC2833
Send KeepAlive:	Disable
MWI:	Enable
Mode:	Single
Status:	registered

7.3. Pair DECT Handset with Base Station

Please follow steps below for pairing DECT handset with Base Station

1. On the SSP-9210-SMG keypad, please press "Mute" *112*811# to clear all paired handsets and open for new pairing.
2. On the wireless handset, press **6862* and then press 2 to enter subscriber mode.
3. The LCD display will show the RFPI number, if it located one. (It should match the RFPI number printed on the back of the SSP-9210-SMG)

4. Press the green L1 button to connect the handset to the base.
5. If the handset doesn't find the base station, press # to search for the next one.
6. Once connected, the extension number provisioned on the base should be displayed on the DECT handset.

8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Session Manager and G-Tek/AEi SSP-9210-SG SIP Phones.

From the System Manager Web interface, select **Elements** → **Session Manager** → **System Status** → **User Registrations** to display the **User Registrations** screen. Verify that the users from **Section 5.2** are registered, as shown below with a check in the **Registered Prim** column.

The screenshot shows the 'User Registrations' page in the Avaya System Manager 6.3 interface. The page title is 'User Registrations' and it includes a navigation sidebar on the left. The main content area displays a table of user registration details. The table has the following columns: Details, Address, First Name, Last Name, Actual Location, IP Address, Success Office, Shared Control, Weight, Device, AST Device, and Registered. A single user is listed with the following details: Address: 61021@44227.com, First Name: GTek, Last Name: 4E, IP Address: 11.64.33.211, and a checked box in the Registered column. The page also includes a search bar and a 'Show ALL' button.

Details	Address	First Name	Last Name	Actual Location	IP Address	Success Office	Shared Control	Weight	Device	AST Device	Registered
Show	61021@44227.com	GTek	4E	---	11.64.33.211	<input type="checkbox"/>	<input type="checkbox"/>	1/1	<input type="checkbox"/>		<input checked="" type="checkbox"/>

From the web interface of the G-Tek/AEi SSP-9210-SMG phone, select **SIP Accounts** from the left menu. Verify that the **Status** field shows **registered**.



9. Conclusion

These Application Notes describe the configuration steps required for G-Tek/AEi Communications SSP-9210-SMG SIP Phone with DECT Base Station and SGR-8206-SPBU DECT Handset to successfully interoperate with Avaya Aura® Session Manager 6.3 and Avaya Aura® Communication Manager 6.3. All feature and serviceability test cases were completed successfully.

10. 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 Issue 10 June 2014, Document 03-300509
- [2] *Administering Avaya Aura® Session Manager*, Administering Avaya Aura® Session Manager Release 6.3 Issue 7 September 2014, Document 03-603324

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