Configuring the Grandstream GXP2130 for SIP Registration

This guide shows you the steps to configure a SIP phone to register with Twilio. If you have any feedback on the following guide please email us at: sip.interconnectionguides@twilio.com

General Notes

- Please see separate instructions on creating Programmable Voice - SIP domains. This guide assumes these steps have already been done.
- User-credentials are required to register phones. IP ACLs alone are not sufficient. Your AuthorizationName should match the username on the SIP endpoint and both of those should match a user credential that you entered on Twilio's console.
- A SIP URI is: sip:username@SIPDomain or sip:phonenumber@SIPDomain
- When this document refers to TwilioSIPDomain it represents: yourdomain.sip.region.twilio.com where you have selected yourdomain on Twilio’s console (globally unique) and region which is initially US1 (North-Virginia) only and other regions later.

Grandstream GXP2130

1. Connect the phone to a LAN port. The phone should obtain a valid IP Address (DHCP enabled by default). You can find the IP Address by navigating the phone menu and note it down.

   Menu -> Status -> Network Status -> IPv4 Address

2. Enter the IP address in a browser and log into the web console of the Grandstream VoIP phone. The username and passwords are:
Username: admin  
Password: admin 

3. Navigate to the Grandstream Accounts webpage. There are three accounts that you can configure on a Grandstream phone.

4. On the screen below enter the following details:
   a. **Account Name**: Your friendly name that gets displayed on the phone's screen.
   b. **SIP Server**: The TwilioSIPDomain that you wish to register your phone with. Note: regionalized domain by including *us1*.
   c. **Outbound Proxy**: Enter the TwilioSIPDomain
   d. **SIP User ID**: This is the *username* or equivalently the username component of your SIP URI. Same as Authenticate ID.
   e. **Authenticate ID**: This is the *username* of the credentialList that you configured for your Twilio SIP domain. Same as SIP User ID.
   f. **Authenticate Password**: This is the *password* corresponding to the username in the credentialList that you configured for your TwilioSIPDomain.
   g. **Save** and **Apply**
5. You can configure the SIP settings by Navigating to

Account# -> SIP Settings -> Basic/Advanced...

The page looks like:

- For increased security SIP Transport can be changed to TLS/TCP. A corresponding change on Twilio is needed.
- Registration Expires can be changed to a large value such as 3600s / 60min

6. If you wish to change the session refresh or keep alive interval then navigate to:

Settings -> General Settings

The page looks like:

![General Settings page]

7. That's it! Congrats! You should be good to go. To verify that the phone is registered successfully go to the home page and you should see the account status showing GREEN for successful registration. If unsuccessful, then you will see RED.
## Account Status

<table>
<thead>
<tr>
<th>Account</th>
<th>SIP User ID</th>
<th>SIP Server</th>
<th>SIP Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account 1</td>
<td></td>
<td>sip.us1.twilio.com</td>
<td>YES</td>
</tr>
<tr>
<td>Account 2</td>
<td></td>
<td>sip.us1.twilio.com</td>
<td>YES</td>
</tr>
<tr>
<td>Account 3</td>
<td></td>
<td>sip.us1.twilio.com</td>
<td>YES</td>
</tr>
</tbody>
</table>