Remote Phones

1. Provision the phone locally as you would any other phone on the LAN, if programming to a Cloud PBX, skip to step 2
2. Configure the PBX Site router with port forwards of 5060 UDP and 10k-20k TCP/UDP. The port forwards should point at the LAN address of the PBX
3. Navigate to PBX Setup=>SIP and enter the Public IP address of the PBX under External IP, Save
4. Navigate to System=>Access Control=>Access Control List
5. Configure so that the IP address for the remote phone can communicate to the PBX in one of two ways:
    1. Add the Public IP address of the remote location if its static (eg. 75.124.65.8/32)
    2. Delete the SIP service from the Access Control List if the remote phone will not have a static IP. If you use this method, we advise to enable Log Watch & Ban after you have verified the remote phone works.
6. Navigate to the PBX Settings for the Extension
7. Click the blue Advanced link
8. Change the Location from LAN to WAN, Save and Apply Changes
9. Navigate to PBX Setup=>Phone Global (Needed for HTTP download of files from remote)
10. Ensure that Phone Download Enabled and Phone Auth Enabled are set to Yes (Needed for HTTP download of files from remote)
11. Navigate to the Phone Settings for the Extension (click the Pencil w Handset)
12. Under Configuration Updates change from TFTP to HTTP (Needed for HTTP download of files from remote) NOTE:The port set must be forwarded to the PBX, typically 8080 or 80.
13. Click Save and Configure (wait and the phone will download its new config, with the external IP address for the PBX)

Manual Configuration Settings in Phone for HTTP (required for phones registering to a Cloud PBX)

Sometimes it may be necessary to program a phone for remote operation when it is at the remote site. (You weren't able to do the previous steps while at the PBX location.) Use these steps as a guide:

1. Open a browser and navigate to the Phone GUI
2. Navigate to **Phone Maintenance -> Advanced -> Auto Provision**
3. Change **Protocol** to **HTTP**
4. Change **Software Server URL**: to

   ```
   http://<pbx public ip>/ippbx/phonecfg/
   ```
5. Set the Username to admin (default value)
6. Set the Password to 1234 (default value)
7. Uncheck Auto Download Kernel
8. Uncheck Auto Download Personal Phonebook
9. Click Submit
10. Click Autoprovision Now

NOTE: In order for their to be a config file for the phone to download, the MAC address of the phone must be entered under the extension in the PBX. Also, you must remove the <> as they are not part of the software URL.

For this to work, you must navigate in the PBX to PBX Setup=>General; ensure that Autoprovisioning is Running (click ON if it is currently Stopped)