

Installation Guide

Recommended Softphone Apps for use with Crux LX & VX

Edition 2.0
June 2024

Feel free to ask us any questions!

via Email: support@crux-labs.com

via Live Chat: www.crux-labs.com

via Phone: +65 6229 7800

Supported Operating Systems



LINUX



Windows



MacOS



android



iOS





Hola Amigo!

Welcome to second edition of [Recommended Softphone Apps](#) instruction guide from Crux Labs.




















While one may use any [SIP Client](#) or [SIP Dialer](#) app that allows configuring a SIP account with Username, Password and SIP Server IP or DDNS, alongside [Crux](#), but since there are so many such apps, to save our users the trouble of selection, we have shortlisted six apps that are feature rich, safe to use, available across popular platforms, and have passed testing with [Crux](#).

Hope this guide comes in handy for you.

Adios for now! from **Team Crux Labs**

Need help? Feel free to write to us at support@crux-labs.com

Recommended Softphone Apps

#	DEVICE TYPE	NAME OF THE SOFTPHONE APP	OPERATING SYSTEM	PAGE
1		PortSIP Softphone	  אנדرويد iOS	5
2		Grandstream Wave Lite	 אנדرويد	7
3		Linphone	  אנדرويد iOS	10
4		Groundwire	  אנדرويد iOS	12
5		PortSIP Softphone	  	14
6		Linphone	  	16

HANG ON!

**99.999% USERS WHO IGNORED
IMPORTANT INSTRUCTIONS
FAILED TO SETUP SOFTPHONE
APP SUCCESSFULLY!**

IMPORTANT INSTRUCTIONS

PASSWORDS

When in school, we might not have minded our cAsEs or char@cters but here we ought to. Read, Copy, Type passwords carefully else your app will get **blocked** and fail registration coz Crux doesn't ignore silly mistakes!

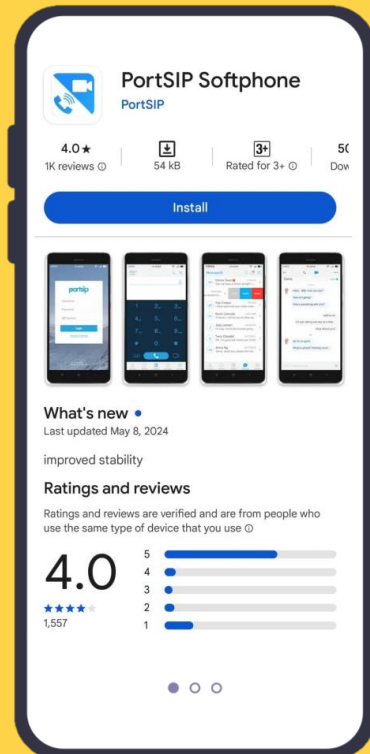
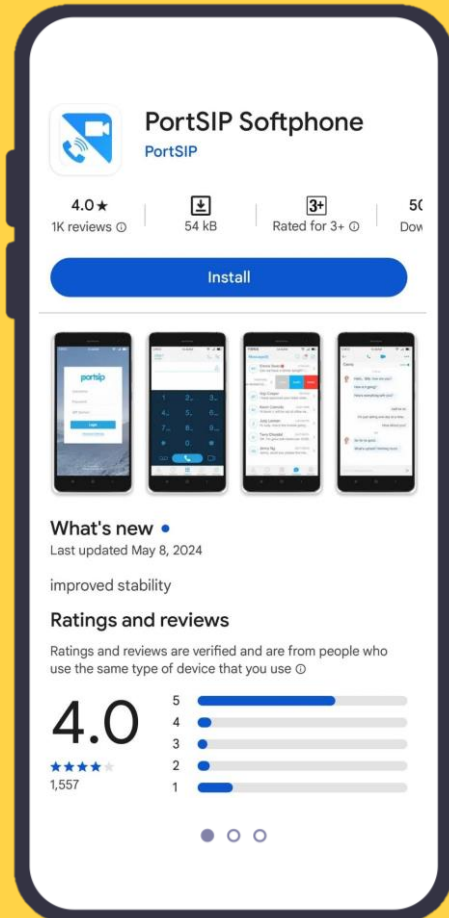
PERMISSIONS

As we all know, 'No means, No!'. So, when installing this App, if you say 'No' to use of phone mic, speaker, storage, camera, or deny permission to run the App in background or wake up on push notifications, then it **won't**. At times 'Yes' is good! This is one such time.

NOTIFICATIONS

Once I missed a call from my spouse as I had turned off notifications on my mobile. I am single now. Okay, don't get ideas! Turn '**On**' notifications, please.





Cost | FREE

- Pros** |
- ^ Simple to configure
 - ^ Works well on all mobiles
 - ^ Uses Push Notifications
 - ^ Low battery consumption

Cons |

- ^ None known thus far!

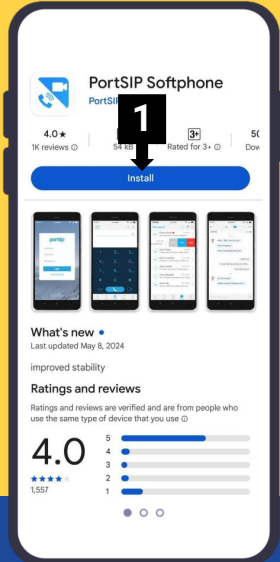
OS support |



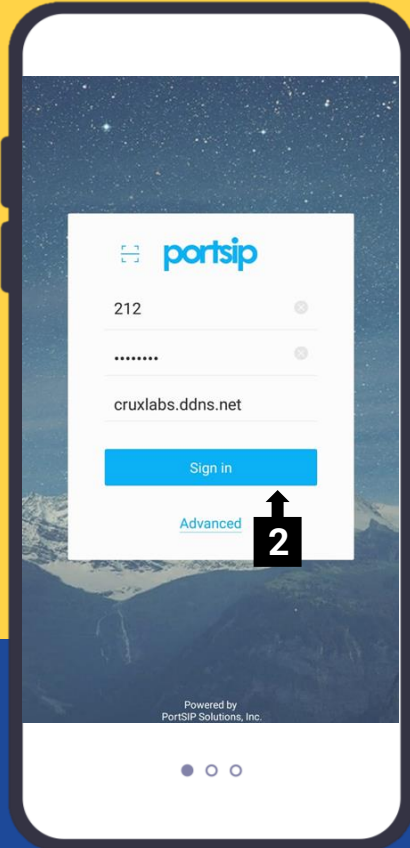
App version | 12.4.6 or higher

Where to find |

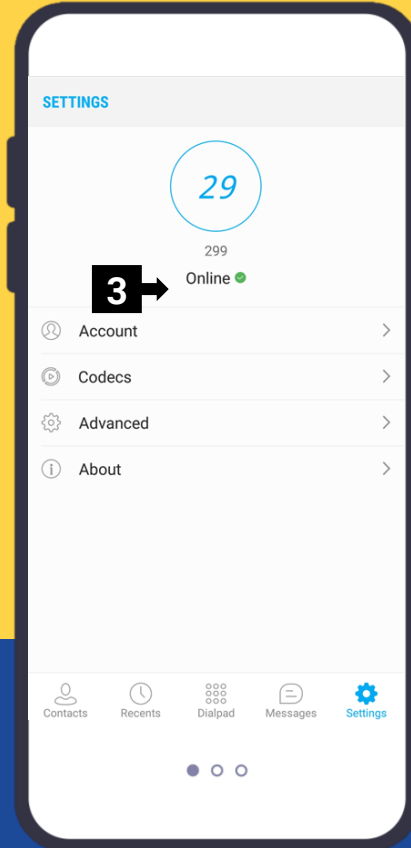




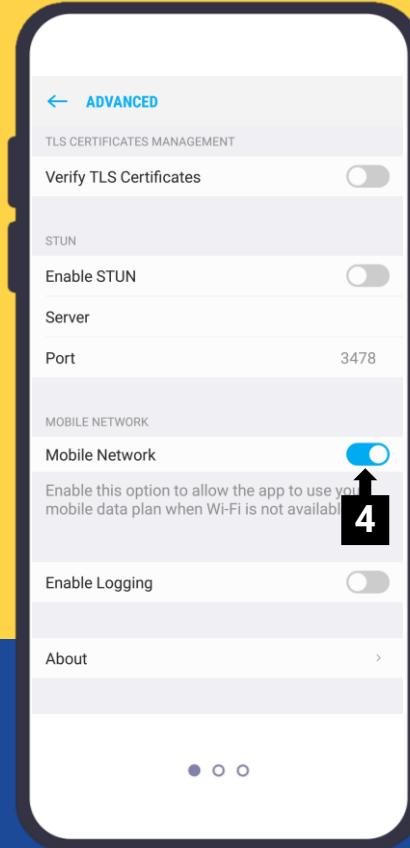
Download PortSIP app from Google Play Store or Apple AppStore and install it with requisite permissions.



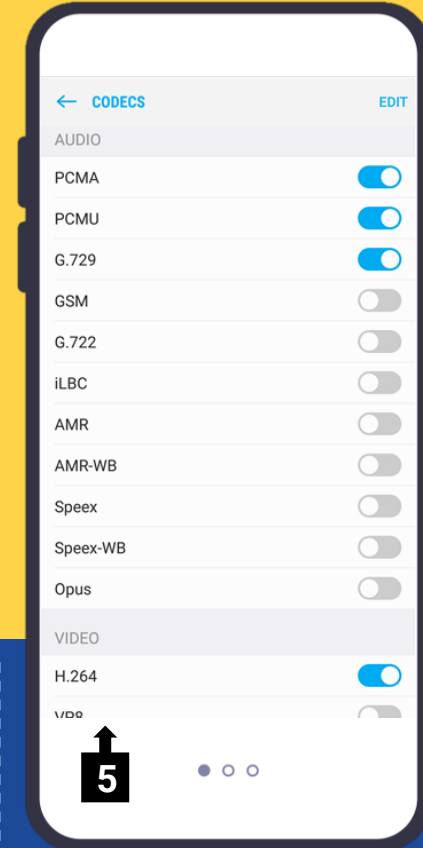
Next, to setup your Account, key in your username, password and Crux IP or DDNS as SIP Server.



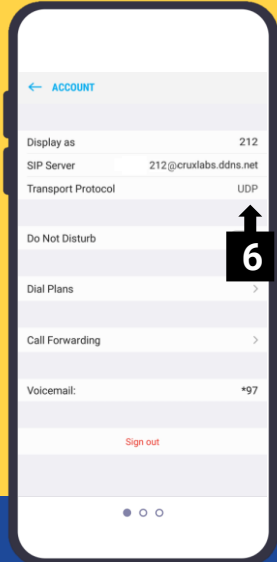
● A Green dot indicates **Registration Success**. You're online and ready for calls!



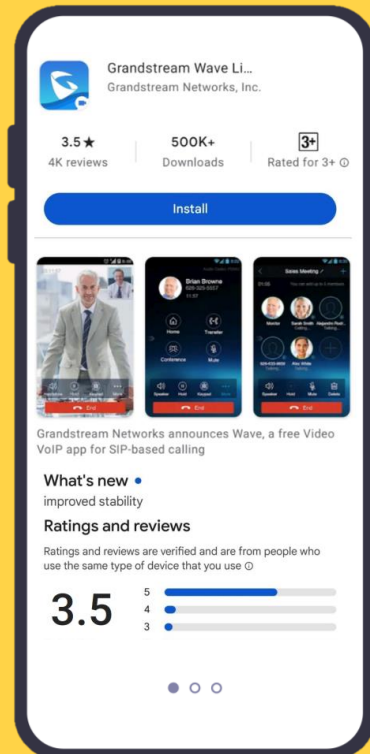
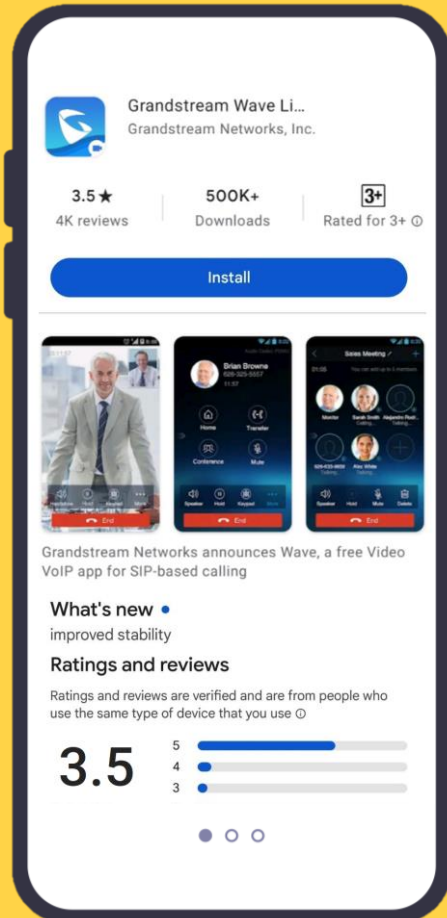
If the App shows ● Green dot on WiFi but not on Mobile Data, then click 'Advanced' & ensure 'Mobile Network' is Enabled.



If you face audio issues, for e.g. unable to hear the other party, then Enable codecs and their order exactly as shown above.



If the App shows the Green dot ● when on Mobile Data but not on WiFi, then click 'Settings' > 'Account' > 'Transport Protocol' > 'Transport Protocol' and change it from UDP to TCP.




Cost | FREE

Pros |


- ^ Add up to 6 accounts
- ^ Works well on Android
- ^ Low battery consumption
- ^ Intuitive interface

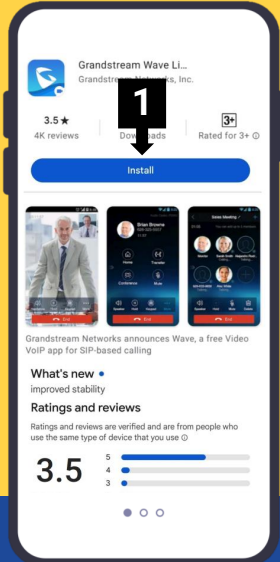
Cons |

- v No Push Notifications
- v Not suitable for iPhone
- v Support has ended

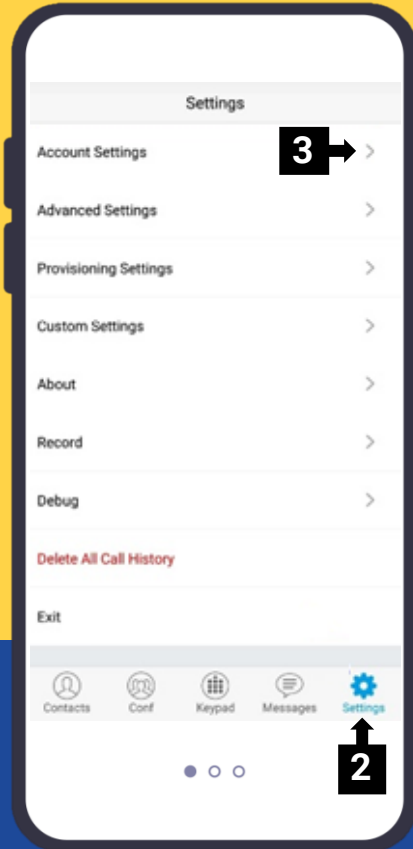
OS support | 
ANDROID

App version | 1.0.3.34

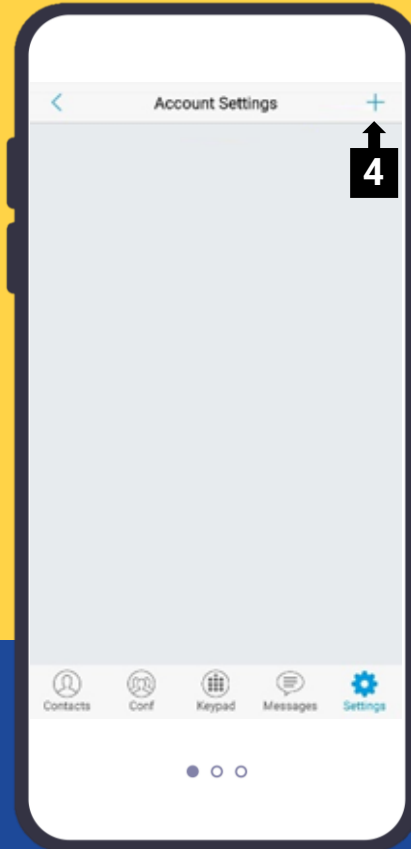
Where to find |  Download from web
Crux Labs



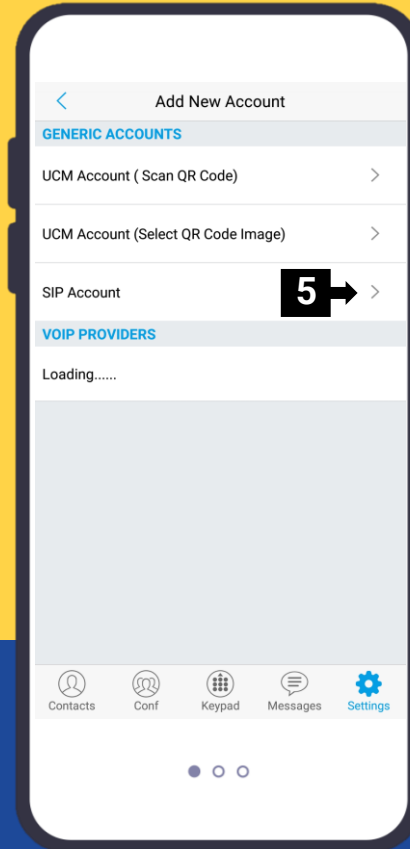
GS Wave Lite app is not available on PlayStore or AppStore. You may download its APK file from **Crux Labs' website** and install it on your mobile by enabling 'Install unknown apps'.



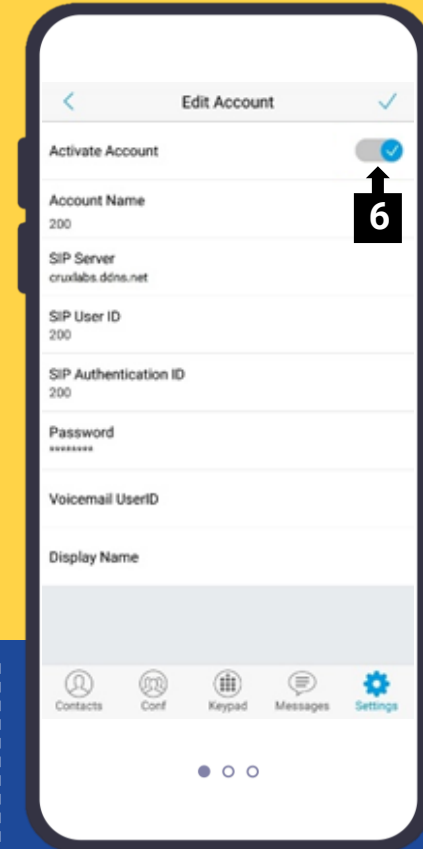
Next, to setup your Crux Extension as an Account on this App, click 'Settings' followed by 'Account Settings'.



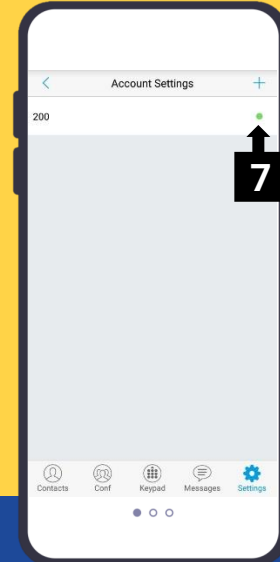
Next, click the '+' sign to Add settings for a New Account.



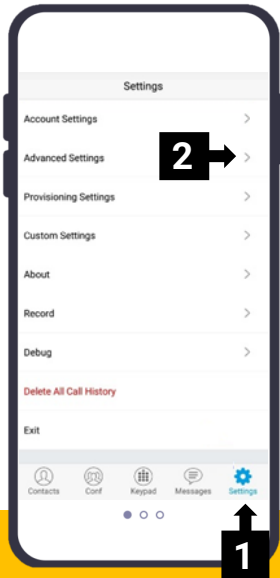
Next, select type of account as 'SIP Account' to proceed to enter Account details.



Next, key in your Extension in 3 fields bearing 200, your Crux IP in 'SIP Server' and 'Password'. Next, 'Activate Account' and ✓

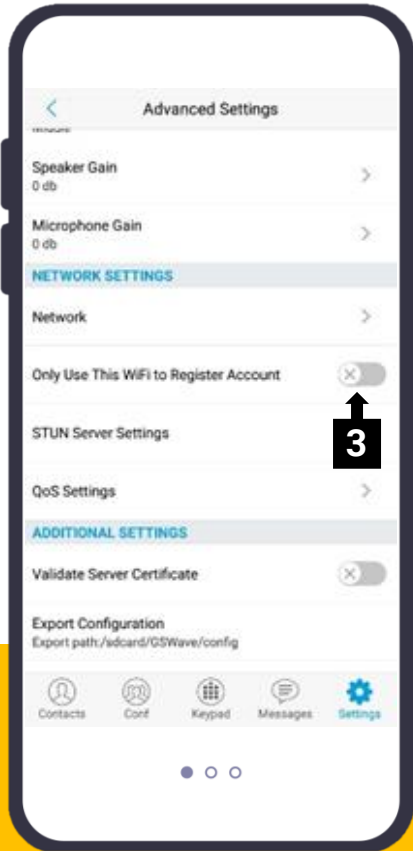


Go to previous screen, ● Green dot indicates **Registration Success**. You're ready for calls!
● Red dot indicates **Registration Failed**. Contact your Admin or Crux Labs CS.

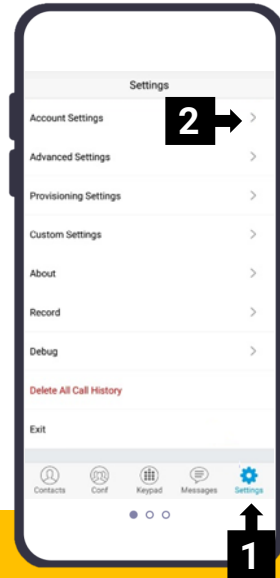


Problem #A Account Registers on WiFi but not on Mobile Data.

Solution #A
Step 1 – Go to 'Advanced Settings'

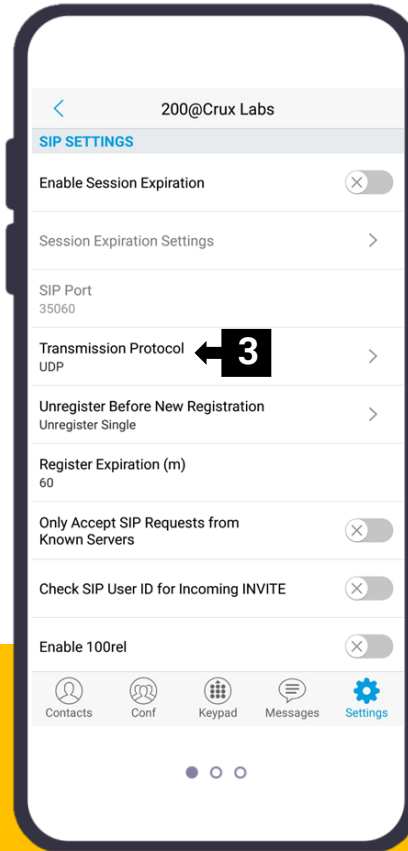


Step 2 – Scroll down to 'Network Settings' and **DISABLE** 'Only Use WiFi to Register Account' option.

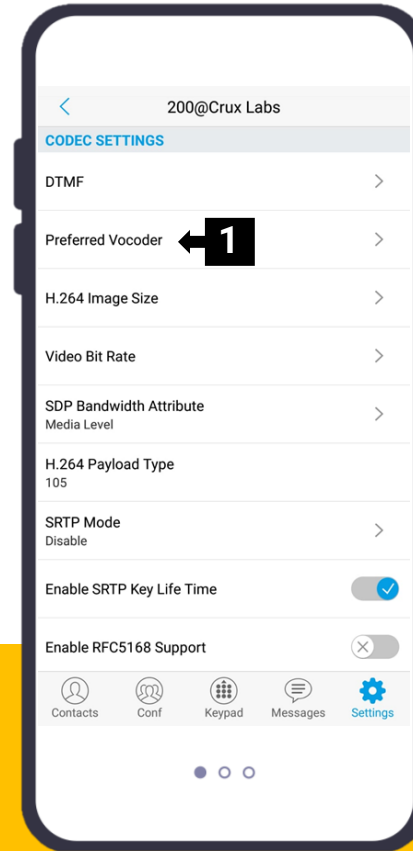


Problem #B Account Registers on Mobile Data but not on WiFi.

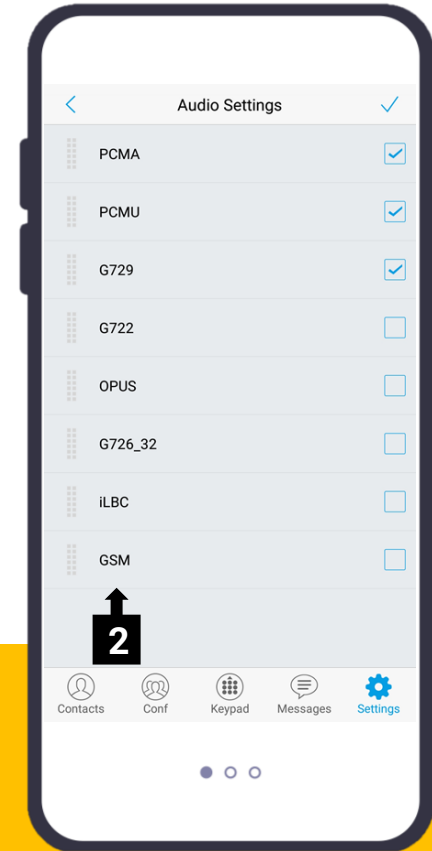
Solution #B & #C
Common Step 1 – Go to 'Account Settings'



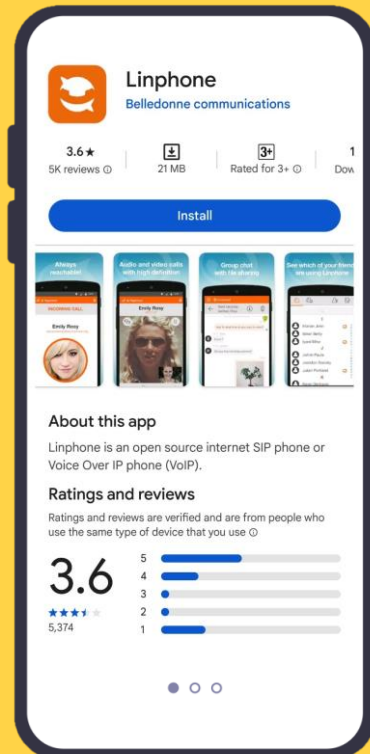
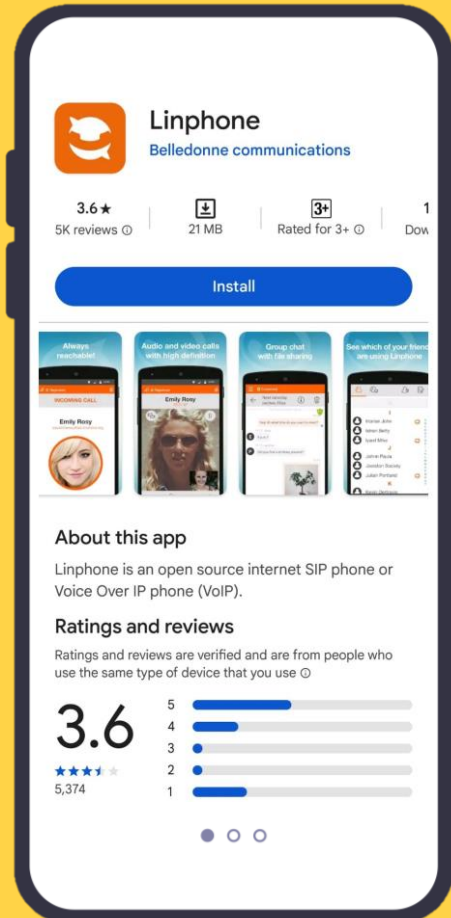
Step 2 – Scroll down to 'SIP Settings' > 'Transmission Protocol' > change its value from UDP to TCP.



Problem #C Call connects but I cannot hear the other person.
Solution #C Go to 'Account Settings' > 'Preferred Vocoder'



Step 2 – Ensure your App has same selection and order of codecs as shown above for both WiFi & Mobile networks.



Cost | FREE

- Pros** |
- ^ Free and Open Source
 - ^ Works on all platforms
 - ^ Add multiple accounts
 - ^ Built-in H264 video codec

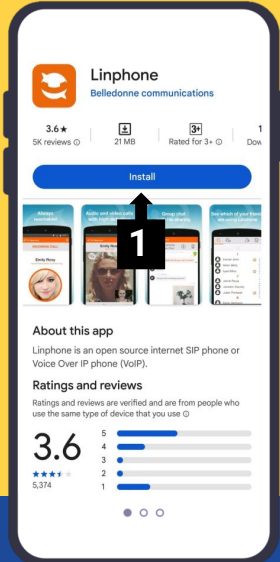
- Cons** |
- ^ Wakeup issues reported on some mobile models

OS support |  

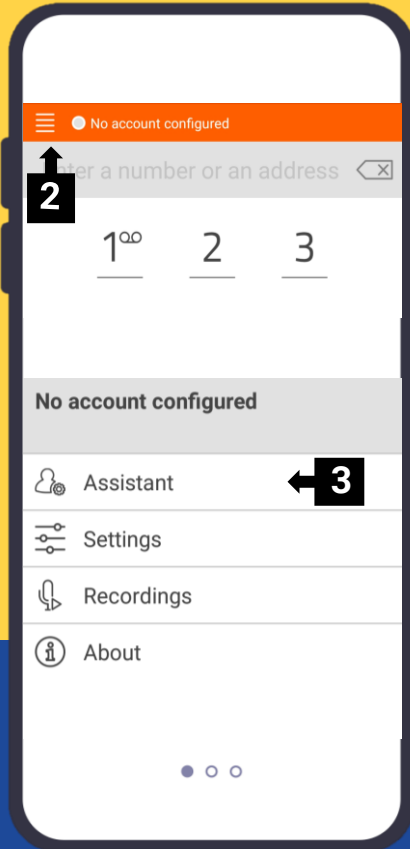
App version | 5.2.4 or higher

Where to find |

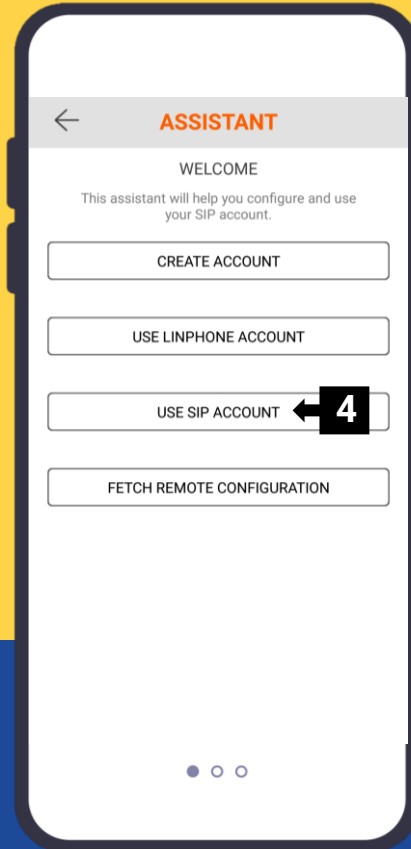




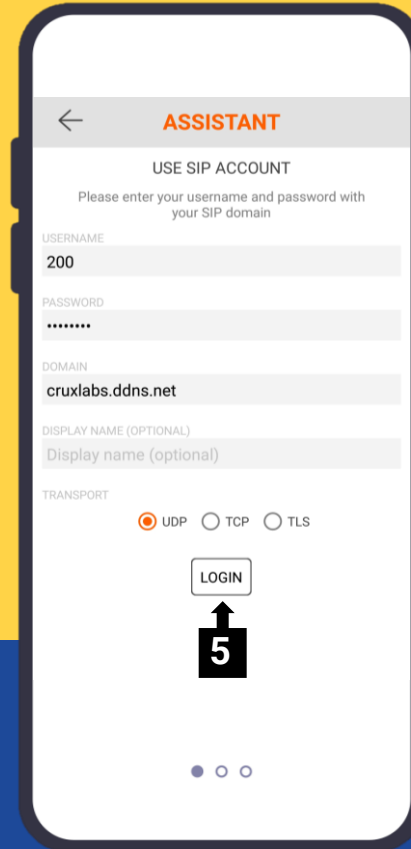
Download Linphone app from Google Play Store or Apple AppStore and install it with requisite permissions.



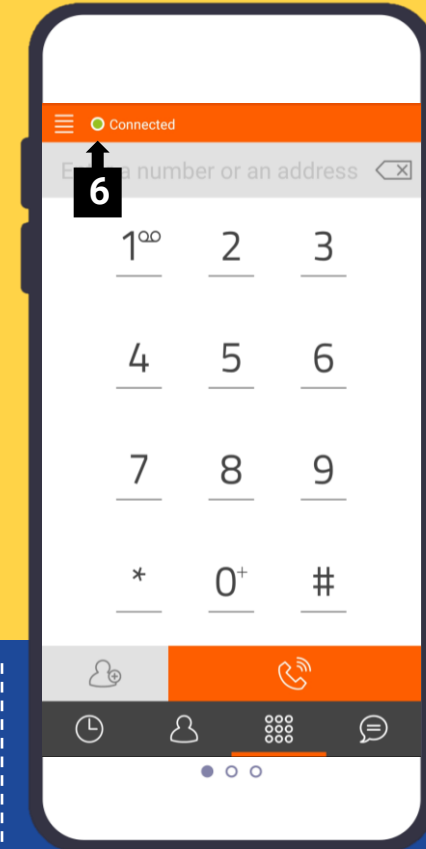
Next, to setup your Account, click the burger menu > then select 'Assistant'



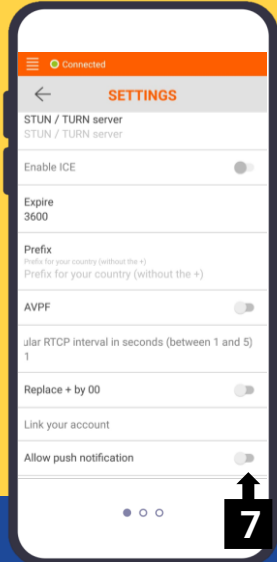
On the 'Assistant' screen, select the option 'Use SIP Account' since your SIP account is already present on Crux .



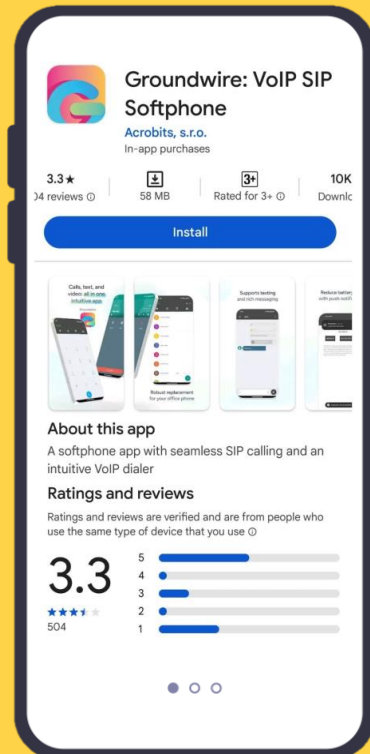
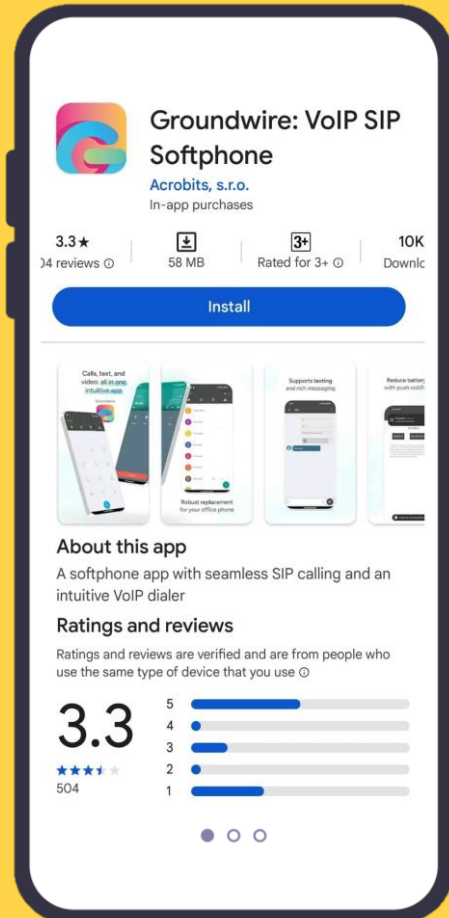
On the 'Use SIP Account' screen, key in your username, password and Crux IP or DDNS as Domain, then click 'Login'.



● Green dot indicates **Success**. You're now ready for calls!
● Red dot indicates **Failure**. Contact Admin / Crux Labs CS.



Enable 'Allow Push Notification' in case incoming calls do not ring when the App is closed or when the App is running in the background.



Cost | US\$ 9.90

Pros |
 ^ Works well on iPhones
 ^ Consistent delivery of incoming calls on iPhone
 ^ Uses Push Notifications

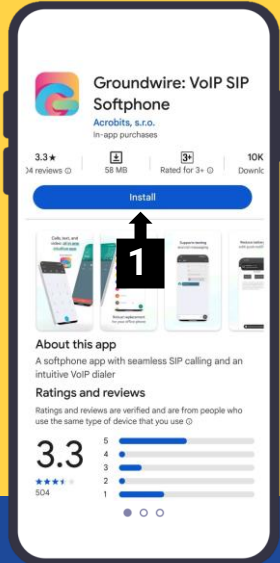
Cons |
 v Purchase (\$\$) required
 v Some Android users may face call wakeup issues

OS support |
 
 Android iOS

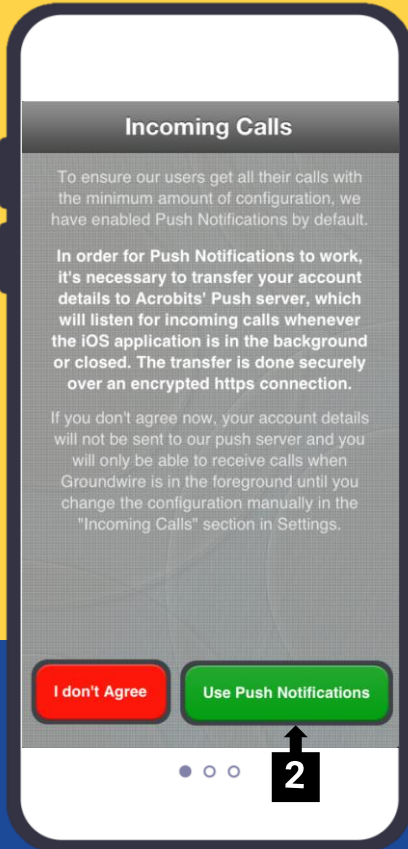
App version | 5.10 or higher

Where to find |

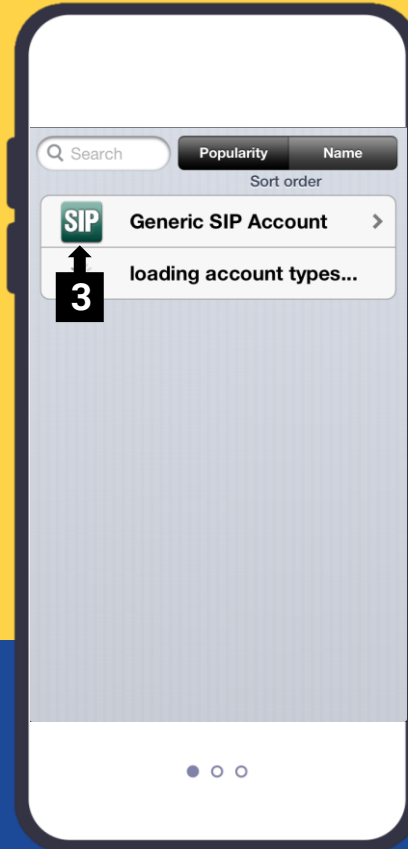




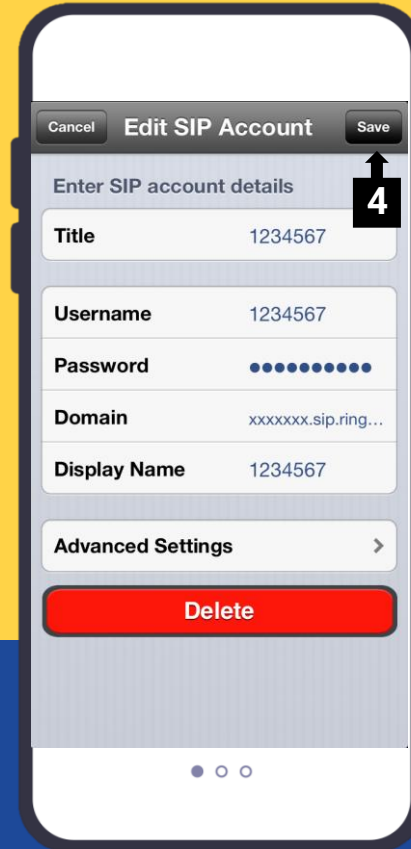
Download **Acrobit Groundwire** app from Google Play Store or Apple AppStore and install.



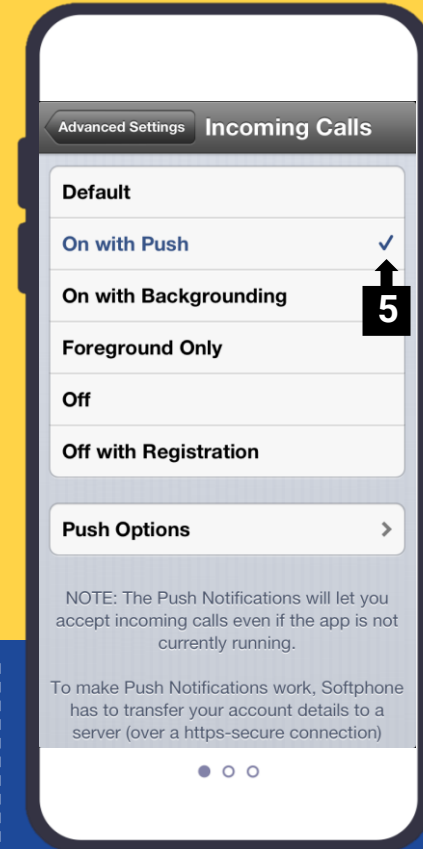
On first run, permit the App to use Push Notifications for Incoming Calls, lest you may miss incoming calls.



Next, click 'Generic SIP Account' to setup your Crux Extension as an Account.



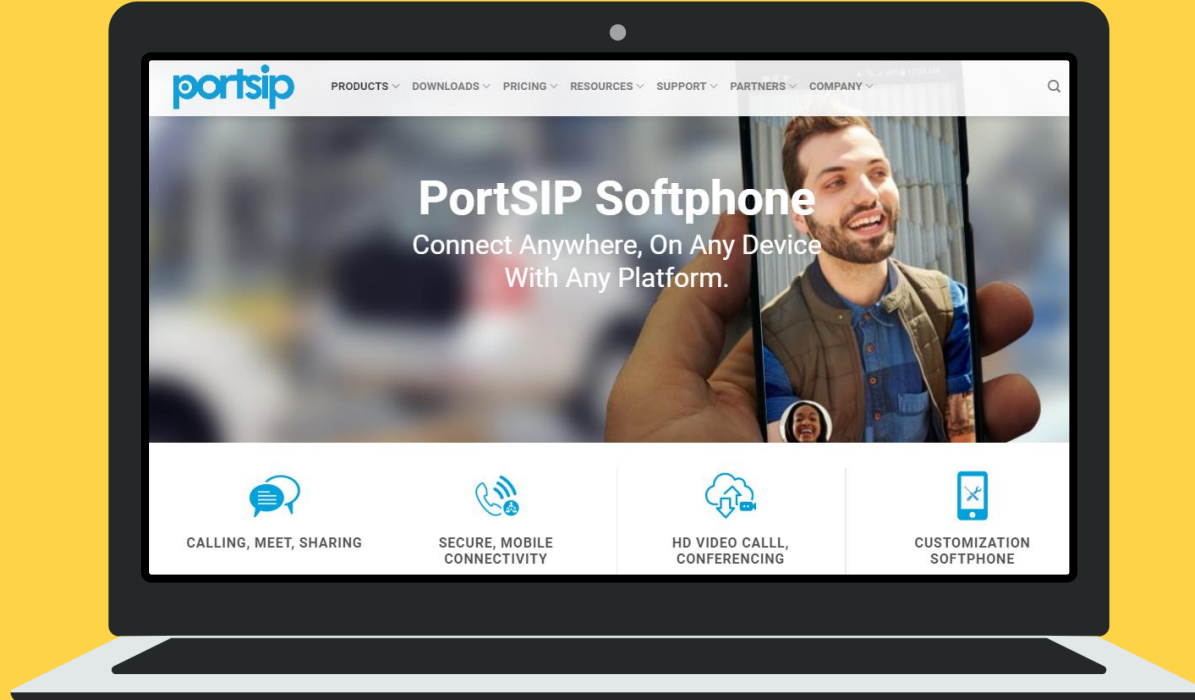
On the "Edit SIP Account" screen, key in your username, password and Crux IP or DDNS as Domain, then click 'Save'.



In case you face issue with receiving incoming calls, go to 'Advanced Settings' > 'Incoming Calls' > Enable 'On with Push'.



● Green handset and **Registered** indicates **Success**. You're now ready for calls!
● Red handset and **Registering** indicates **Failure**. Contact Crux Labs CS for support.



Cost | FREE

Pros |

- ^ Works well on all laptops
- ^ Uses Push Notifications
- ^ Simple to configure
- ^ Low battery consumption

Cons |

- ^ None known thus far!

OS support |   

App version | 61.39.3 or higher

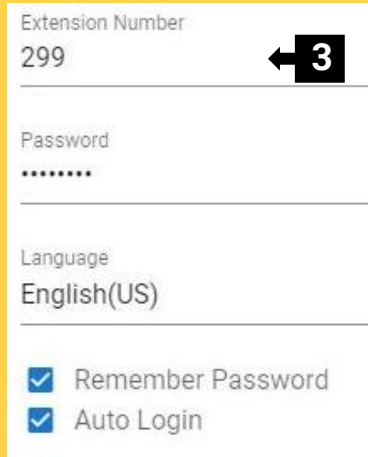
Where to find |  Download from web
PortSIP



← 1



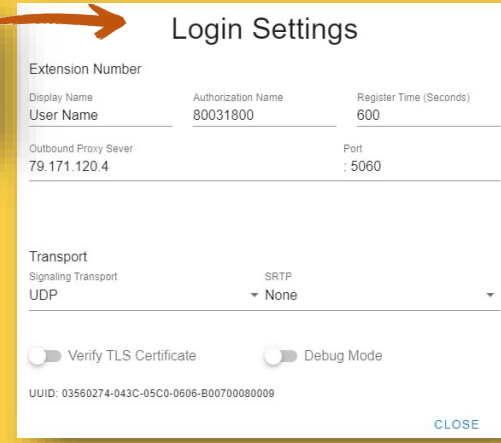
← 2



← 3



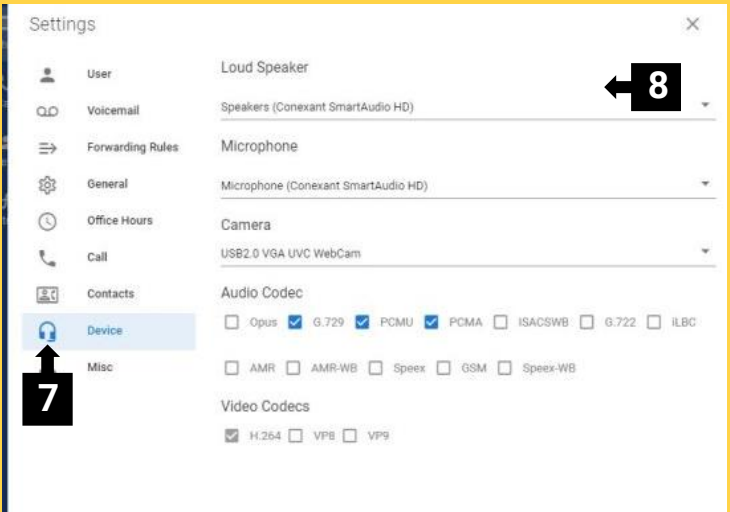
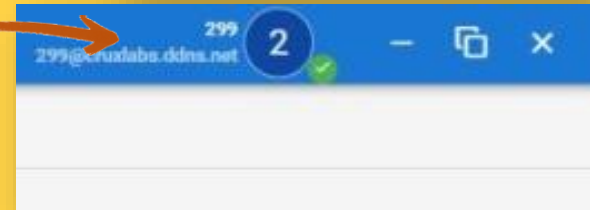
↑ 4



↓ 5



↑ 6



← 8

↑ 7

1. Download **PortSIP** installable for macOS, Windows or Linux from **portsip.com website** and install.
2. When run for the first time, the App begins with a screen that will require you to enter 'SIP Server' which is your Crux WAN IP or DDNS.
3. Next, key in your Extension number and Password and check the two checkboxes to 'Remember Password' and 'Auto Login'.

4. When at **Step #3**, you may also Click the Cogwheel at top-right corner of the screen to bring up the Login Settings if you're required to change the Port number or Transport protocol.
5. Check both checkboxes to Allow the App to use private as well as public networks.
6. ● A Green check mark next to the extension number shows that the Softphone App has successfully **Registered**. If the App isn't able to login, the **Step #3** may be indicative of **Registration Failure** and you must contact Admin / Crux Labs CS.

7. If you face audio issues, for e.g. unable to hear the other party, then Enable codecs and their order exactly as shown above.
8. If using an external Mic or Speaker or Headset, go to the 'Device' tab under Settings and select the Speaker and Mic devices to use.



Cost | FREE

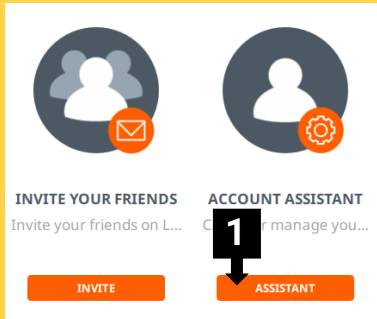
Pros |
^ Free and Open Source
^ Works on all platforms
^ Add multiple accounts
^ Built-in H264 video codec

Cons |
v None known thus far!

OS support |   

App version | 5.2.4 or higher

Where to find |  Download from web
Linphone



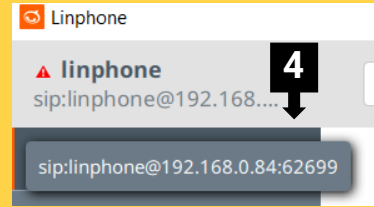
USE A SIP ACCOUNT

Username Display name (optiona...

SIP Domain

Password

Transport

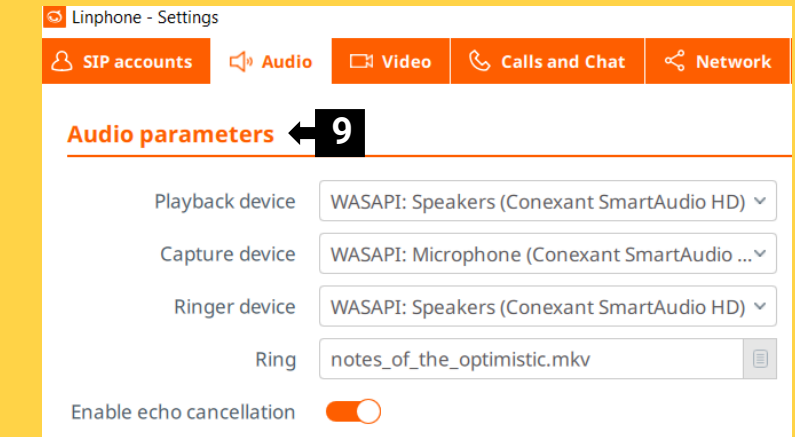
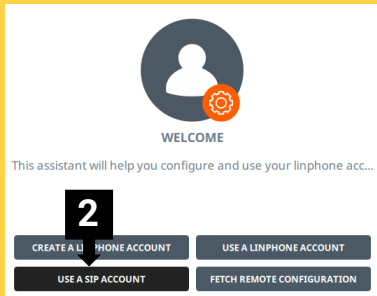
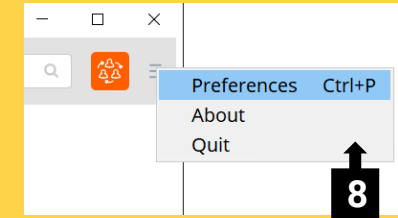
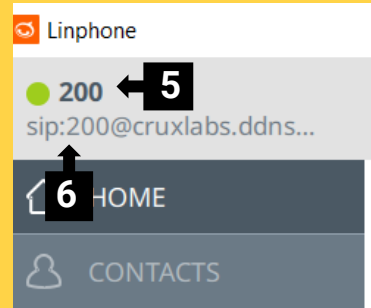


Presence status

Active account

Presence status

Active account



1. Download **Linphone** installable from **linphone.org website** and install it with requisite permissions.
2. Click on Home tab on top-left column, then select 'Assistant' and Use SIP Account to start the setup.
3. Key in Username, SIP Domain, Password given by your Admin or Crux Labs staff and Transport as UDP.

4. Linphone App comes with a default Account. After adding your Crux Extension as a 'SIP Account', click on top-left corner to select your Crux Account so as to use that to make calls.
5. ● A Green dot indicates **Registration Success**. You're now ready for calls!
6. ● A Red dot indicates **Failure**. Contact Admin / Crux Labs CS.

7. Type the phone number in the text input box on top of the App window and press Call Icon to make a call.
8. If using an external Mic or Speaker or Headset, go to Preferences,
9. Then, under the Audio tab, select the required playback (speaker) device, capture device (mic) and the ringer device (typically again the speaker).




Crux Labs

Simplifying Technology

Ask for a free trial today!

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