Linkus User Guide

Android Edition 1.2.6

CONTENTS

Yeastar

INTRODUCTION

Linkus is a VoIP Mobile Client coordinated with Yeastar S-Series VoIP PBX. Linkus makes your mobile phone an office extension and links you and your colleagues and customers anywhere anytime. Make and receive calls through corporate phone network to slash call costs and enhance efficiency with consistent in-office experience.

About This Guide

This guide is introduces how to install and configure Linkus on S-Series VoIP PBX and how to use Linkus client. This guide is for both the S-Series VoIP PBX administrator and the Linkus client users.

This guide is based on Linkus mobile client version 1.2.6 and Linkus server version 1.2.5.

If you are a Linkus client user, you can skip the chapter *Linkus Sever Settings*.

Standard Telephone Features

- Call Display
- Speakerphone and Mute
- Hold & Resume
- Call Waiting
- Do Not Disturb
- Call History
- Access to S-Series Directory
- Native Contacts Integration
- Contact Avatars
- Audio Call Conference

Specifications

- Android Phone Requirement: Android 4.4 or later

- PBX Requirement: Yeastar S-Series PBX firmware version 30.2.0.27 or later

- Network: 2G/3G/4G or Wi-Fi

- Protocol: SIP RFC3261

- Codec: iLBC

- Network Protocol: TCP/IP/UDP, RTP/SRTP/RTCP, HTTP/HTTPS

- DTMF: Inband, RFC4733 (RFC2833), Info

LINKUS SEVER SETTINGS

This chapter is for Linkus administrator, introducing how to configure Linkus server on Yeastar S-Series VoIP PBX. If you are a Linkus client user, you can skip this chapter.
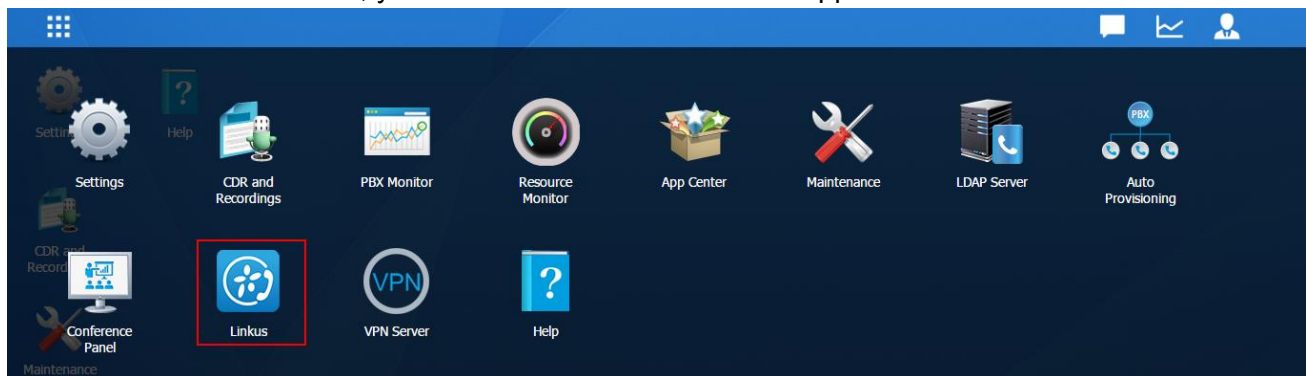
Installing and Enabling Linkus

Linkus is supported on Yeastar S-Series PBX firmware version 30.2.0.27 or later. Please upgrade the PBX firmware before using Linkus.

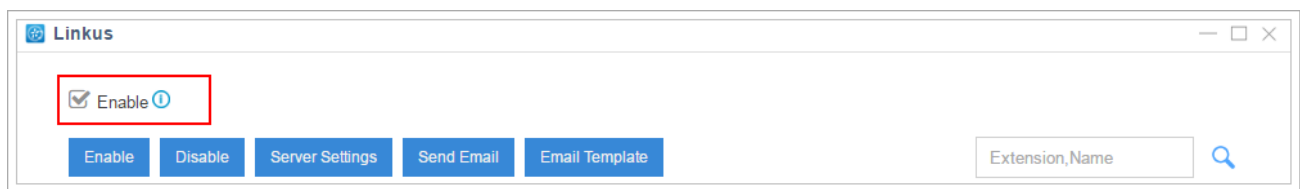**STEP 1**. Log in S-Series PBX web user interface, go to App Center and install Linkus.
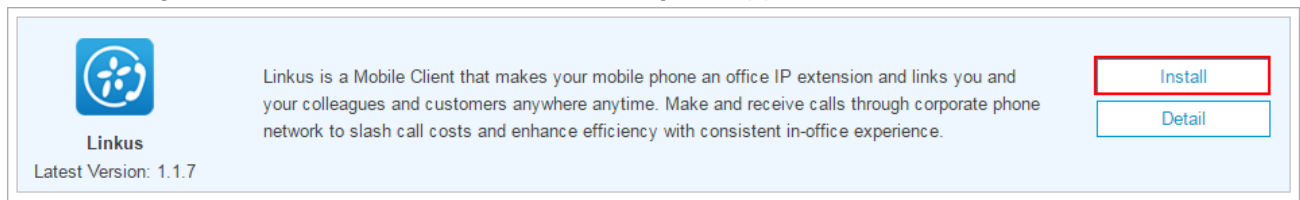
STEP 2. Click "Main Menu", you can see the installed Linkus App.

STEP 3. Click "Linkus" icon to configure it.

STEP 4. Check "Enable" box to enable Linkus feature on the PBX.

STEP 5. Select extensions, and click "Enable". The extension users would be allowed to log in Linkus on their phones.

Note:

- For Linkus security, the extension users' default "User Password" MUST be changed, or the system will not allow you to enable Linkus for the extension users.
- We suggest that you set up robust passwords that include a combination of numerics, upper letters, and lowercase letters.

STEP 6. Click "Save" and "Apply"

Assigning Linkus Login Information

Yeastar S-Series VoIP PBX provides an easy way to help the administrator to assign Linkus login information to extension users. Follow the steps below to assign Linkus login information.

STEP 1. Click "Sever Settings" to configure the Linkus server, the system will generate QR code and login link using the server settings.

- **Local Hostname/IP**: the PBX's local hostname or IP address.
- **Local Port**: Linkus local port, the default port is 8111.
- **External Hostname/IP**: the PBX's external hostname or IP address.
- **External Port**: the forwarded Linkus port.
- **SIP Remote Registration Port**: set the port according to your PBX's network settings:
  1) If Linkus remote registration is through the PBX's network interface which is configured with a private IP, and the PBX is behind a router, you need to forward SIP registration port (default 5060) on your router, and enter the forwarded port here
  2) If Linkus remote registration is through the PBX's network interface which is configured with a public IP, then enter the local SIP registration port (default 5060) here.
  3) If the PBX is connected to a VPN network, you don't need to do port forwarding and enter the local SIP registration port (default 5060) here.

STEP 2. Click "Email Template" to modify the email subject and contents. When you finish the configuration, click "Save".

STEP 3. Select the desired extensions, and click "Send Email".

Note:
- Please make sure the selected extensions have email address tied and have enabled Linkus.

STEP 4. If the system failed to send emails, you can see the email failure status on the Linkus settings page. Click "Failure sending email" to resend the email or ignore the status.

Port Forwarding and NAT Settings

NAT enables private IP internetworks that use nonregistered IP addresses to connect to the Internet. If Linkus communicates with the S-Series VoIP PBX through the network interface which is configured with a private IP, and the IPPBX is behind a router, you need to do port forwarding and configure NAT on your S-Series VoIP PBX.
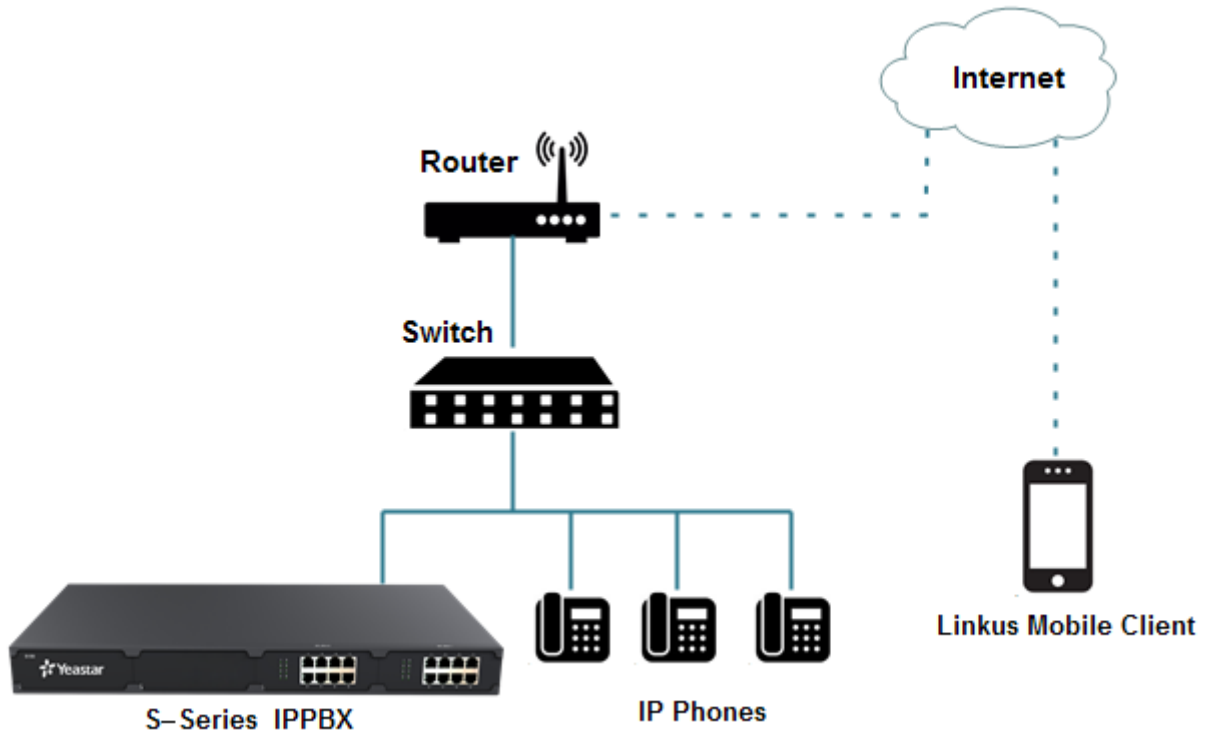
In this situation, you need to forward the following ports to make Linkus work properly in remote network.

Port	Default Value	Configuration Path
Linkus Service Port	8111	S-Series > Linkus > Port Settings
SIP UDP Port	5060	S-Series > Settings > PBX > General > SIP
RTP Ports	10000-12000	S-Series > Settings > PBX > General > SIP

Go to **S-Series > Settings > PBX > General > SIP > NAT** to configure NAT settings.
1) Choose a NAT Type.
2) Enter the external IP address or domain, and enter the forwarded SIP UDP port.
3) Enter local network identification.
4) Set NAT Mode to "Yes".
5) Click "Save" and "Apply".

GETTING STARTED

Installing Linkus on Android Phone

The Linkus app must run on Android version 4.4 or higher. Users could download the application from QR code scan or search "Yeastar" in the Google Play Store to download the application.

Scan and Download from Google Play Store.

Network Settings

Before using Linkus, please make sure that the network settings on your phone are configured correctly. You can choose Wi-Fi network or cellular data for your phone. Enabling both Wi-Fi and cellular data is a better choice that Linkus will keep working through the cellular data if you are not in the Wi-Fi zone.

Note:
- We strongly recommend that you perform your initial setup from within a "known" network, such as in your company or in your home, but not in a public network such as an internet café.

Logging in Linkus

Once the Linkus has been downloaded and installed on your phone, you can see the icon on your phone. Tap the icon to launch Linkus.

Note:
- For the first-time login, please allow Linkus to send notifications when the application is in the background.
- For the first-time login, you need to confirm whether allow Linkus to access Contacts from your phone. If you allow this action, Linkus will continually synchronized with your native contacts.

You have three ways to log in Linkus mobile client.

➢ **Scanning QR Code**
  If you have received a Linkus Login email on your computer, you can choose to log in Linkus via the QR code. Tap the QR code button on Linkus login page, and scan the QR code to log in.
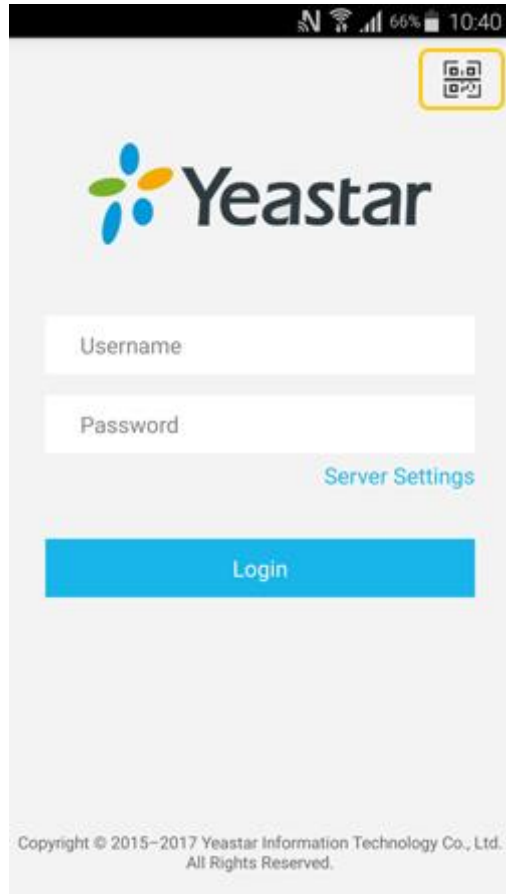
➢ **Copying Login Link**
  If you have received a Linkus Login email on your mobile phone, you can choose to log in Linkus via the link. Copy the link, then open Linkus mobile client, tap **OK** to log in.

Note:
● The QR code and link are only valid in 30 minutes and can only be used once.

➢ **Logging in Manually**

You can also tap "Server Settings" on the Linkus mobile client login page, and enter the server IP address and port manually to log in.

1. Enter the local hostname/IP of Yeastar S-Series PBX.

2. Enter Linkus service local port.

3. Enter the external hostname/IP of Yeastar S-Series PBX.

4. Enter Linkus service external port.

5. Tap **OK**.

6. Enter extension number.

7. Enter extension user password.

Tap to change server settings.

8. Tap **Login**

Personal Information

After login, you can edit your profile by taping 👤 on the bottom of the screen.

Tap to view the profile.

Tap to edit the profile.

Tap to save the changes.

Tap to change image.
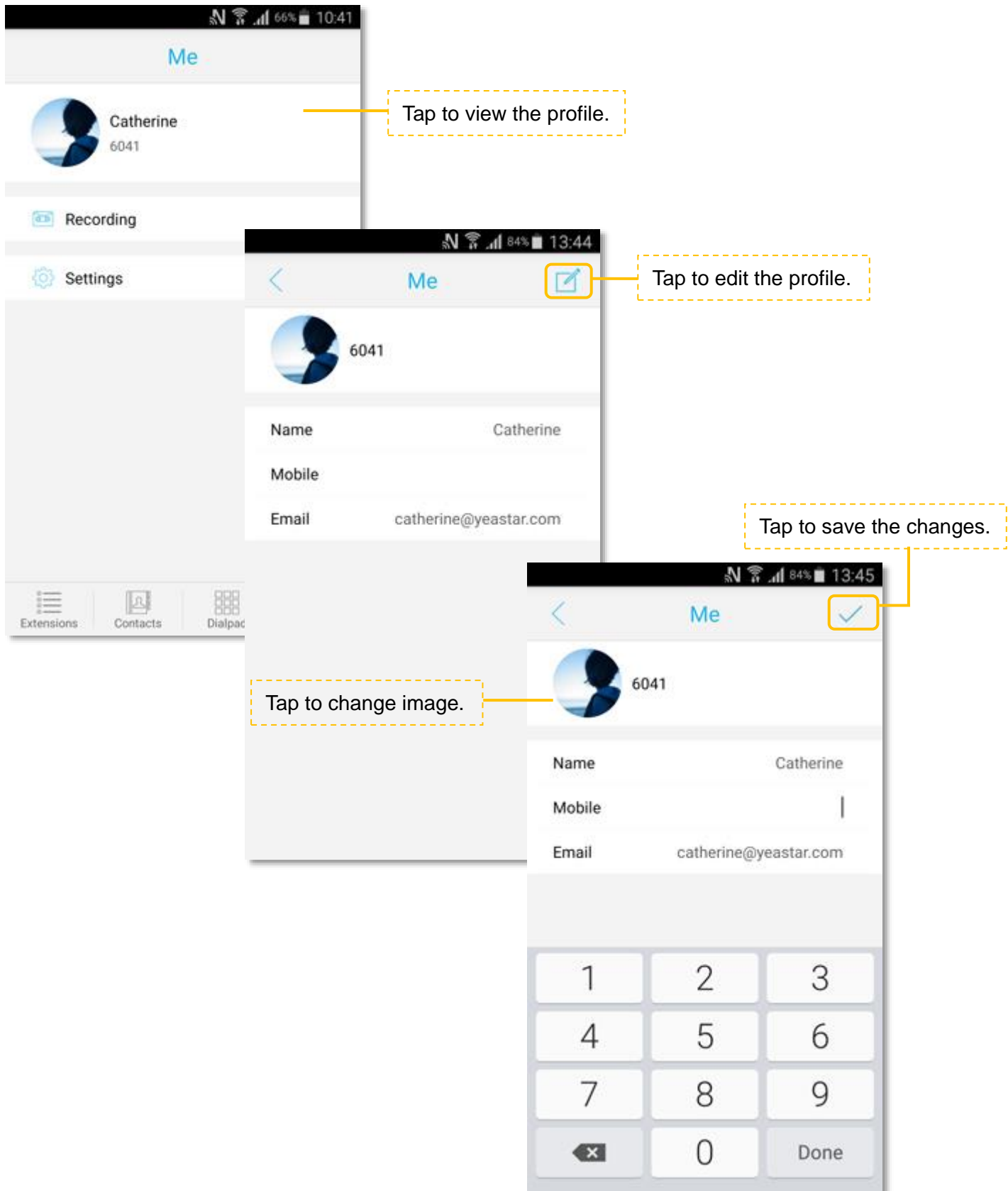
CALLING WITH LINKUS

Interaction between Linkus & Native Phone

Outgoing Calls

- You can make a native call regardless of the state of Linkus.
- Calls from Linkus can be made if not on a native call.

Incoming Calls

- An incoming call to your extension will ring Linkus if you are not on a native call.

Established Calls

- If you accept an incoming native call, you could not handle the call by Linkus.
- If you make a call from Linkus, you can record the call or transfer the call on Linkus.

Making a Call from Extension List

Access S-Series PBX extension list by tapping ⸬≡ at the bottom of the screen.

➢ **Call Extension Number**

Choose the extension number and tap 📞 to call the extension number directly.

Tap to view the extension user's information.

Tap to call the extension number.
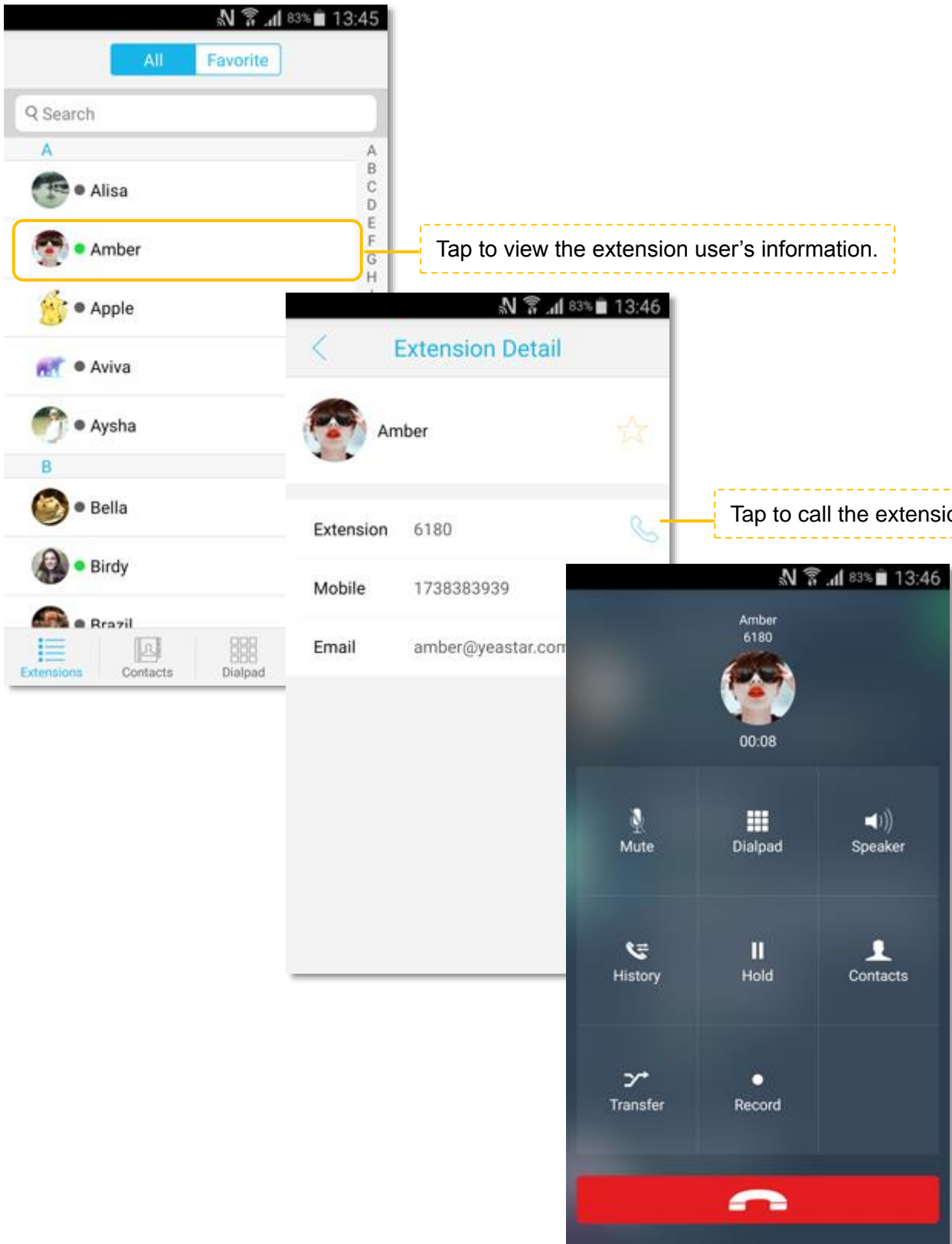
➢ **Call Mobile Number**

Users can also call a person's mobile phone on Linkus, the bill is charged to S-Series PBX. The number you want to call should match outbound routes in S-Series PBX, or the call will fail.

Tap to call the mobile number.
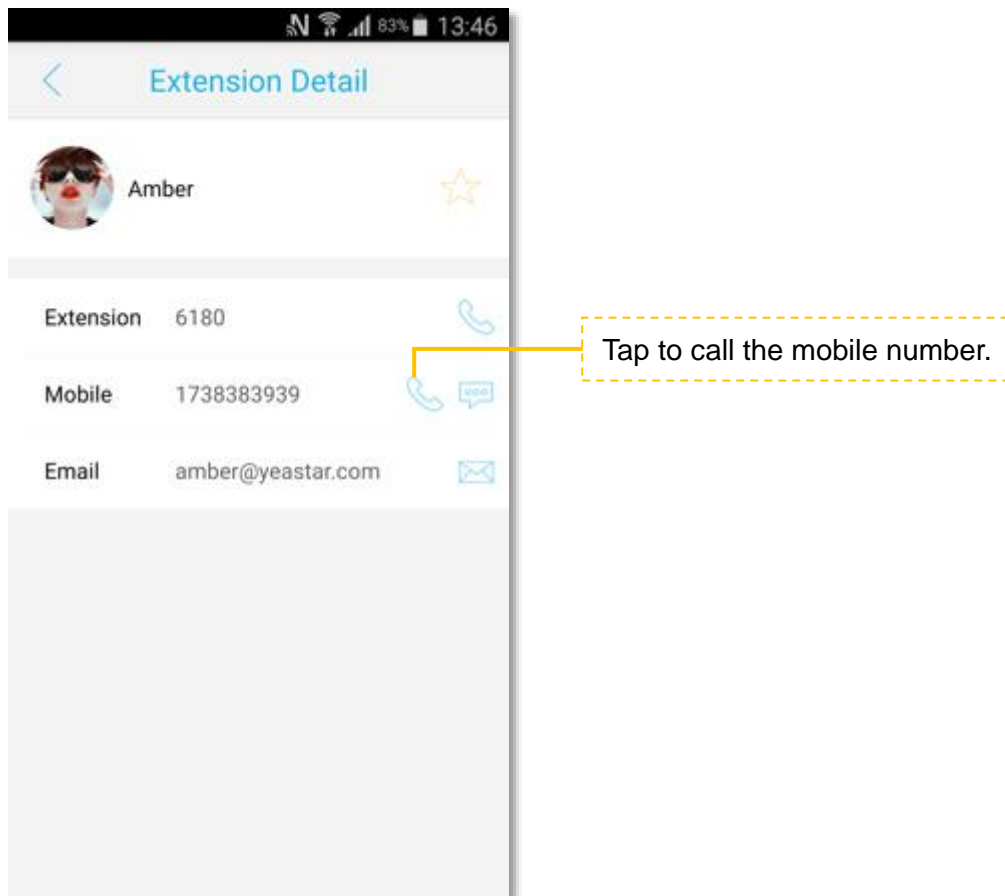
Making a Call from Contacts

Access Linkus **Contacts** by tapping ⬚ at the bottom of the screen. The contacts are continually synchronized with your native contacts.

Tap to view the contact information.

Tap to call the mobile number.
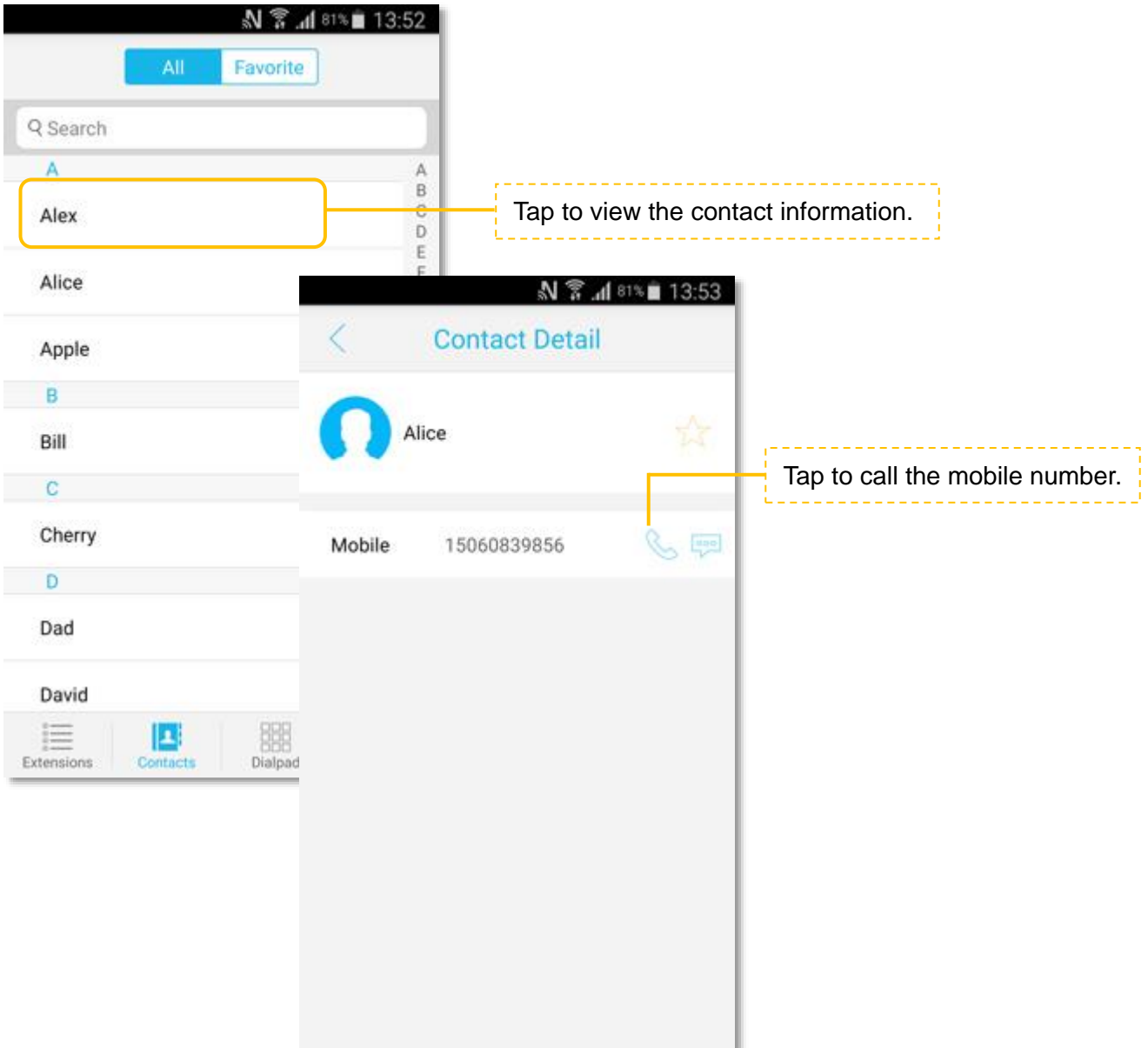
Making a Call from the Dial Pad/Call History

Tap ⊞ at the bottom of the screen, a dial pad shows up and displays all the call history and missed calls. Tap ▦ to hide the dial pad, then you can check all the call history. Tap ▦ to show the dial pad.

Enter a number on the dial pad and tap 📞 to call or you can call from the history.

Tap to call the contact.

Type number in this area.

Tap to start calling.
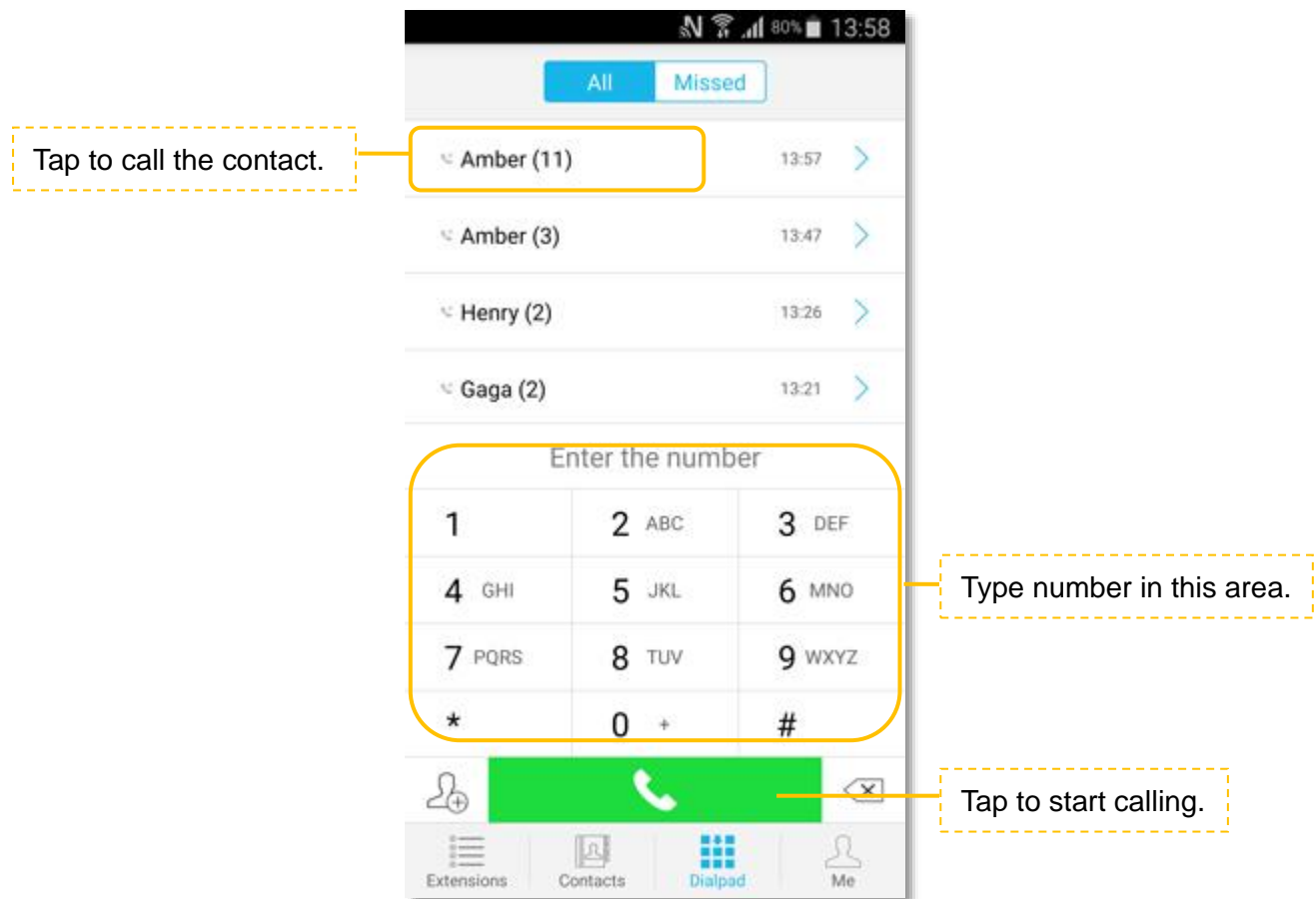
Handling an Established Call

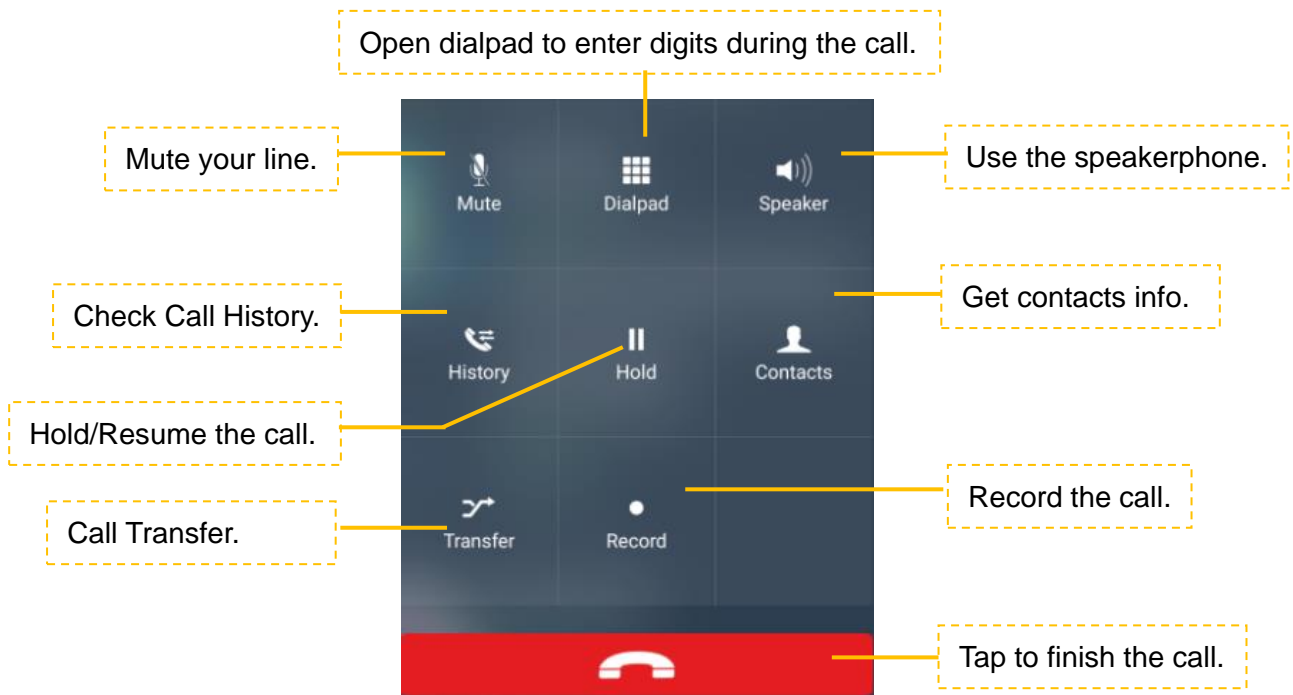When you are on a call, the screen shows several call options.

Open dialpad to enter digits during the call.

Mute your line.

Use the speakerphone.

Check Call History.

Get contacts info.

Hold/Resume the call.

Record the call.

Call Transfer.

Tap to finish the call.

Call Transfer

Tap ⤴ during the call, you can make an attended transfer, then dials a number and talks to the person who has picked up the call before transferring the caller over to him/her.

User A and User B are on the phone, User B on Linkus wants to transfer the call the User C.

1. Tap ⤴ , the screen will be switched to the Transfer Screen.

2. Input User C's number on the screen then tap 📞 to call User C.

3. User B talks to User C, the call between A and B is put on hold.

4. User B taps Comfirm transfer to finish the call between B and C.

5. The call between A and C is established once B ends the call.

2. Tap to choose Attended Transfer.

3. Type the number you want to transfer.

1. Tap to transfer the call.

4. Tap to call the input number.

Tap to cancel transfer and back to the former call.

5. Tap to finish the transfer.
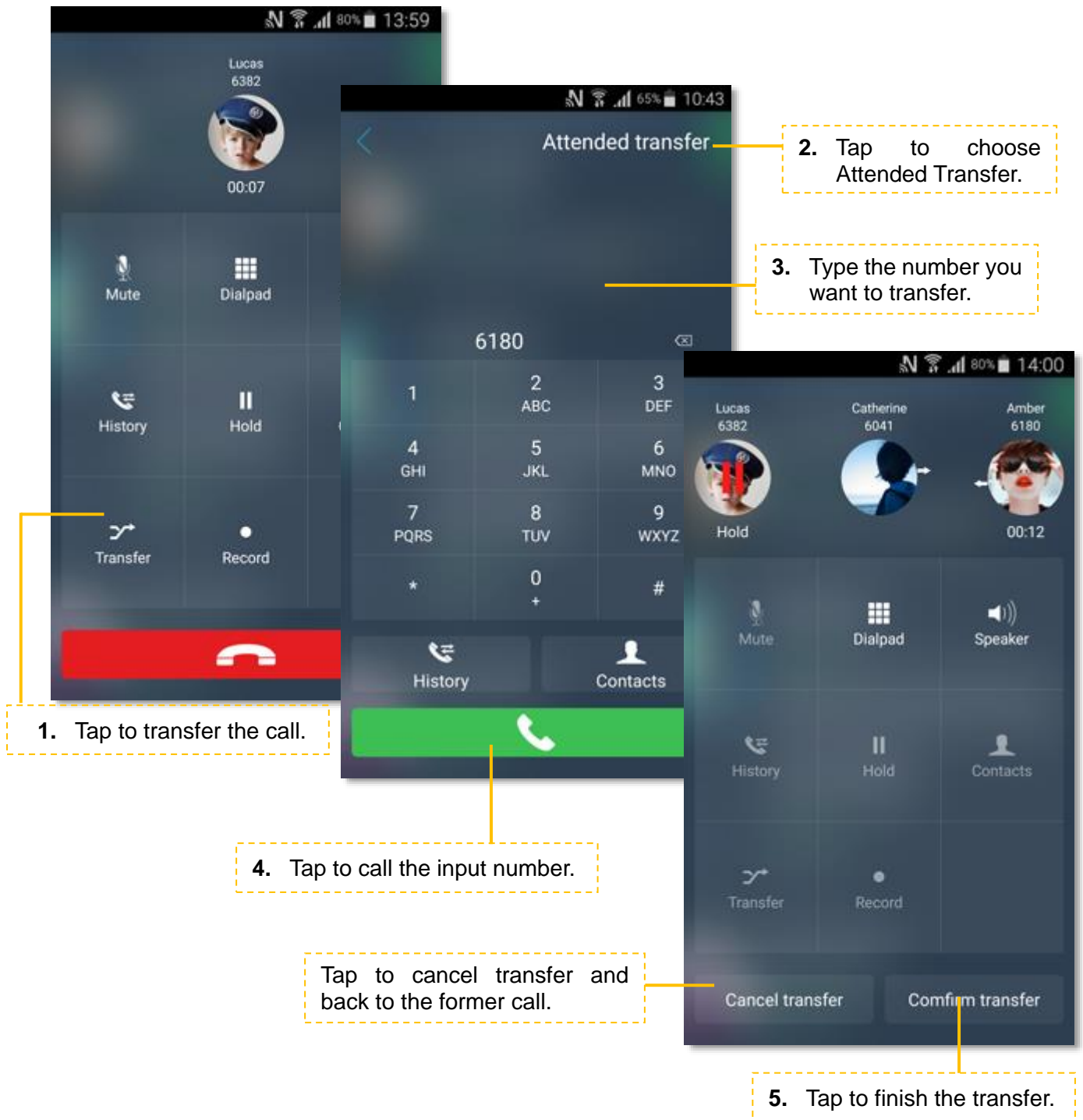
Blind Transfer

Tap [icon] during the call, you can choose to make a blind transfer.

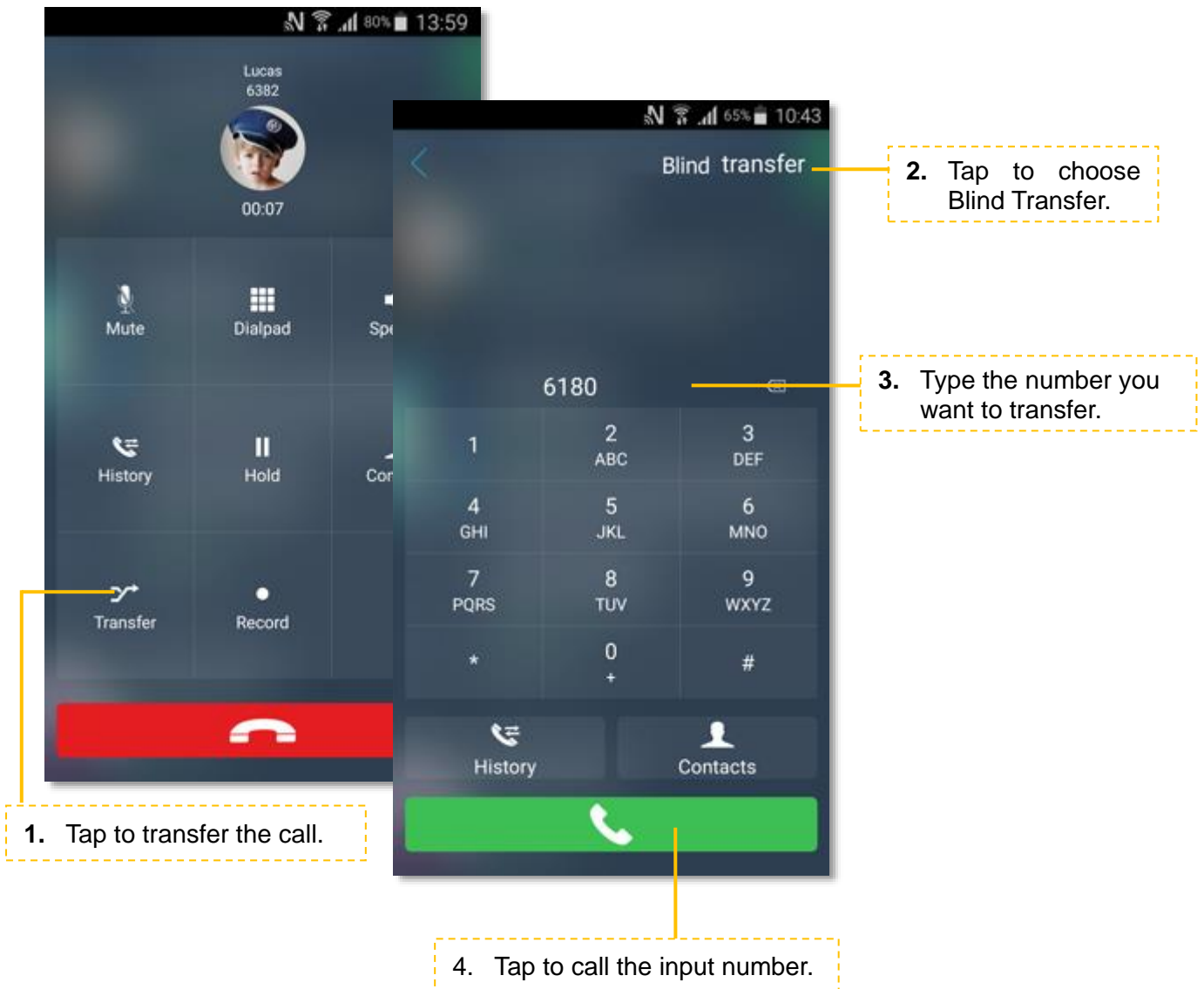User A and User B are on the phone, User B on Linkus wants to transfer the call the User C.

1. Tap [icon] , the screen will be switched to the Transfer Screen.

2. Switch the transfer type to "Blind".

3. Input User C's number on the screen then tap [call icon] to call User C.

4. The call between A and C is established immediately.

2. Tap to choose Blind Transfer.

3. Type the number you want to transfer.

1. Tap to transfer the call.

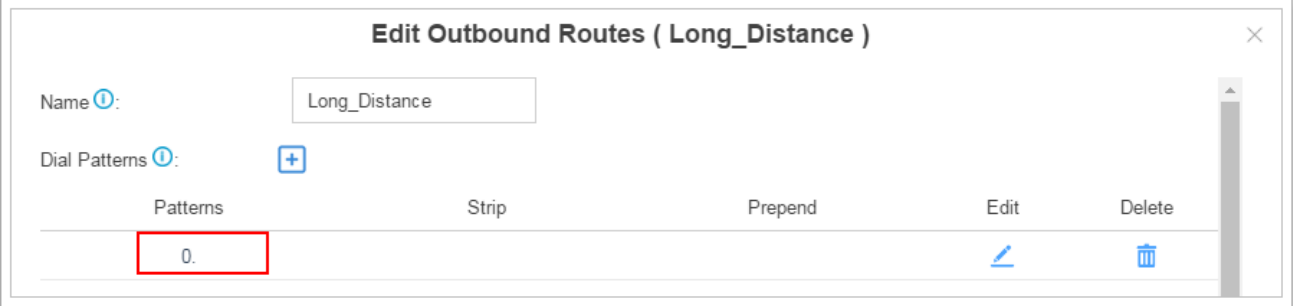4. Tap to call the input number.

Number Rewriting

Number rewriting is a feature that allows you to manipulate the numbers dialed from Linkus. With number rewriting feature, you can utilize your native contacts or call history numbers without having to add new entries.

We have an example to show you how to use number rewriting feature. You could check the steps below.

Step 1. Create an outbound route for adding prefix digits propose.

For example, we need to add digit 0 before the long-distance mobile phone numbers; so we need to create an outbound route and set the patterns as "**0.**" (do not forget the dot).

Step 2. Choose the outbound route on Linkus to call out.

The system will automatically add prefix 0 and match an available outbound route to call out.

◆ **Call From Contact Numbers**

Long press the icon 📞, choose calling through PBX, and choose the outbound route we created in step 1, the system will add prefix 0 automatically and call out.

Long press the icon.

Choose dialing through PBX.

Choose the newly created outbound route.
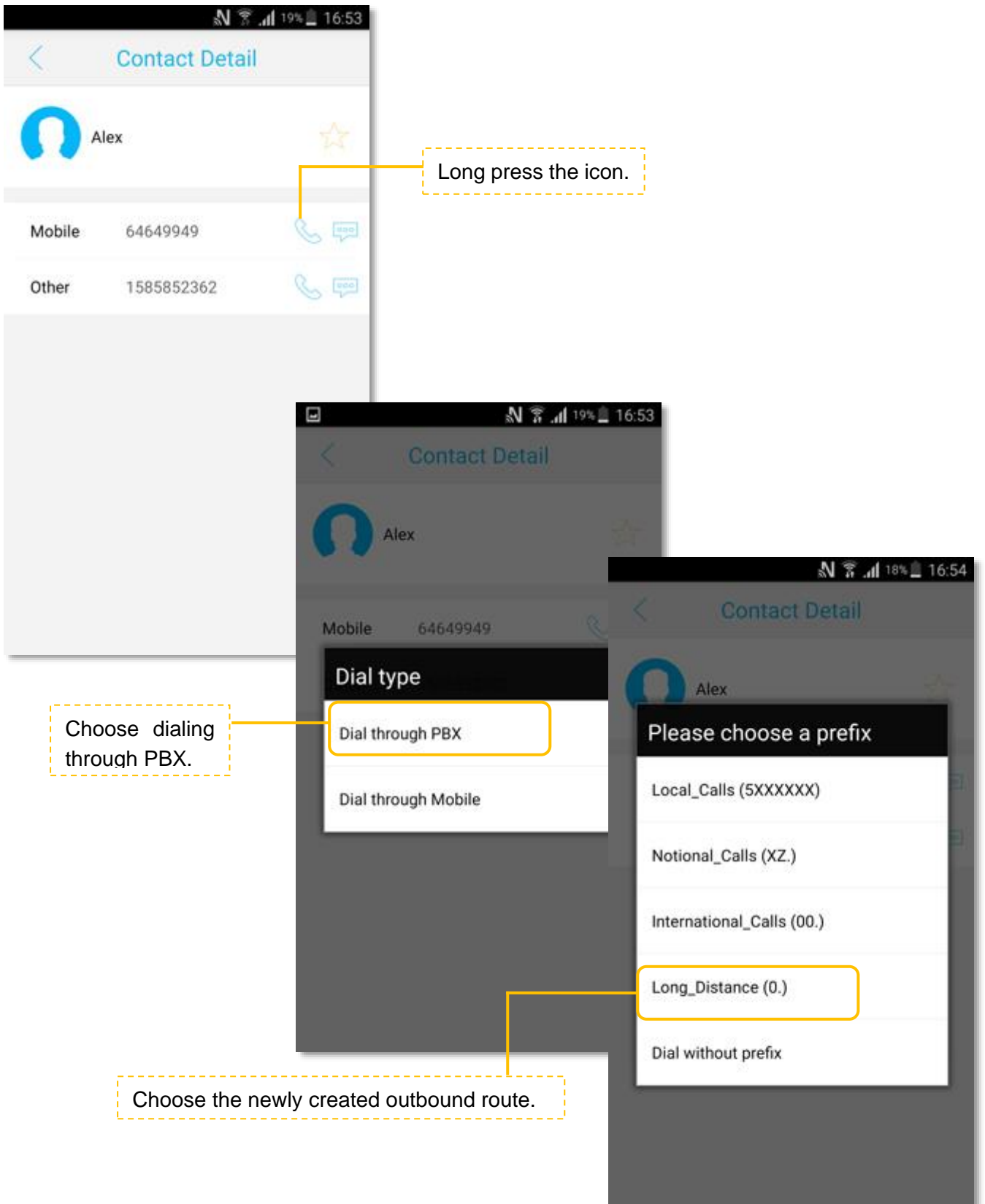
◆ **Call From Call History Numbers**

Long press the number, choose dialing through PBX, and choose the outbound route we created in step 1, the system will add prefix 0 automatically and call out.
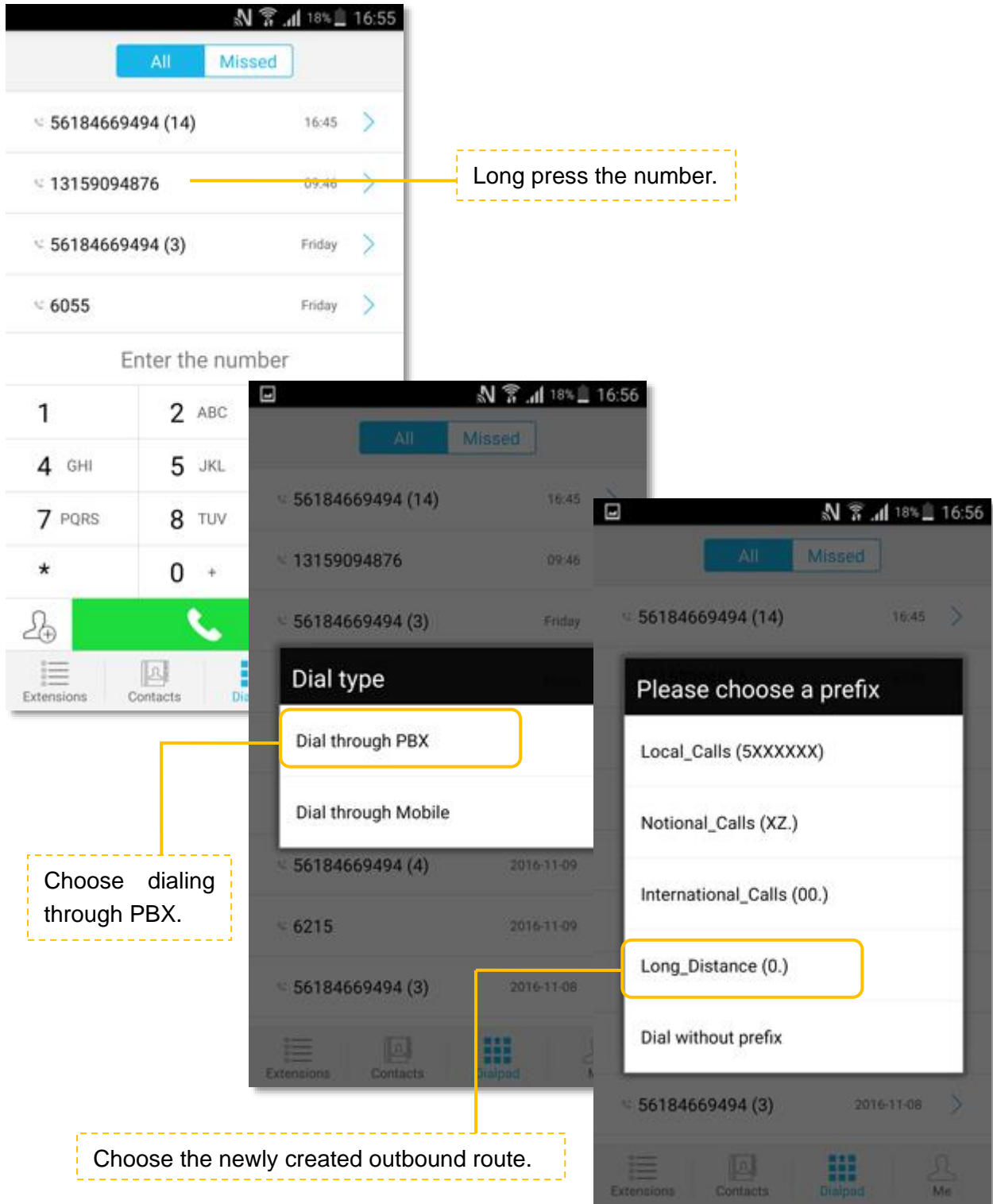

Long press the number.

Choose dialing through PBX.

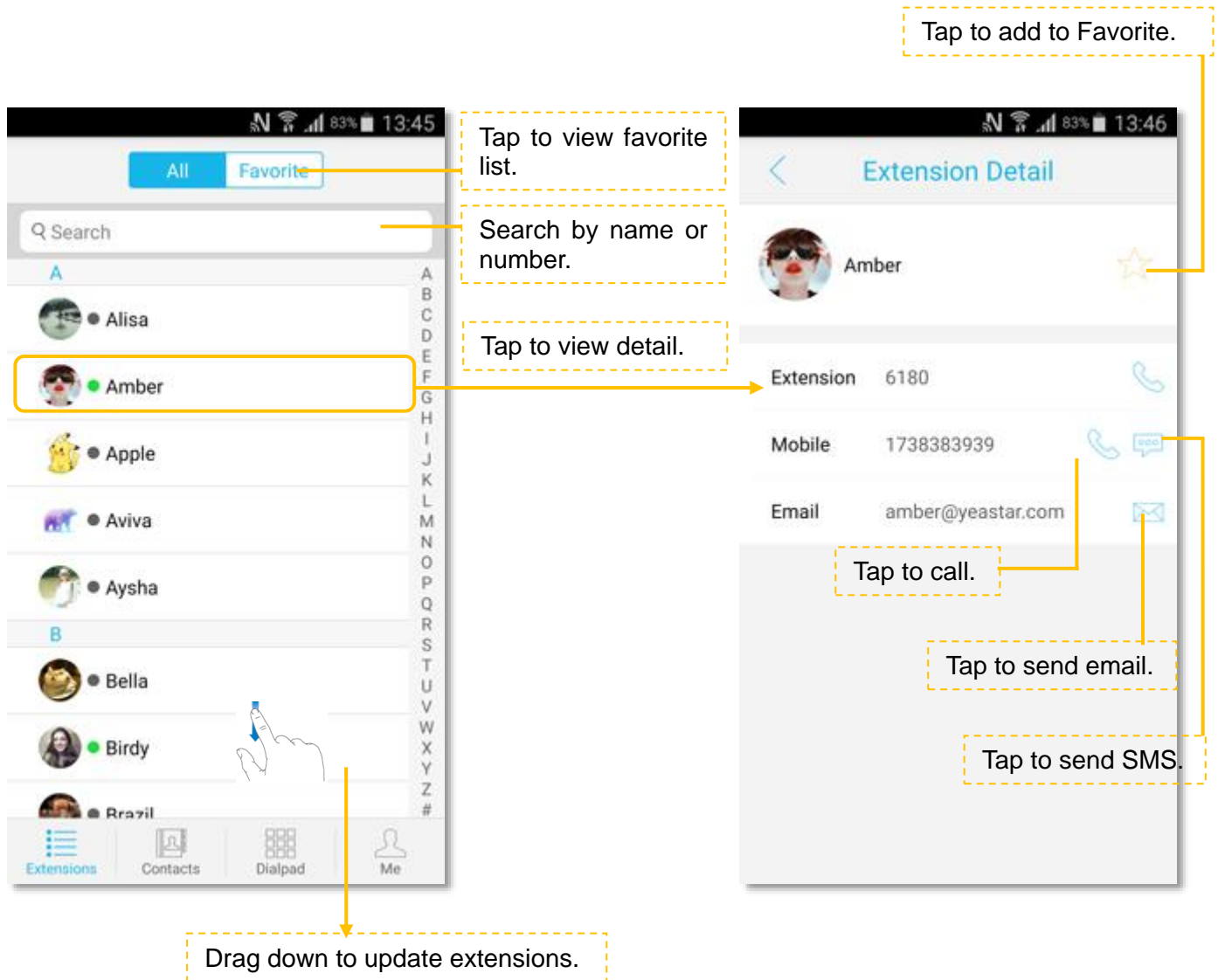Choose the newly created outbound route.

CONTACTS

Linkus provides two phonebooks, **Extensions** and **Contacts**.

- **Extensions:** all the S-Series extensions are displayed on the Extensions page.
- **Contacts:** Contacts on Linkus are continually synchronized with your native contacts.

Extensions

Tap to add to Favorite.

Tap to view favorite list.

Search by name or number.

Tap to view detail.

Tap to call.

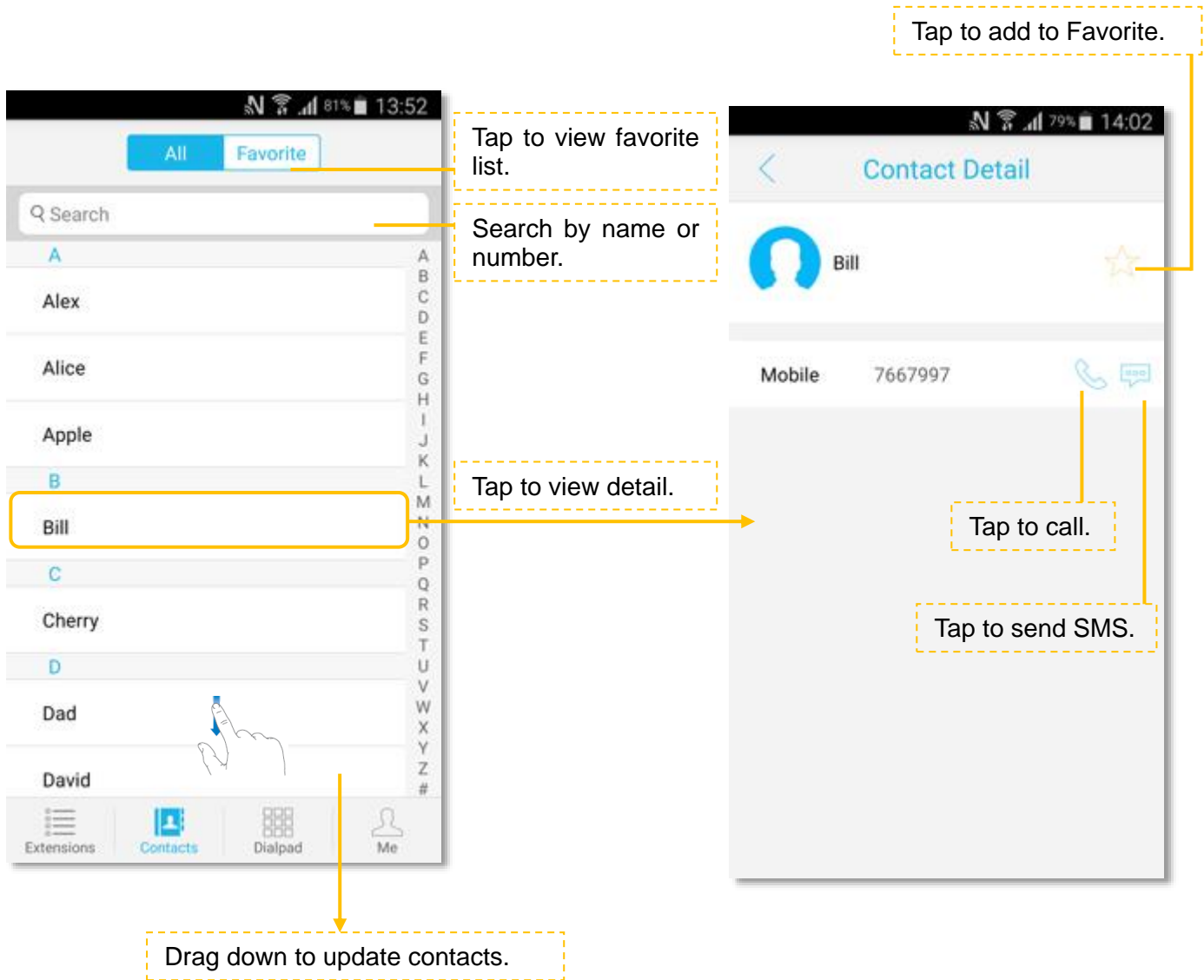Tap to send email.

Tap to send SMS.

Drag down to update extensions.

Extension Status

- 🟢 The user is logged in Linkus.
- 🔴 The user is logged in Linkus and busy in a call.
- ⚪ The user is not logged in Linkus.

Contacts

Tap to add to Favorite.

Tap to view favorite list.

Search by name or number.

Tap to view detail.

Tap to call.

Tap to send SMS.

Drag down to update contacts.

CALL HISTORY

Tap ⊞ at the bottom of the screen, a dial pad shows up and displays all the call history and missed calls. Tap ⊞ to hide the dial pad, then you can check all the call history.

Tap to check all missed calls.

Tap to view call detail.
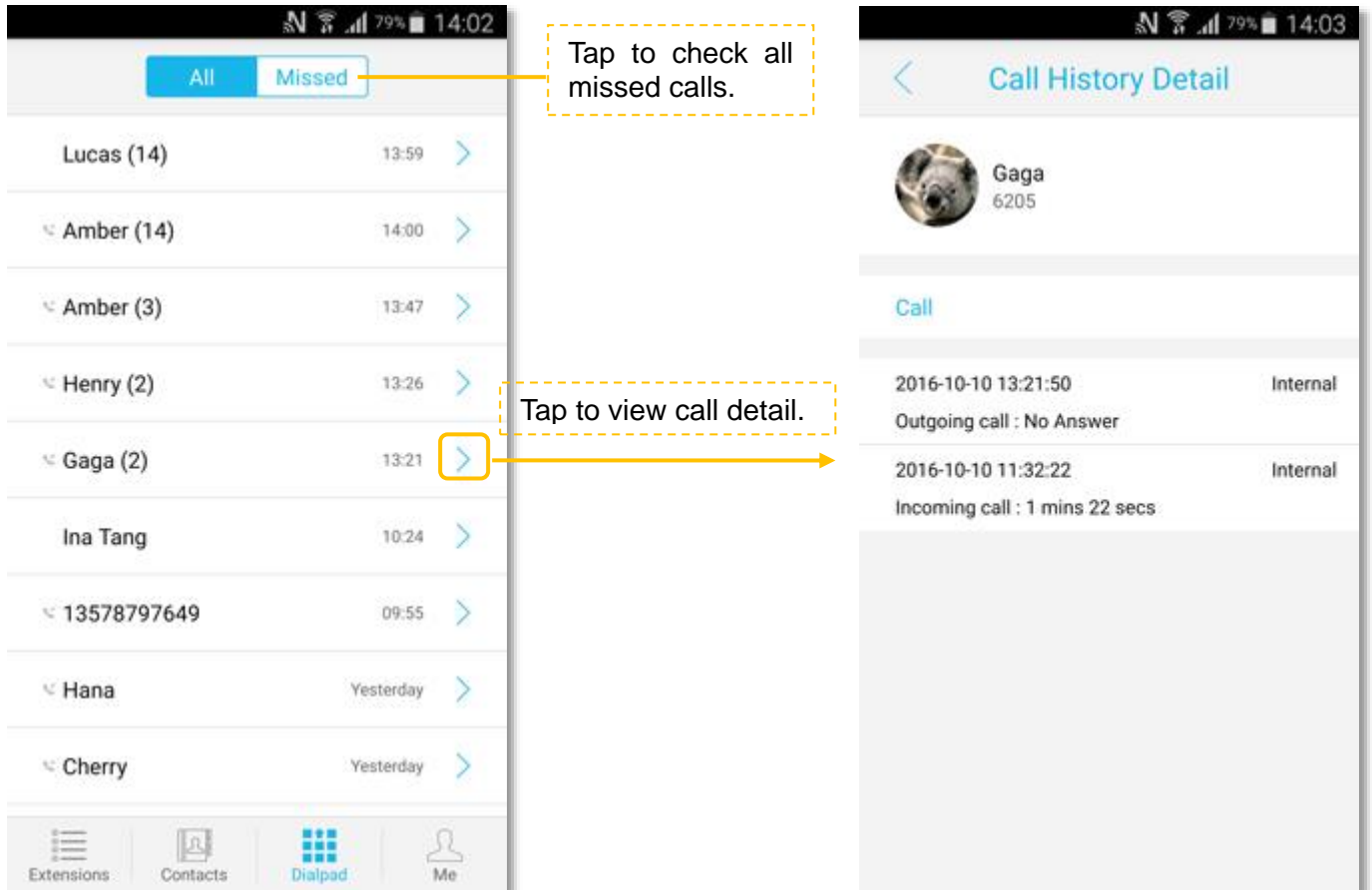
Creating a Contact from History

You can create a contact from a history item.

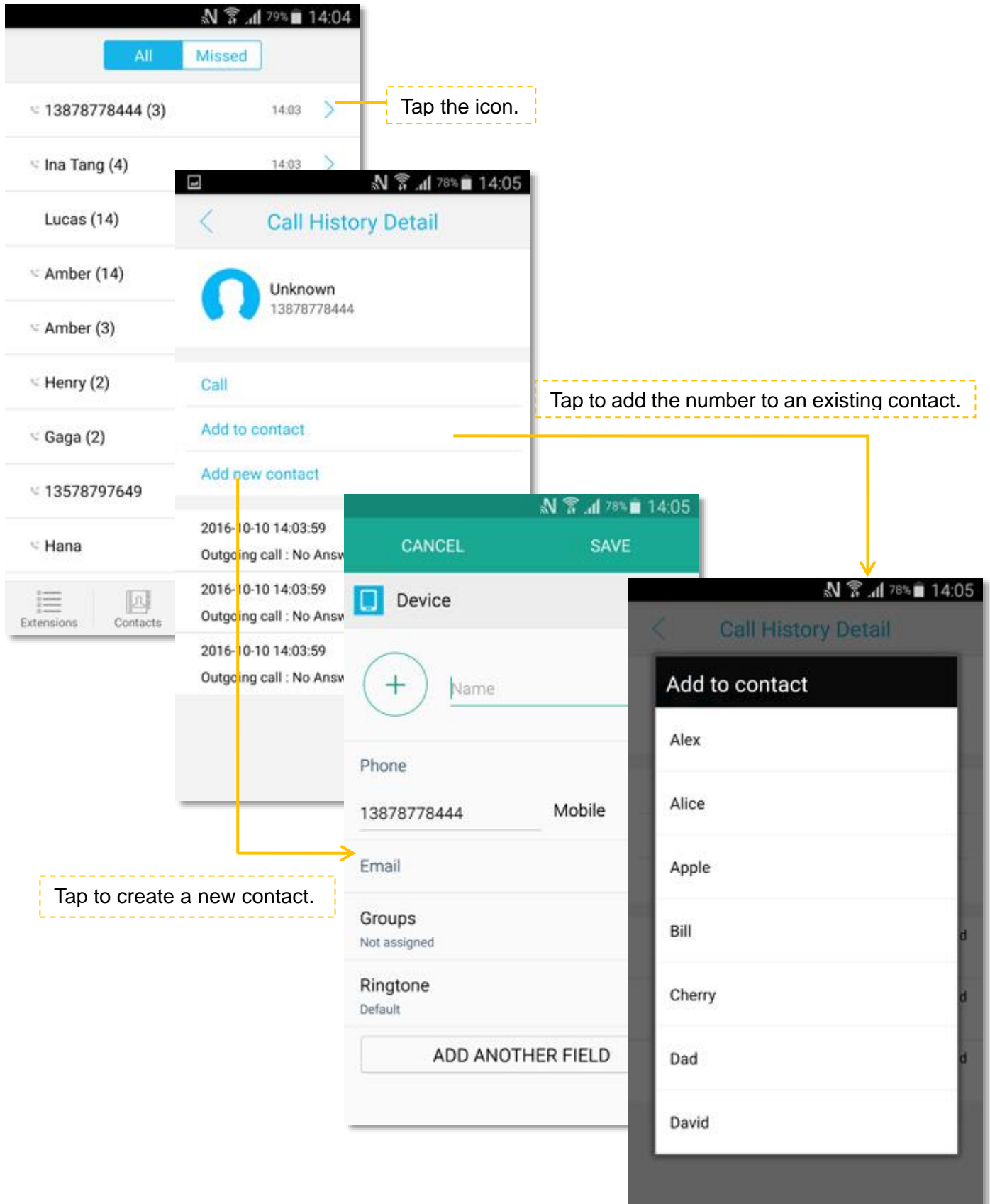Tap the icon.

Tap to add the number to an existing contact.

Tap to create a new contact.

VOICEMAIL & RECORDINGS

Linkus users could check their voicemail files and recording files on Linkus client. Tap [icon] on the bottom of the screen, and tap **Recording** to check the recording files, tap **Voicemail** to check the voicemail files.

➢ Click [icon] to download the recording/voicemail file.

➢ Click [icon] to listen to the recording/voicemail.

SETTINGS

For the first time using Linkus, please tap ⛹ on the bottom of the screen, and go to configure the Linkus.
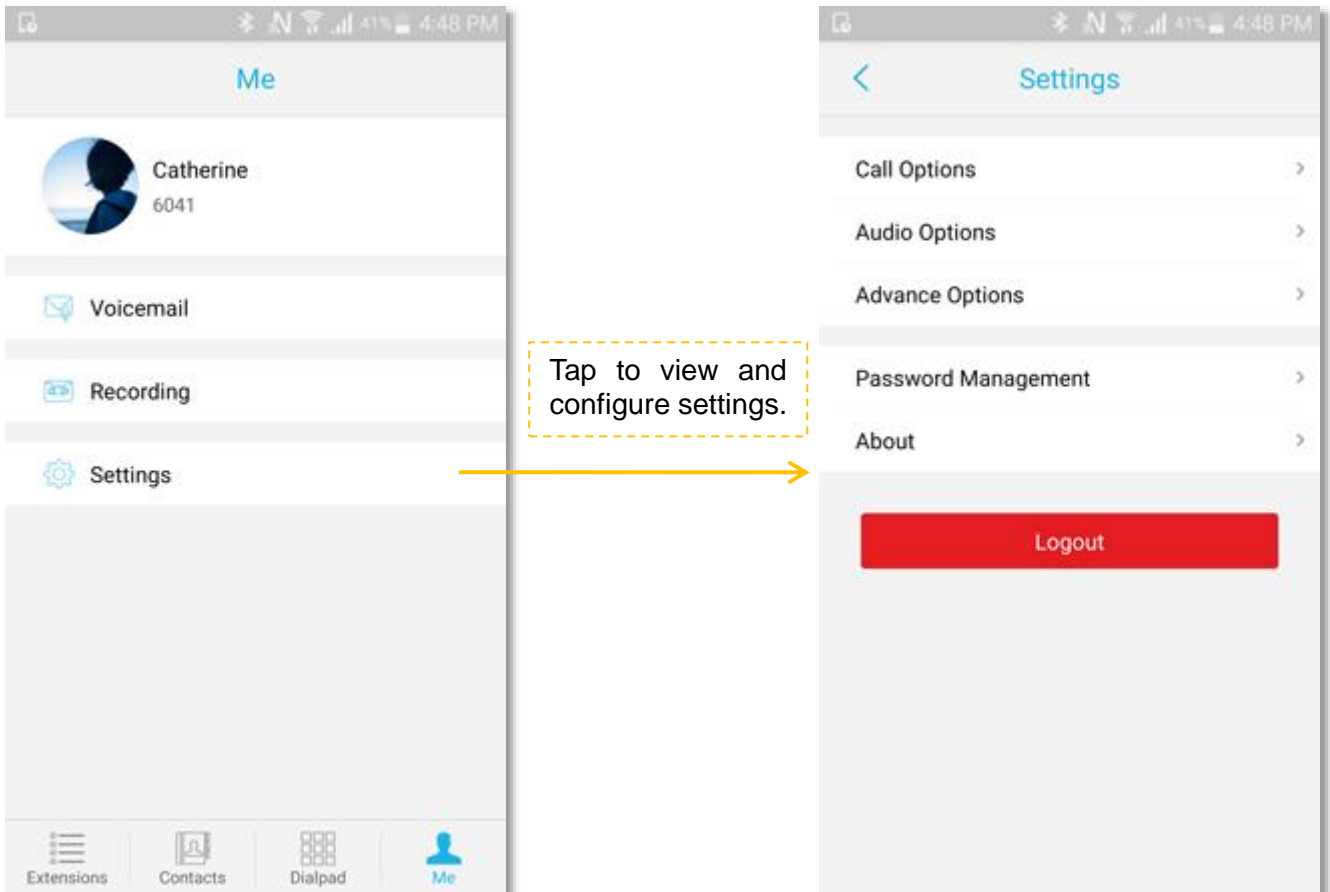

Call Options

1) Ring Strategy

Set the ring strategy for your office phone (where your extension is registered) and Linkus.

- **Ring Simultaneously**: the office phone and Linkus will ring simultaneously.
- **Ring Extension Only**: only the office phone will ring.
- **Ring Linkus Only**: only the Linkus will ring.
- **Ring Extension First**: the office phone rings first, then the Linkus rings.
- **Ring Linkus First**: the Linkus rings first, then the office phone rings.

2) Call Forwarding

Calls can be forwarded in any of these 3 conditions, choose one condition and choose the forward destination.

- **Always**: always forward the call, never rings the user.
- **No Answer**: only call forward when the user does not answer.
- **When Busy**: only call forward when the user is in a call.

3) Ring Timeout

Set the ring timeout in seconds, phone will stop ringing after the time defined.

4) DND

If DND is enabled, the user could not receive any calls.

Audio Options

1) Echo Cancellation

If there is an echo during the call, enable this feature to get better sound quality.

2) TX Gain

Adjust the transmitting volume.

3) RX Gain

Adjust the receiving volume.

4) Dial Pad Tones

Enable or disable dial pad tones.

Advanced Options

1) Clear Cache

Tap this setting to clear downloaded recording files on your mobile phone.

2) Debug

By default, Linkus debug is disabled. If you got a problem of Linkus client, please follow the steps below to report your bugs to Yeastar:

i.   Enable **Report Bugs**.
ii.   Duplicate the problem.
iii. Tap **Send Report**.
iv.   Enter the description of your problem, click **OK**.
v.   Edit your Email contents, and click **Send**. The email will be sent to Yeastar.

Password Management

Change the Linkus login password. Enter the old password first, then enter new password twice to confirm. Tape **Save**, and log in Linkus using the new password.