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User Manual

Linphone for Andriod Group Chat (Waterfall)

Version 1.0

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1 Revision History

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2 Document Approval

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3 Introduction

Linphone is the leading open source implementation of Voice over IP (VoIP) and Instant messaging functionalities, and is compatible with iOS, Android, Blackberry, Windows Phone, Windows desktop and web browser clients. This user manual will be focused specifically on the Android aspect.

4 Systems Overview

5 Systems Configuration

Linphone has inside a separation between the user interfaces and the core engine, allowing to create various kinds of user interface on top of the same functionalities.

The user interface frontends:

- Gtk+ interface for windows, mac and linux
- The console interface (linphonec, linphonecsh)
- The iPhone application built in objective C
- The Android application running in java
- The Windows Phone application written in C#

Liblinphone, the core engine: this is the library that implements all the functionalities of Linphone.

Liblinphone is a powerful SIP VoIP video SDK that anyone can use to add audio or video call capabilities to an application. It provides a high level api to initiate, receive, terminate audio and video calls.


Liblinphone relies on the following software components:

- Mediastreamer2, a powerful multimedia SDK to make audio/video streaming and processing.
- oRTP, a simple RTP library.
- belle-sip the SIP library.

Liblinphone and all its dependencies are written in pure C

6 Installation

To install the Linphone application simply follow the steps below:

1. Locate your Android device's Play store
2. Under the search tab, search for "Linphone"
3. Locate the Linphone application and click on it 
4. Follow you device's guideline to install the application
5. Once installed, launch the application by clicking on the Linphone icon in your applications list on you device
6. Follow the prompts further to register if you are a new user or to log in if you already have an account.

7 Getting Started

In order to make use of the application one needs to have a linphone.org account and SIP account. Follow the steps bellow to create one:

1. Launch the application
2. Click the "Start" button located on the bottom right of the screen
3. Click on "Create an account on linphone.org" if a new user
Follow the prompts on the screen to further creat an account
4. Click on "I have already a linphone.org account" if one already has an account
Enter the neccessary account information and click "Sign in"
5. Click on "I already have a SIP account" if one already has a SIP address to use
Enter the neccessary account information and click "Sign in"
6. Once logged in you will be presented with the application user interface

8 Using The System

8.0.1 Using the Group Chat functionality

Below is a diagram showing how one can navigate through the interfaces involved in the group chat functionality.



When on the "Chat" user interface, one will be presented with the following options on the top panel of the screen:

- New Conversation
- New Group Chat
- Edit

Looking at the diagram above, the steps to navigate through the user interface will be listed: **Green Path**

1. Once logged in you will be presented with the application user interface
2. Click on the "Chat" menu item located on the bottom panel
3. Click "New Group Chat" option located on the top panel
4. You will be presented with a screen to enter necessary information to create a new group chat

Enter a desired group name

Choose the type of encryption you wish to use

Add members to participate in the group chat - Note: at least two members must be added

Click "Next"

5. You will now be presented with the actual group chat
6. You can now proceed to "chat" in the group chat or view the group information by clicking on "Group Info" in the group chat

You can edit the information by clicking "Edit" and changing the information desired.

9 Troubleshooting

10 Appendix B

List of Figures