

The following document describes how to run the RWG implementation and the RWGChat application in compatible Symbian phones. In the application folder of each phone you will find 3 different icons with the following names:

- *RWG Symbian*: this is the implementation of the RWG protocol. Since it is a console application it has no graphical user interface (GUI).
- *Tab* is the RWGChat. RWGChat is a chat application that runs on top of the RWG protocol allowing message communication among several phones.
- *RWGClient*: this will not be used. It is only used for tests.

A Section – Run the protocol and the chat application

In order to run the protocol and the chat application the following steps must be followed. First, the steps must be performed only in one phone. Then, the other phones can follow the steps.

1. Run the RWG protocol:
 - a. Press the *RWG Symbian* icon in the application folder.
 - b. A dialog will be prompted. Press *Yes* to create the RWG wireless network in offline mode.
2. Run the RWGChat:
 - a. Press the *tab* icon and wait until the application creates the connection with the protocol (a welcome message will be written in the chat display).
3. The RWG protocol and the RWGChat application are ready.

B Section – RWGChat

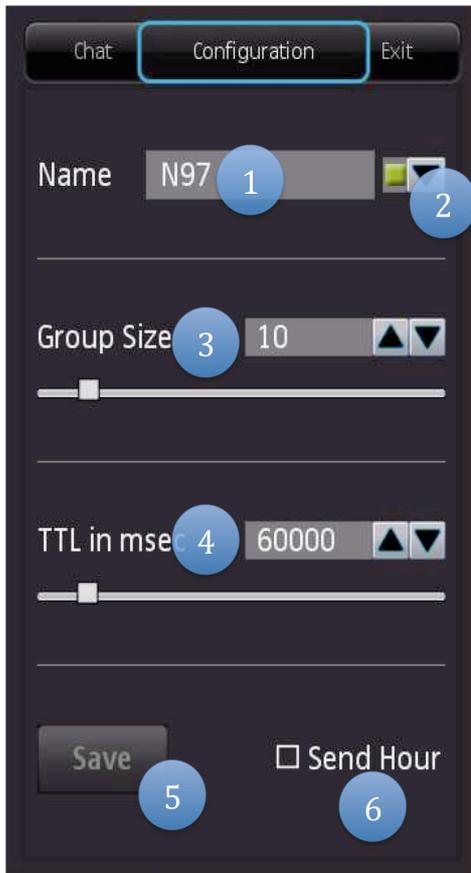
The RWGChat application has 3 tabs: chat, configuration and exit.

Chat: steps to send a message



- 1) Area where the messages and the name of the sender will appear.
- 2) Write here your message.
- 3) Press \leftarrow in the keyboard or the *Send button* (3) in the display.
- 4) Received messages will be displayed in (1).

Configuration:



- 1) *Name* is the name of the user in the chat. In order to change your name, write the new one in the text box.
- 2) *Color* shows the color of your name. Press on it and choose a color among the different colors that will appear.
- 3) *Group Size* is the minimum number of nodes the message should be delivered to. Change the *Group Size* moving the slider, pressing the up/down arrow or writing in the BOX the new number. Then press Save (5) to save the changes.
- 4) *TTL (time to live)* is the time that the message is allowed to remain in the network. Change it moving the slider, pressing the up/down arrow or writing in the text box the new number. Then press Save (5) to save the changes.
- 5) *Save* is used to save the changes performed in (3) and (4).
- 6) *Send Hour* allows appending the time when the message was sent.

Exit: press the *Exit* button to close the application and the protocol.

C Section – Scenarios

Connect different phones and exchange messages:

In order to connect two or more phones and be able to send and receive messages the steps explained in Section A must be followed. The way of changing the *Group Size* is described in Section B, otherwise it is set to 10 by default. Use the chat tab to send and receive messages like in a normal chat application.

One node coming from another partition receives an earlier sent message:

First, only one phone has to launch the protocol as it is explained in Section A. Then, the other phones can follow the steps of Section A (they have to be in contact with the first node). Once all the phones are running the protocol, they can split up and send messages. Finally, when the phones meet again, they will be able to receive the messages sent before.