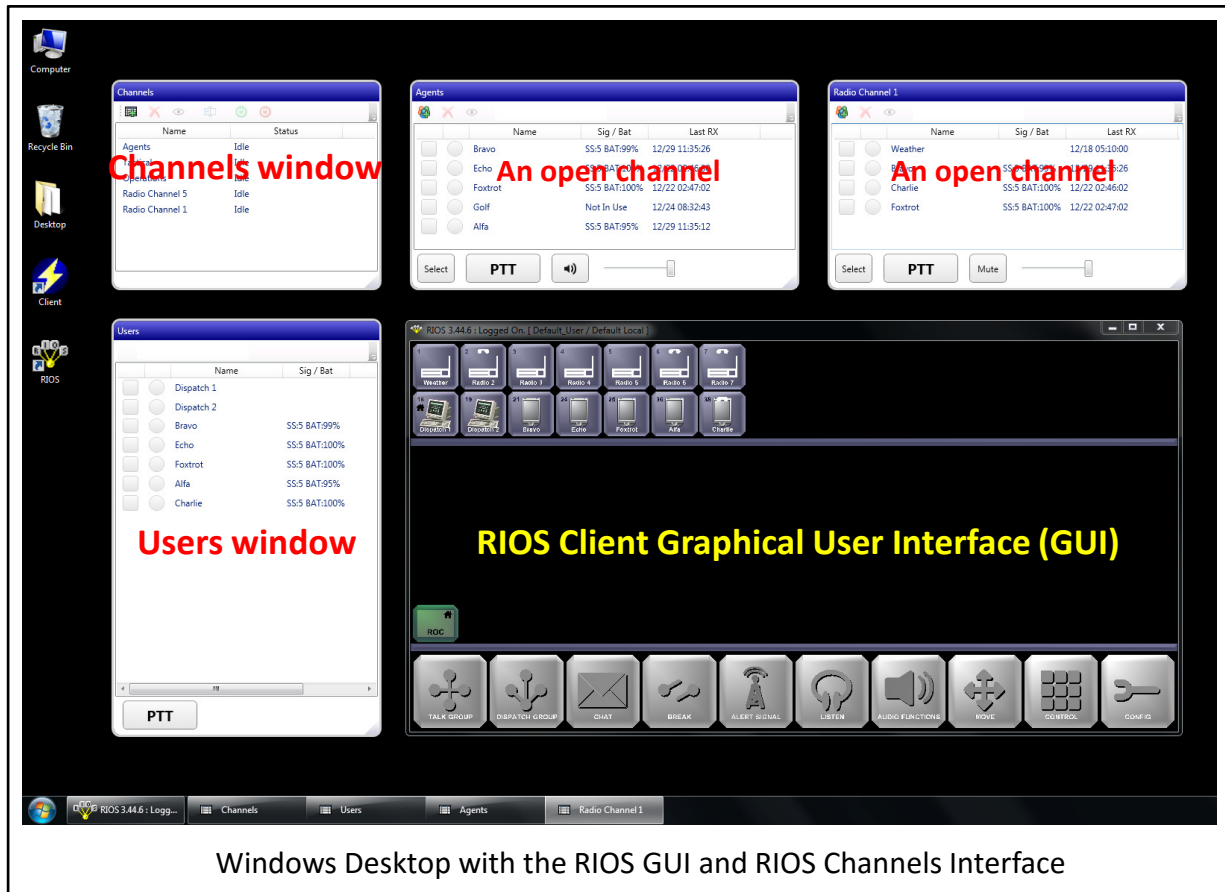# The RIOS Channels Interface

The RIOS Channels Interface is designed for users who want to create and manage communication channels among smartphones, radios, and computers. The RIOS Channels Interface allows users to quickly communicate with individuals and grouped assets through selectable push-to-talk capability. The following document outlines the basic operation of the RIOS Channels Interface.

The RIOS Channels Interface is an add-on resource available through the RIOS Client Graphical User Interface. If initiated from within the RIOS GUI (CONFIG > Global Config > Global Options), the channels interface starts automatically with the RIOS Client Graphical User Interface.

The image below illustrates an example of the RIOS Client GUI along with the RIOS Channels Interface. In this example, the user is viewing the RIOS GUI along with the "Channels" window, the "Users" window, and two open channels named "Agents" and "Radio Channel 1."

Windows Desktop with the RIOS GUI and RIOS Channels Interface

TIP: Channels can be placed anywhere on the Windows Desktop. The user can "snap-to-grid" the size and placement of the windows by holding "Ctrl" and sizing bottom right corner of the window and placing it accordingly.

When the RIOS GUI is re-started, the channels will be placed in the last configuration of the local computer. To close a channel the user may right-click on the channel from the Windows Tool Bar and select "Close."
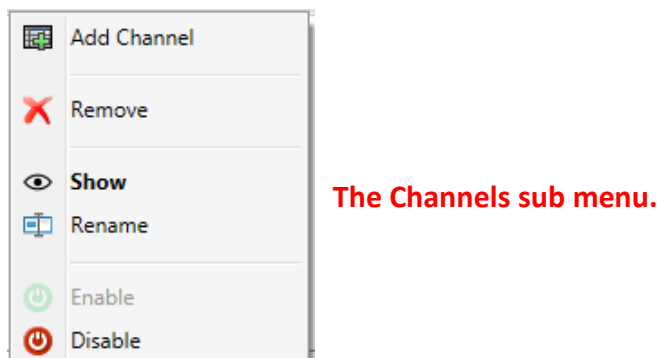
Section 1.00 – The Channels Window

A **_channel_** is a group of resources such as radios, smartphones, and/or computers that can communicate as a group. When assets are added to a channel they are cross -patched together; meaning, they are able to communicate with push-to-talk audio as a group. Within RIOS, smartphones and computers are known as VoIP Assets. VoIP Assets can appear in multiple channels at the same time. Standard Assets, such as radios, can only be used in one channel at a time. The user is able to create as many channels as necessary. The created channels are shown in conjunction with the RIOS Client GUI as well as on the smartphone operating the RIOS LiTE smartphone application. The RIOS LiTE user has the ability to join or exit the channel by toggling the speaker icon of the corresponding channel.

The **_Channels window_** is the main control panel for the RIOS Channels Interface. Channels are created, managed, and deleted from within this window. The image on the left displays an example of the Channels window. In this example, five channels are created. The image on the right displays the corresponding channel interface from the perspective the RIOS LiTE user.

The Channels window from within the RIOS Channels Interface.

The Channels tab from RIOS LiTE.

From the Channels widow, double click on the channel name to open a channel. The user can hide the channels by selecting the Show icon (appears as an eye) or close the channel from the Windows Task Bar. Controlling open channels will be further discussed in Section 3.00, *Open Channels*.
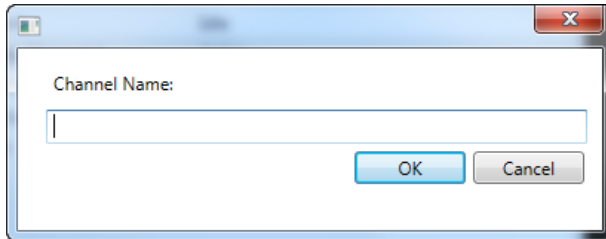
Actions that are available within the Channels window are shown in the top ribbon of the panel. The user can also access these actions by right-clicking on the specific channel.

The Channels sub menu.

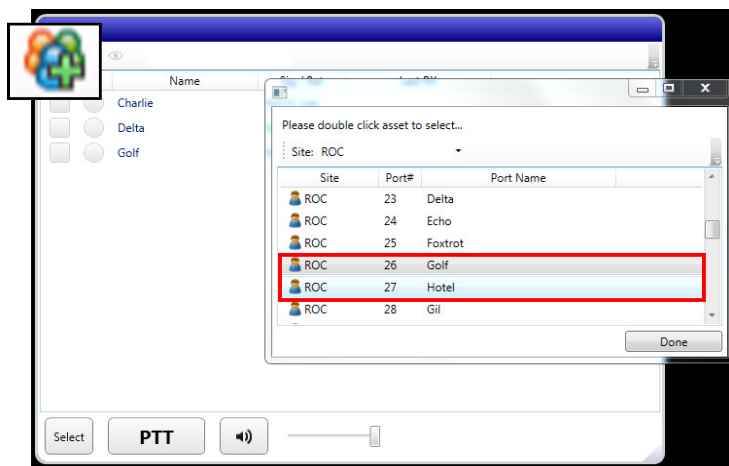<u>1.01 – Creating a New Channel</u>

1. **Select the "Add Channel"** icon to create a new channel select. The prompt will appear as indicated below.

Naming a new channel.

2. **Enter the name** of the new channel to be created. Select "Okay." Pressing the "Cancel" button exits the new channel prompt. If the user does not enter a name within the Channel Name field the channel will be called "new channel."

3. **Double click the newly created channel** to open the channel.

4. **Double click the "Add Member"** icon to add radios, smartphones, and/or computers to the channel. The assets selection menu will open. Select the assets you wish to add. When complete, select the "Done" button.

Adding assets to a channel.

The channel is now created. Channel management will be discussed in Section 3.00, *Open Channels.*

NOTE: Upon creating the Channel, permissioned RIOS LiTE users are able to join the channel by selecting the "Channels" tab within RIOS LiTE and toggling the speaker icon to monitor the channel.

1.02 – Deleting a Channel

Select the channel you wish to delete. Select the "Remove" icon to delete the selected channel. The assets that were in that channel will no longer be patched.
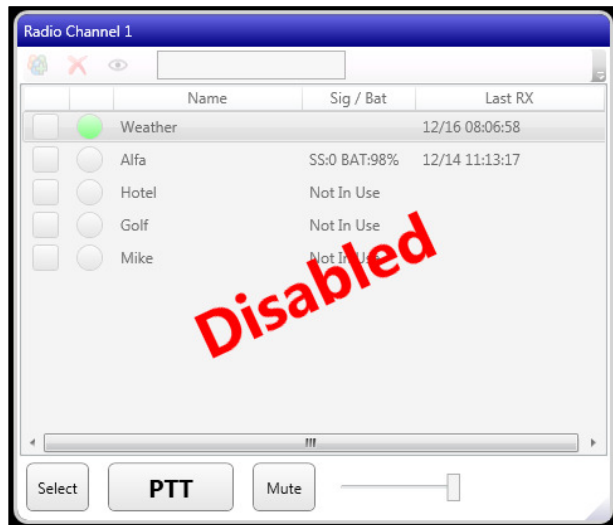
1.03 – Viewing a Channel

Select the channel you wish to view. Select the "Show" icon to open the channel. The user can also accomplish this by double clicking the channel.

1.04 – Renaming a Channel

Select the channel you wish to rename. Select the "Rename" icon to open Channel Name field. Input a new name. When complete select "Done."

1.05 – Enabling and Disabling a Channel

Select the channel you wish to disable or enable. Select the corresponding "Enable" or "Disable" icon. If the channel is disabled, "Disabled" will appear in the Channel Status Column and "Disabled" will be written across the open channel as shown below.

A Disabled channel.

Disabling channels allows the user to suspend the patch of the channel while having the option to make the patch available if necessary. Users logged into RIOS LiTE will see the channel however no patching will occur.

Section 2.0 – The Users Window

A _user_ is a smartphone or computer that is logged into the RIOS server. A user can be a smartphone operating the RIOS LiTE smartphone application or a personal computer operating the RIOS Client GUI or RIOS Channels Interface. Both types of users appear in the Users window when logged into the system.

The image below illustrates an example of the Users window. In this example five smartphones are logged into the system while two computers, "Dispatch 1" and "Dispatch 2" are logged into the system.

The Users window displaying all logged in users.

Viewing the users from RIOS LiTE.

In addition to displaying users who are currently logged into the system, the Users window acts as a access point for private, one-to-one connections with other users.

2.01 – Private Connections

A _private connection_ is a one-to-one conversation that can only be heard between the two users. To initiate a private connection with the another user, select the box next to the user you wish to communicate. The box turns yellow as shown below. Press and hold the PTT button to transmit audio to the user.

Computer "Dispatch 1" transmitting to smartphone "Alfa."

2.02 - Column Headers

The column headers within the Users window (and open channels) display the "Name," "Signal/Battery," and "Last Reception" for each device. The displayed "Last Reception" is from the perspective user or channel.

TIP: To sort the users, click on the column desired header. To search for a user, click above the column headers. The search box will appear. Type the user you wish to find.
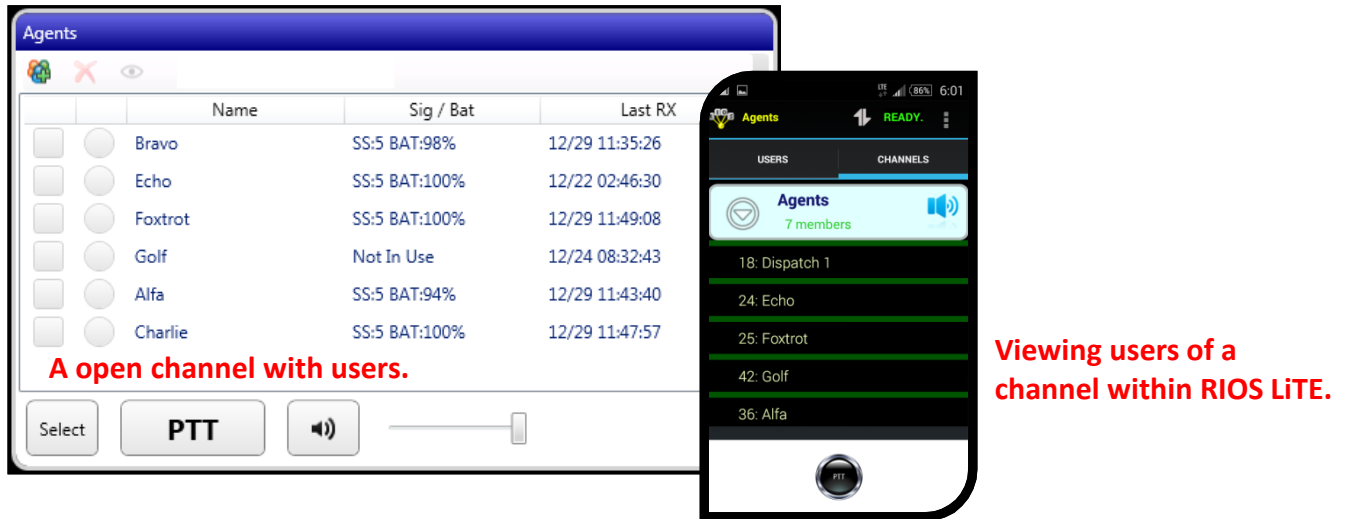
2.03 – Transmit and Receive Indicators

The transmit and receive indicators show the direction of audio traffic from the perspective of the user. The indicators appear as:

- – Receive
- – Transmit
- – The asset is not logged in or is not in the active group.

Section 3.0 – Open Channels

An **_open channel_** is a channel that is currently being viewed by the user. The image below illustrates an example of a RIOS Channels Interface open channel with five smartphones currently monitoring the "Agents" group and one smartphone, "Golf," that is monitoring the group but is not currently logged in.

A open channel with users.

Viewing users of a channel within RIOS LiTE.

Users who are displayed in the channel can be in one of two states: logged in or not in use. "Not In Use" means that the phone is not turned on or it is not using the RIOS LiTE application. Furthermore, the local user of the RIOS Channels Interface (in the above example "Dispatcher 1") is not shown in the local, open channel. However, as seen from other RIOS Channels Interface workstations or RIOS LiTE users, the local user is shown in the group. From the perspective of the RIOS Server, the local user is in the group so long as the open channel is not muted (Section 3.04).

NOTE: If the RIOS LiTE user **mutes** the channel from their smartphone they will not be shown in the group. They will however appear in the Users window (Section 2.0). If communication is required with the user who has muted the channel, the Channel Interface user may utilize the Users window and a private connection (Section 2.01) to inform the RIOS LiTE user to unmute the channel.

3.01 – Managing Channel Audio

The RIOS Channel Interface allows the user to communicate to assets in the following ways:

1. Using the Channel PTT Button to communicate to all users within a group.
2. Using the Channel Select Button and a physical PTT button such as a SyTech CCU2 PTT microphone or footpedal to communicate to all users within a group.
3. Using the selection box and the Channel PTT Button to communicate with one or assets to create a temporary channel.

3.02 – Using the Channel PTT Button

The Channel PTT Button within an open channel allows the user to quickly transmit to the available assets within the indicated channel. Simply press and hold the PTT button of the channel to transmit to the group.
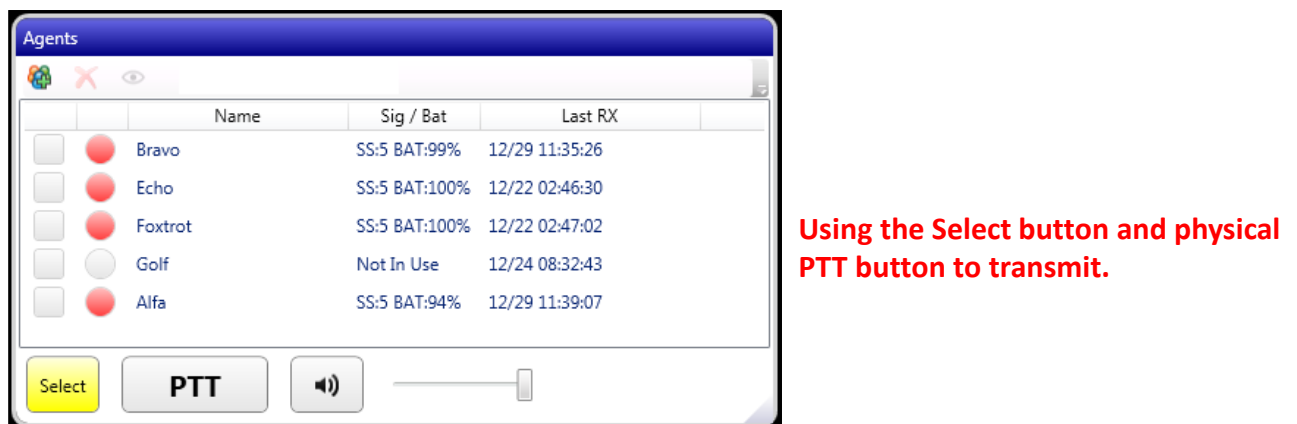

Transmitting to an open channel.

Receiving the transmission from within RIOS LiTE.

NOTE: Only users who are monitoring the channel will receive the transmission. User who are logged into the system but have muted the channel will not be shown in the channel or receive the transmission.

3.03 – Using the Channel Select Button

The Channel Select Button allows the user to select the destination of a physical PTT button used in conjunction with RIOS. Typically, the physical PTT button is the SyTech PTT microphone or a foot pedal as used with the SyTech CCU2 Audio Control.

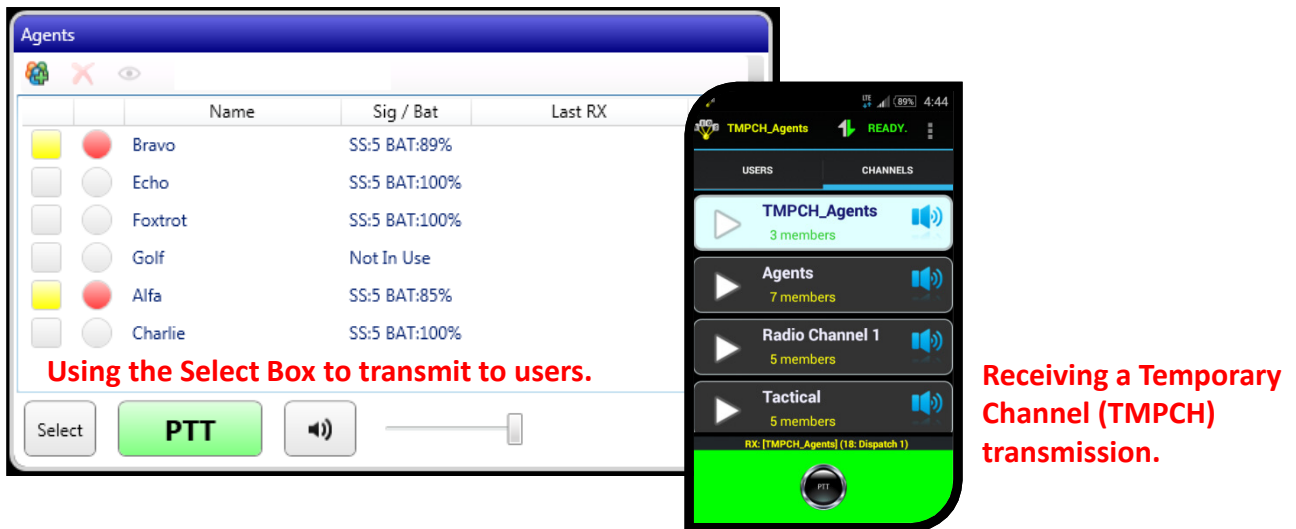**Using the Select button and physical PTT button to transmit.**

Within the Channels Interface only one channel can be armed with the Select button at a time. The user is able to switch between selected channels by clicking the Select button within the desired channel.

3.03 – Using the Select Box and Channel PTT

The Channels Interface allows the user to transmit to individual assets or a group of assets within an open channel. To do so, select the asset(s) to receive the transmission and press and hold the Channel PTT Button. The screen will appear as shown below. From the RIOS LiTE perspective, a temporary channel will be created with the "TMPCH" nomenclature. The temporary channel will be removed when the individual RIOS LiTE user mutes the temporary channel.

Using the Select Box to transmit to users.

Receiving a Temporary Channel (TMPCH) transmission.

3.04 – The Speaker Icon and Volume Control

The Speaker icon within an open channel allows the user to mute the incoming audio of the channel. To mute the open channel toggle the Speaker icon. Muting the channel effectively removes the RIOS Channels Interface user from the group. As such, the Channels Interface user will no longer appear in the group when viewed from other workstations.

The Volume Control slider bar allows the dispatcher to control the level of receive volume. Sliding the bar from left to right increases the receive audio from the open channel.