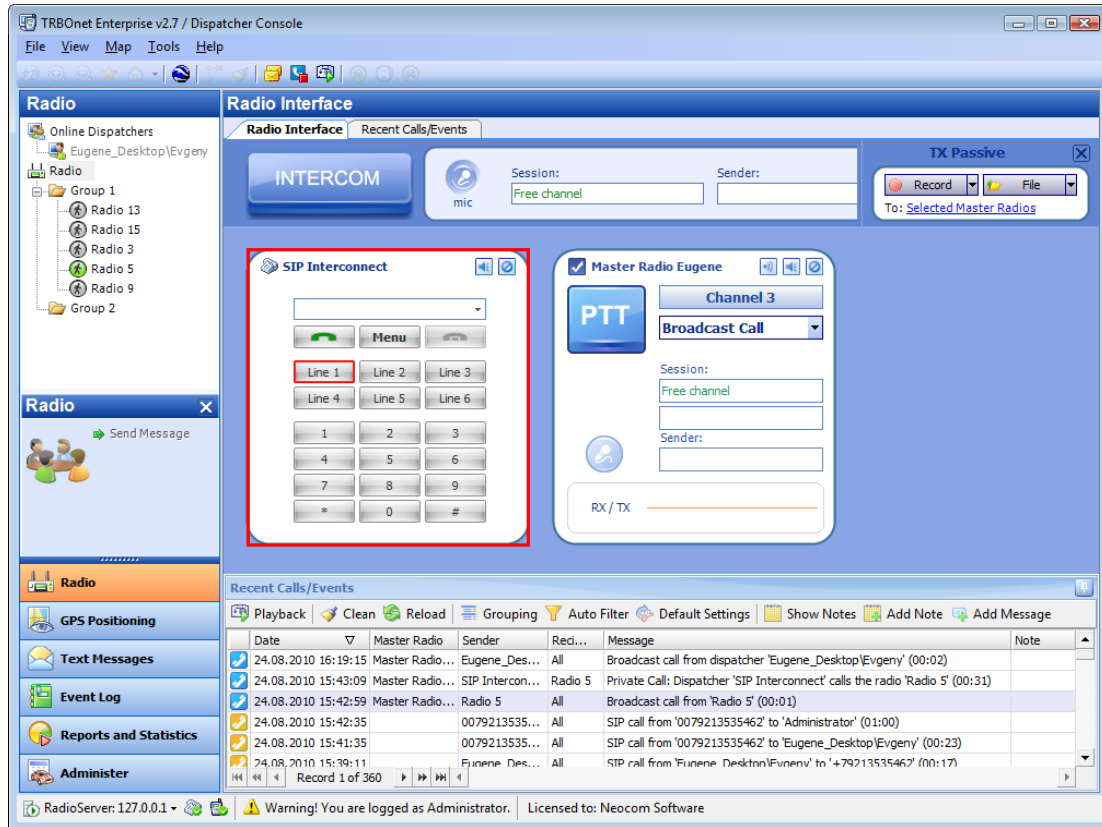


# Telephone Interconnect

We are glad to announce one of the **TRBONet Enterprise 2.7** release new features.

The **Telephone Interconnect (SIP)** function allows making calls from radios to telephones and from telephones to radios. A dispatcher can also make telephone calls from the Dispatcher Console.



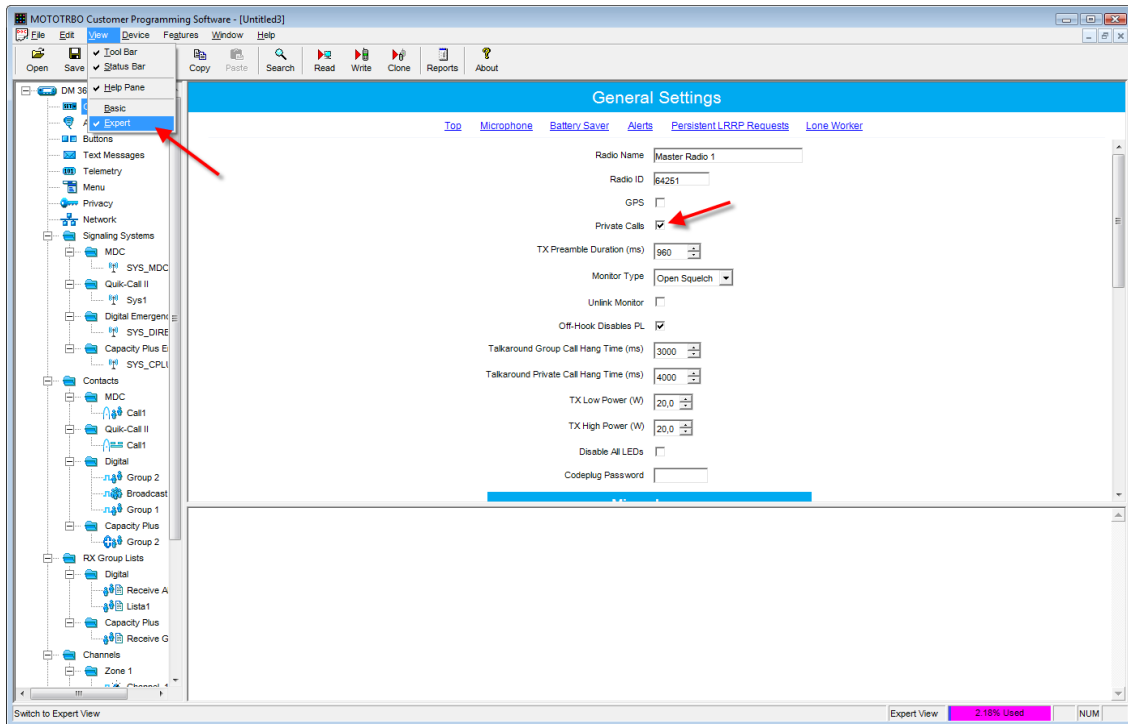
You only need to register a SIP account and configure the RadioServer to connect to this account. When you make a call, the SIP service connects to the RadioServer.

## Programming the master radio

**NOTE: Firmware version 1.7 or higher is required to support SIP Interconnect feature in IP Site Connect or Capacity Plus systems**

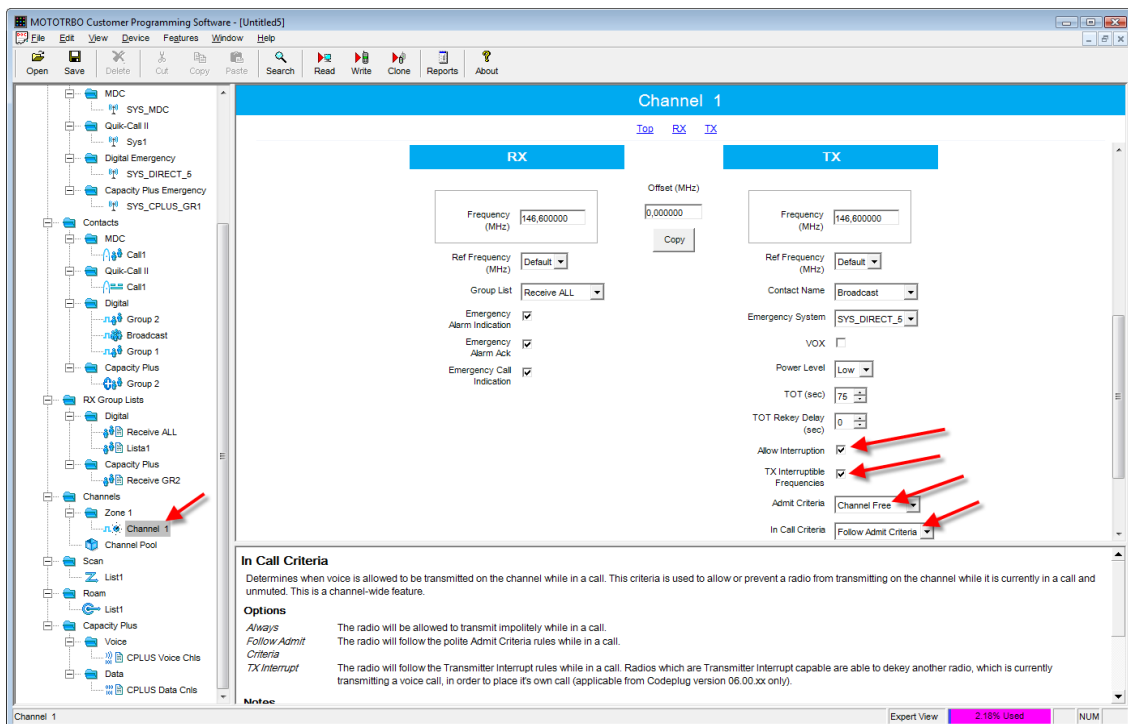
Make sure the Master Radio is correctly programmed. For this open **MOTOTRBO CPS**, select the expert view and read the radio's configuration.

1. Make sure the **Private Calls** are allowed in **General Settings**.



2. Go to your channel configuration and make the following settings:

- Under the **TX** column select the **Allow Interruption** and **TX Interruptible Frequencies** checkboxes
- In **Admit Criteria** drop-down list select **Channel Free** and in **In Call Criteria** drop-down list select **Follow Admit Criteria**.

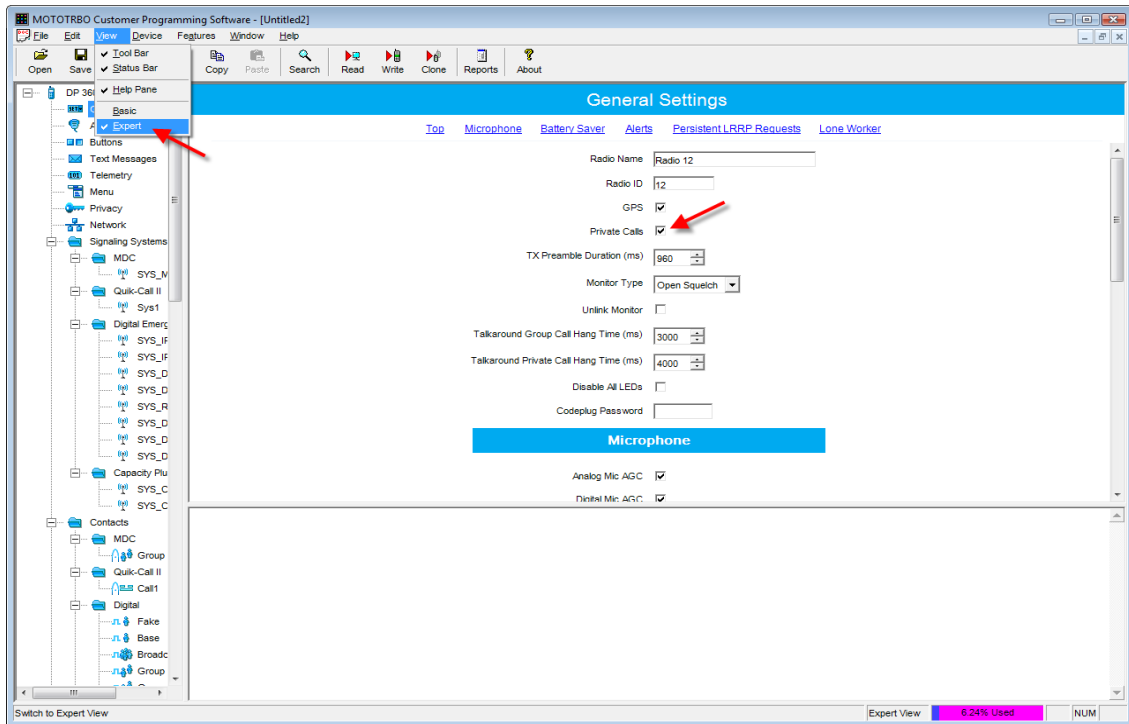


## Programming portable radios

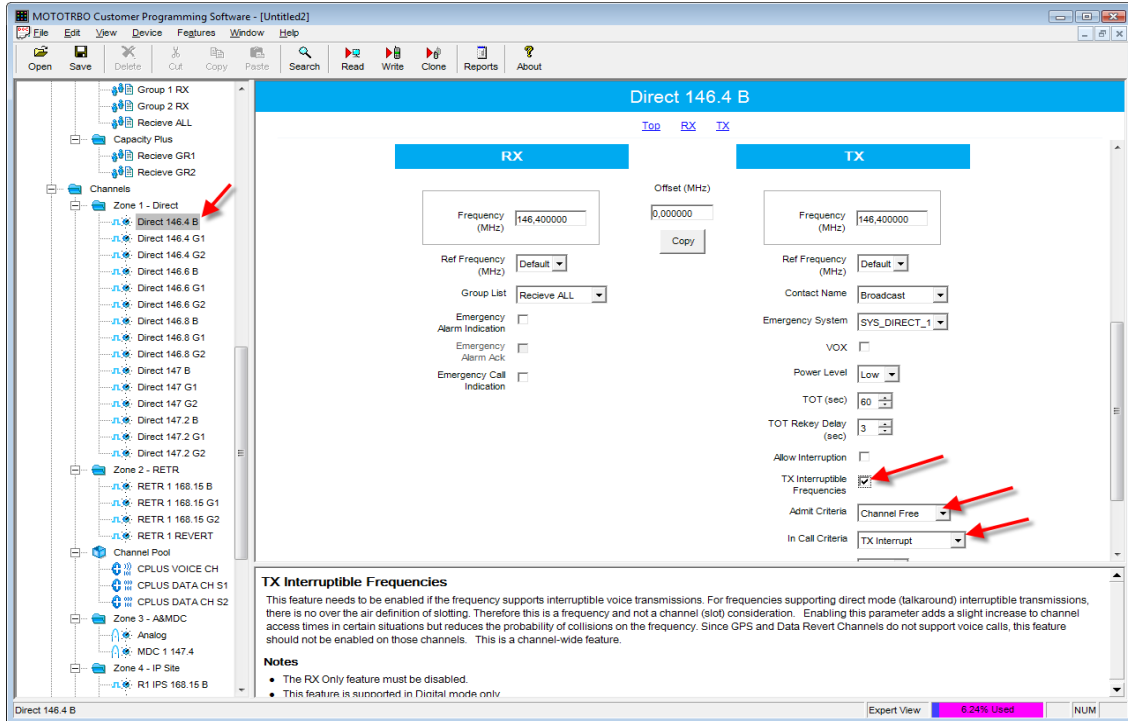
**NOTE: Firmware version 1.7 or higher is required to support SIP Interconnect feature in IP Site Connect or Capacity Plus systems**

Make sure that portable radios are correctly programmed. For this open **MOTOTRBO CPS**, select the expert view and read the radio's configuration.

1. Make sure the **Private Calls** are allowed in **General Settings**.

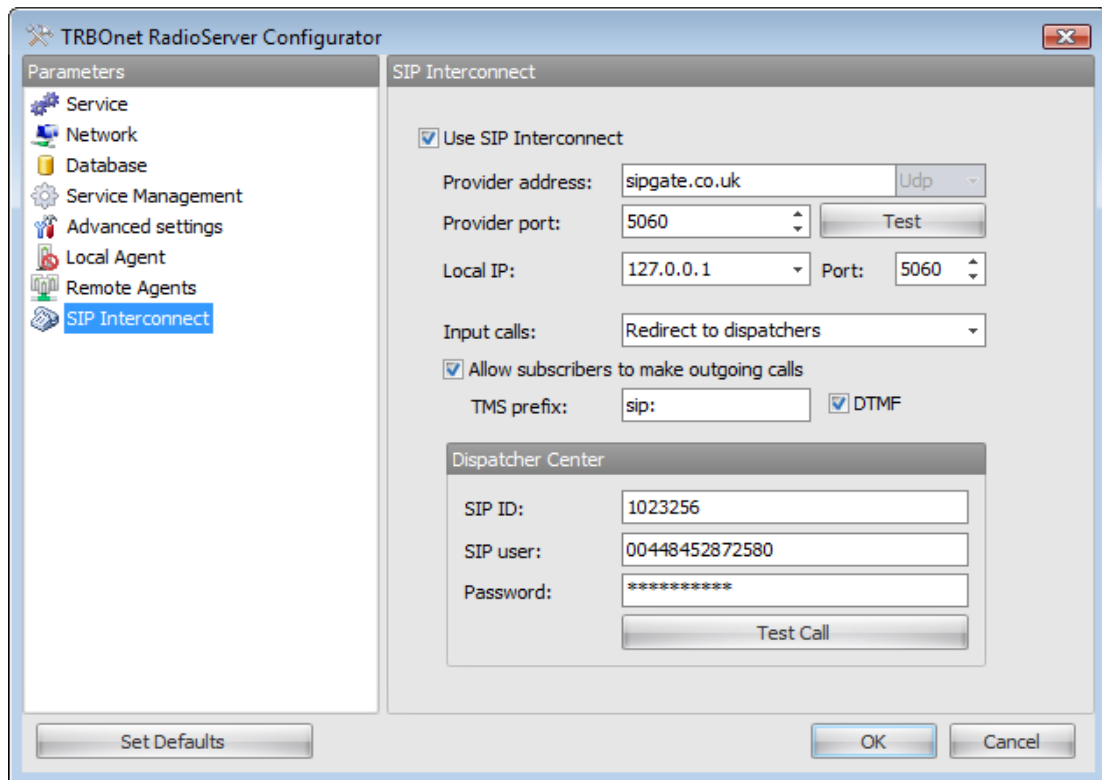


2. Go to your channel configuration and make the following settings:
  - Under the **TX** column select the **TX Interruptible Frequencies** checkbox
  - In **Admit Criteria** drop-down list select **Channel Free** and in **In Call Criteria** drop-down list select **TX Interrupt**.



## Configuring Telephone Interconnect

1. Open the **TRBOnet RadioServer Configurator** using one of the following options:
  - In the Start menu, select **All Programs | Neocom Software | TRBOnet Enterprise v2.7 | Configure TRBOnet Enterprise RadioServer v2.7**
  - Use the **TRBOnet Enterprise RadioServer v2.7** shortcut on your desktop
2. Select **Sip Interconnect** in the navigation tree.



3. Configure the following parameters either for a hardware PBX phone or for a registered SIP account:

Parameter	Hardware SIP phone	SIP account
Use Sip Interconnect	Select to enable SIP Interconnect	
Provider address	specify your PBX phone IP address in local network	specify the SIP provider's website
Provider port	5060	
Local IP	specify IP address of the adapter to access your local network	127.0.0.1
Port	5060	
Input calls	Select the RadioServer's actions in case of incoming phone calls: <b>Decline calls, Open voice menu</b> or <b>Redirect to dispatchers</b>	
Allow subscribers to make outgoing calls	select to allow subscribers making calls to telephones	
TMS prefix	The prefix a radio subscriber will need to use to make a call (for example, if the prefix is " <b>sip:</b> ", the subscriber will need to send a text message to a master radio with the text " <b>sip:N</b> ", where <b>N</b> is the phone number to make call to)	
DTMF	Select to enable DTMF	
SIP ID	The ID from the phone configuration	Your SIP account ID
SIP user	The phone number to be indicated when an outgoing call is made	Your SIP account phone number
Password	The password from your phone	Your SIP account password

Parameter	Hardware SIP phone	SIP account
	configuration	

## Making calls from telephones to radios

To make a call from phone to radio you need to dial the SIP account or PBX phone number. After that the SIP service connects to RadioServer and the call is conducted due to the RadioServer configuration (you are forwarded to a dispatcher or the voice menu to connect you to a subscriber).

## Making calls from radios to telephones

To make a call to a phone number you only need to send to the master radio a text message with the text "**PrefixN**".



**Prefix** - the prefix set in the RadioServer configuration (the default prefix is **sip**);

**N** - the telephone number

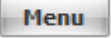
For instance, you send "sip:00789817388118" to the master radio to dial phone number 0079817388118. After that a private call is initiated and you can talk to the telephone subscriber.

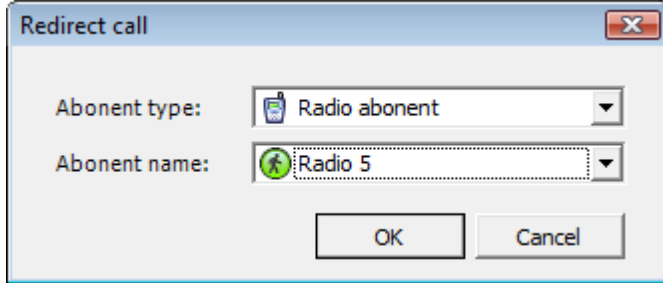
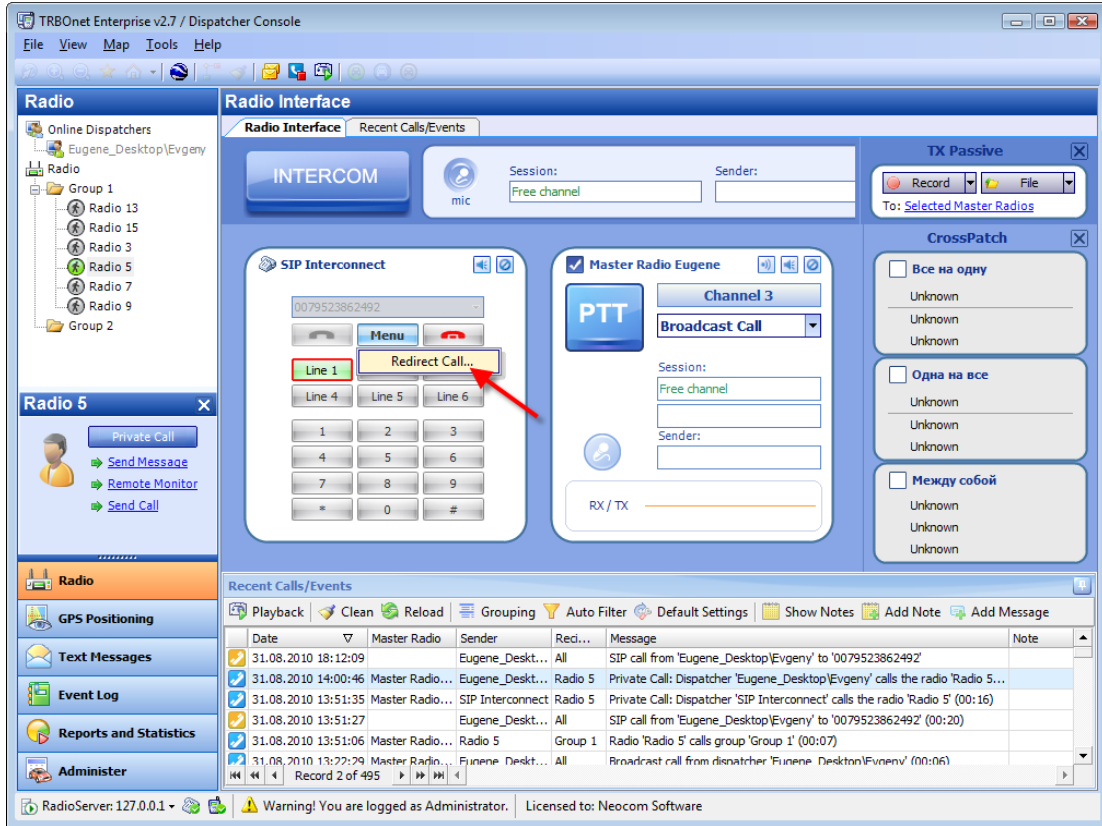
## Making telephone calls from the Dispatcher Console

To make a phone call from the Dispatcher Console just select the free line, enter the phone number in

international format (for instance 0079817388118) and click . To terminate the call click .

## To redirect a phone call to a subscriber radio

To redirect a phone call to a subscriber click  then click **Redirect Call...** and select the dispatcher or subscriber to redirect the call to.



The screenshot displays the TRBOnet Enterprise v2.7 Dispatcher Console. The interface includes a sidebar on the left with navigation options: Radio, GPS Positioning, Text Messages, Event Log, Reports and Statistics, and Administer. The main area is titled 'Radio Interface' and contains several functional panels:

- SIP Interconnect:** A panel with a dropdown menu showing '0079213535462', a 'Menu' button, and a numeric keypad. A red arrow points to the 'Line 1' button.
- Master Radio Eugene:** A panel with a 'PTT' button, 'Channel 3' selection, and 'Broadcast Call' options. It also includes fields for 'Session' (Free channel) and 'Sender'.
- Recent Calls/Events:** A table at the bottom showing a list of call events with columns for Date, Master Radio, Sender, Rec..., and Message.

Date	Master Radio	Sender	Rec...	Message	Note
24.08.2010 16:19:15	Master Radio...	Eugene_Des...	All	Broadcast call from dispatcher 'Eugene_Desktop\Evgeny' (00:02)	
24.08.2010 15:43:09	Master Radio...	SIP Intercon...	Radio 5	Private Call: Dispatcher 'SIP Interconnect' calls the radio 'Radio 5' (00:31)	
24.08.2010 15:42:59	Master Radio...	Radio 5	All	Broadcast call from 'Radio 5' (00:01)	
24.08.2010 15:42:35		0079213535...	All	SIP call from '0079213535462' to 'Administrator' (01:00)	
24.08.2010 15:41:35		0079213535...	All	SIP call from '0079213535462' to 'Eugene_Desktop\Evgeny' (00:23)	
24.08.2010 15:39:11		Eugene_Des...	All	SIP call from 'Eugene_Desktop\Evgeny' to '+79213535462' (00:17)	

At the bottom of the interface, there is a status bar showing 'RadioServer: 127.0.0.1', a warning 'Warning! You are logged as Administrator.', and 'Licensed to: Neocom Software'.