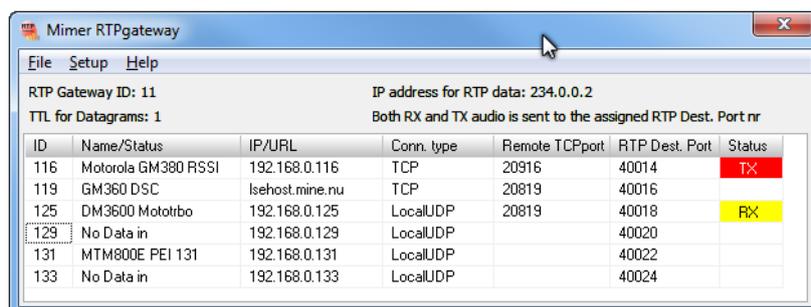


Mimer SoftRadio

Connecting radios all over the world

How to setup and use Mimer RTP Gateway 3157



The screenshot shows the Mimer RTPgateway application window. It has a menu bar with 'File', 'Setup', and 'Help'. Below the menu bar, it displays 'RTP Gateway ID: 11' and 'IP address for RTP data: 234.0.0.2'. Below that, it shows 'TTL for Datagrams: 1' and 'Both RX and TX audio is sent to the assigned RTP Dest. Port nr'. The main area contains a table with the following data:

ID	Name/Status	IP/URL	Conn. type	Remote TCPport	RTP Dest. Port	Status
116	Motorola GM360 RSSI	192.168.0.116	TCP	20916	40014	TX
119	GM360 DSC	lsehost.mine.nu	TCP	20819	40016	
125	DM3600 Mototrbo	192.168.0.125	LocalUDP	20819	40018	RX
129	No Data in	192.168.0.129	LocalUDP		40020	
131	MTM800E PEI 131	192.168.0.131	LocalUDP		40022	
133	No Data in	192.168.0.133	LocalUDP		40024	

Release date June 08, 2017

This guide will help with the setup of your Mimer RTP Gateway system.

Please also refer to the web page www.softradio.se.

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2 General

Mimer RTP Gateway is a component in the Mimer family of products for IP-network operated 2-way radios and other devices.

Basically the RTP Gateway is used to act as a gateway for audio data from the IP-network connected devices and PC operators to third party audio recording equipment.

The gateway samples the audio packets in the SoftRadio system and resends them as an RTP stream to a predefined IP port. In this way the audio can be recorded by the third party audio recording equipment.

Please note that the current version of the RTP Gateway will only sample audio from equipment that is connected through a Network Interface. This means that for example calls made through the option for SIP phone calls will not be sampled.

2.1 Mimer VoiceLog

There is also a component in the Mimer family that works as a full recorder of audio, it is called Mimer VoiceLog. Please see the web page for more information.

www.softradio.se/VoiceLog.htm

3 RTP Gateway installation

Install the software package from the supplied USB stick or CD.

During installation you can select to add the program to Auto Start or not.

3.1 Recommended hardware

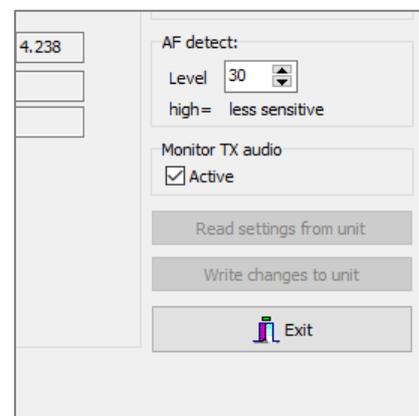
We recommend running the software on a separate Windows Server or Windows PC. In small systems the server function may be placed on one of the operator PCs.

In systems with for example a Mimer NetworkRepeater or a Mimer StatusLog, the server can be shared between the applications.

3.2 Activate the Monitor function

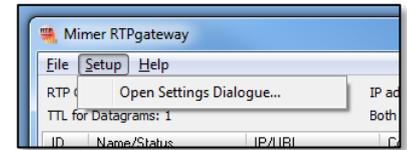
In the Network Interfaces that connects each radio to the IP system there is a setting called “Monitor Tx Audio”. This setting needs to be active.

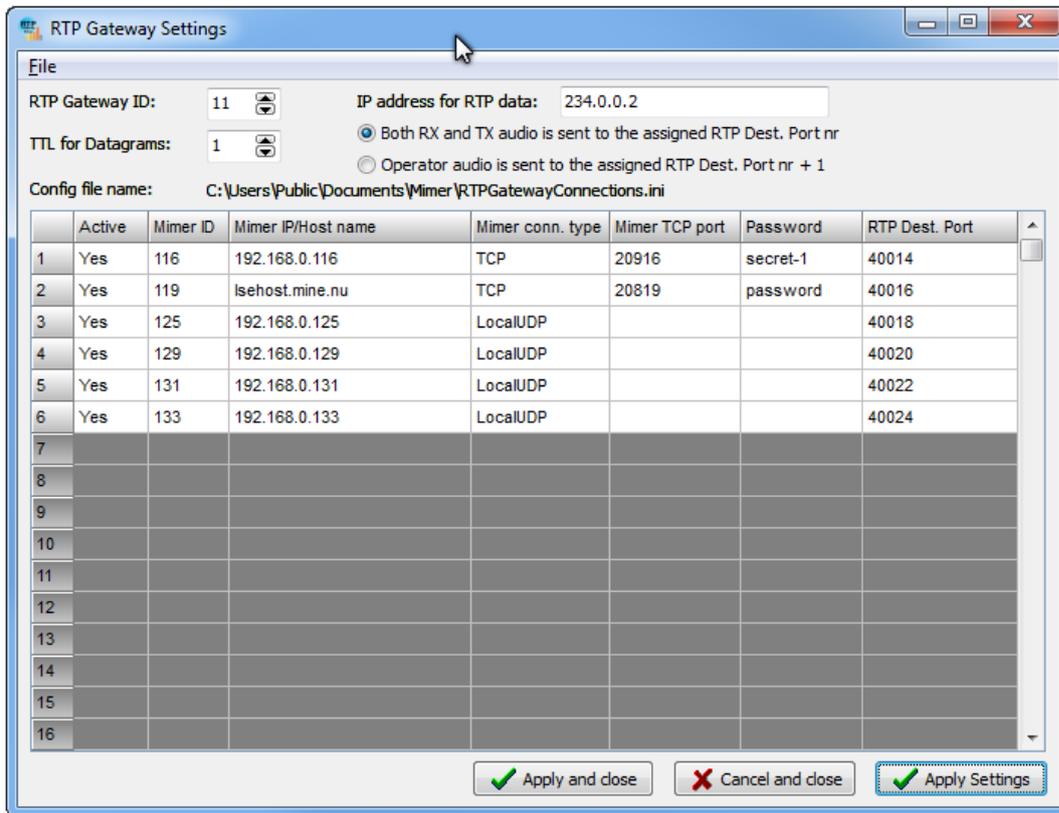
The audio transmitted from the operators will then be echoed through the network interfaces back into the IP network so that other operators can hear the audio, and in this case also so that the RTP Gateway can sample the audio and distribute it for recording.



4 RTP Gateway configuration

- Start the “RTP Gateway” program.
- Go to “Setup – Open Settings Dialogue...”.
- **RTP Gateway ID.** Select a unique ID number for the RTP Gateway. It can be any number 10-240 that is not in use by another unit in the SoftRadio system.
- **TTL for datagrams.** This sets the number of routers that you allow the Multicast RTP message to travel through. Normally this is set to “1”, the message will then stay in the local subnet and not be allowed to pass through routers.
- **IP Address for RTP Data.** This is the address that you want your audio data to go to. In the example this is a Multicast address.
- **Assigned RTP Destination.** This is a selection if the audio from the radios and from the operators shall terminate at the same RTP port or at separate ports.
- **Connections.** Add a connection that specifies the first network interface using the following settings:
 - Set Active to Yes on the first line.
 - Enter the Mimer ID of the network interface by the device. It is a number in the range 10-240 that is defined in the Network Interface.
 - Enter the IP address, or URL, to the network interface at the device.
 - Set the Connection type to UDP for local connection or TCP for remote connection.
 - Select the Remote TCP port. (Not needed for UDP) This is configured in the interface as the “TCP server port”. The factory default for the interfaces is port 20997. If you have several interfaces behind a router, on the same IP address, you may want to use port forwarding to route the data to each interface. You will then need to set different port numbers to each interface.
On the other hand, if the interfaces are accessed on different IP addresses they may use the same port number.
 - Specify the password for the connection to the network interface. (Not needed for UDP) This is defined in the network interface.
 - Set the RTP Destination Port.
- You have now defined the first connection. If the RTP Gateway shall serve more devices, just add these in the same way.
- Finally press [Apply and Close]





Setup window for the Mimer RTP Gateway

5 Running the application

Start the application.

By default, the application is installed with icons on the start menu and on the desktop. If selected during installation it will auto start when the computer is started.

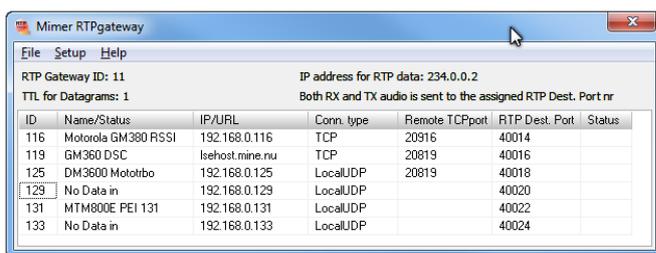
5.1 Status window

When started, the screen looks as below.

Each monitored network interface is listed with its status.

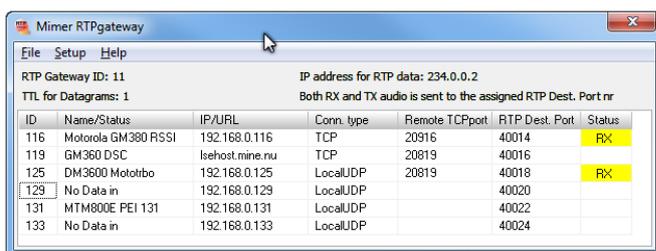
If status is "Rx" then the audio is coming in from the network interface and is being resent through the gateway to the predefined RTP port.

If status is "Tx" then the audio is coming in from one of the operators and is being resent through the gateway to the predefined RTP port. Depending on the setting this can be the same port as for Rx, or that port number +1.



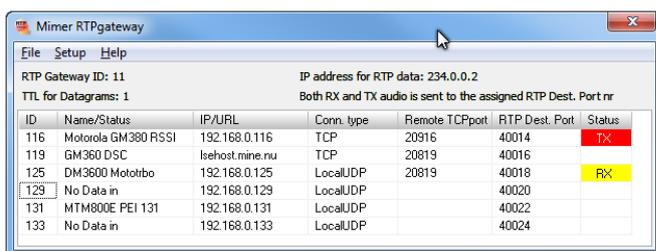
ID	Name/Status	IP/URL	Conn. type	Remote TCPport	RTP Dest. Port	Status
116	Motorola GM380 RSSI	192.168.0.116	TCP	20916	40014	
119	GM360 D5C	lsehost.mine.nu	TCP	20819	40016	
125	DM3600 Motorbo	192.168.0.125	LocalUDP	20819	40018	
129	No Data in	192.168.0.129	LocalUDP		40020	
131	MTM800E PEI 131	192.168.0.131	LocalUDP		40022	
133	No Data in	192.168.0.133	LocalUDP		40024	

Status screen for RTP Gateway



ID	Name/Status	IP/URL	Conn. type	Remote TCPport	RTP Dest. Port	Status
116	Motorola GM380 RSSI	192.168.0.116	TCP	20916	40014	Rx
119	GM360 D5C	lsehost.mine.nu	TCP	20819	40016	
125	DM3600 Motorbo	192.168.0.125	LocalUDP	20819	40018	Rx
129	No Data in	192.168.0.129	LocalUDP		40020	
131	MTM800E PEI 131	192.168.0.131	LocalUDP		40022	
133	No Data in	192.168.0.133	LocalUDP		40024	

Two network interfaces in receive mode



ID	Name/Status	IP/URL	Conn. type	Remote TCPport	RTP Dest. Port	Status
116	Motorola GM380 RSSI	192.168.0.116	TCP	20916	40014	Tx
119	GM360 D5C	lsehost.mine.nu	TCP	20819	40016	
125	DM3600 Motorbo	192.168.0.125	LocalUDP	20819	40018	Rx
129	No Data in	192.168.0.129	LocalUDP		40020	
131	MTM800E PEI 131	192.168.0.131	LocalUDP		40022	
133	No Data in	192.168.0.133	LocalUDP		40024	

One network interface in receive mode and one operator transmitting



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