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Regarding the microphone path in Mimer SoftRadio

In some cases, there is a concern that a microphone built in or connected to the operator's PC can be activated remotely and thereby be used for listening to conversations around the PC without the operator's knowledge.

This cannot happen in the SoftRadio system.

The SoftRadio operator system only activates the audio stream from the connected microphone after the operator pushes the PTT button and a sequence of steps has been completed. On the way several checks are made before the audio stream can be transmitted to the network interface and the radio.

No audio goes through the application until the following steps have been done:

1. Operator pushes PTT on a radio device panel. A "PTT" command is then sent from the operator software to the network interface.
2. The network interface at the radio accepts the "PTT" command, notes the ID of the operator and sends back a status message that this particular operator is transmitting on the radio.
3. The operator software sees the "Transmitting" status from the interface and, if the operator ID matches and the operator is still pressing the PTT button, then (and only then) activates transfer of the audio stream from the microphone to the network interface.

This gives the following safety:

- The radio connected to the network interface can never initiate a PTT sequence and audio stream since the "Transmitting" status is initiated by the reception of the message from the operator software, not that the radio is actually transmitting. (E.g. if PTT is activated by a Microphone key or software on the radio unit, the Transmitting status is never sent)
- It is required that the operator ID in the status message from the interface, described above, matches the ID of the operator. If not, no audio is sent.
- If a status, for some reason, should be received from an interface, indicating that the operator is transmitting, but the operator software senses that the PTT button is not pressed, a "Stop PTT" message is automatically sent to the interface.

- In the interface there is a timeout check, so the above PTT command is actively repeated when the PTT button is pressed. The transmission from the interface will automatically cease if the connection is lost.

Extended safety.

For double safety a table top microphone with a PTT key that physically disconnects the external microphone can be used. Please note that with such a setup the PTT key on the operator GUI can no longer be used.