Using Ham Radio Deluxe with Logger32

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Introduction

These are basically notes about my own set up. They are presented here in the hope that they might just help someone else in the complexities of setting up something similar. The user is encouraged to read and understand the facilities offered by the Ham Radio Deluxe (HRD) program.

I stress that the port numbers mentioned in this document are those used in my particular set up and that these can be changed to suit individual systems.

From the set up described below, I can:

a) Use Logger32 in exactly the same way as I could before linking with Ham Radio Deluxe.

b) Use all the radio control (and some other) facilities within Ham Radio deluxe.

Please note that the virtual serial port driver required as part of this set up will only work with Windows 2000, Xp and higher. Windows 95/98/SE and NT 4.0 are NOT supported.

HRD can support 3rd party programs such as Logger32 via a virtual serial port. In order to connect to Logger32 an additional pair of back to back virtual serial ports is generated

Two virtual ports are created during the installation, in this case Com15 (used by HRD) and Com16 (used by Logger32).

- HRD opens and listens on Com15 port for incoming requests.
- Logger32 opens Com16 in exactly the same way it would connect to a radio using a hardware serial port.

The connection parameters used by Logger32 to connect with COM16 are:

- **Speed** any (57600),
- **Stop bits** 2,
- **Parity** none.

And the protocol supported is Kenwood (and only Kenwood, regardless of the type of radio actually being controlled by HRD).

It should be noted that during testing of this configuration it was found that HRD did NOT pass the correct command codes over its 3rd party interface for RTTY (FSK) modes of operation to Logger32. The author has been emailed about the problem but to date I have not received so much as an acknowledgement.

Basic starting point

Most decisions taken during the setting up of this arrangement rest on two main items:

1) the hardware (RS232) or virtual port used for the radio CAT control, and

2) the virtual ports to be used for the linking to Ham Radio Deluxe.

It is not actually necessary to know the Com port numbers used for the radio itself as HRD will discover this it for itself and displays the port number in its opening flash screen sequence. In my case it was virtual Com port 5 generated from within the USB router for a microHam microkeyer. It can be seen that the radio used was a Yaesu FT-1000MP.
As to the choice of virtual ports for the 3rd party connection, it should be remembered that Logger32 will only accept com port numbers up to 16 for the radio port, so the selection should be within that range. As I had several other virtual ports in use at the time I decided to use 15 and 16 to avoid any conflict.

Installation of the virtual port drive

N8VB’s vCOM driver creates up to ten sets of paired virtual COM ports and these can be used like you would use a null-modem cable. Virtual null-modems are pure software - no hardware is involved.

Note: vCOM is only supported on Windows 2000, and Windows XP.

When using the 3rd-party program support you must use a virtual null-modem cable to connect HRD to (in this case) Logger32. HRD opens one end of the virtual cable and Logger32 opens the other.

N8VB’s vCOM driver is copyrighted 2005 by Philip A Covington N8VB.

I used the latest copy of the driver collected from:-

http://www.philcovington.com/SDR_arch.html (Look for build 226 or later).

Configuration of the virtual port driver

I found configuring the virtual port driver was easiest from the HRD menu Tools| N8VB vCom Configuration, which gave the window shown below. I chose to generate two pairs of ports (but only used the 15/16 combination). On requesting an update, the program will advise for the need to reboot your computer before the links will become available.
If you have set things up correctly you should see a virtual serial port driver in the Device Manager.
Configuring HRD to use the 3rd party link

Having created the back to back virtual ports there is a need to connect to both ends. The first of these will be HDR. Using the HDR menu option Tools | 3rd Party Serial Port, set this for com15 at the speed shown.
...and finally set up the radio configuration in Logger32 on port 16. Remember that the radio type — for whatever radio you actually have will ALWAYS be Kenwood.

The combination should now be working – as below.

This screenshot is simply to show the two programs working together. Although it might look like it, HDR is NOT working as a child window – indeed it doesn’t even have a “remain on top” facility (that I have found anyhow) so as soon as you click on Logger32, HRD will disappear.

The combination of HRD and Logger32 would best be served by using twin monitors.
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