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.



(HRD005.bmp)

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.

N8VB vCOM Configuration							
🗆 Input Files							
Select either the default files shipped with HRD or files from a kit downloaded from N8VB's website.							
Driver (.SYS):	Driver (.SYS): C:\Program Files\Amateur Radio\Ham Radio Delu\vCOM.sys						
Information (.INF): C:\Program Files\Amateur Radio\Ham Radio\N8VBvCOM.inf							
Driver name = N8VBvCOM, version = 0.0.0.226			'S				
Configuration Select the number numbers must not	r of paired por be in use by (ts and assigned existing hardwa	d COM po re or oth	ort numbers er non-vCOI	. The I M driv	COM port ers.	
○ 1 COM8	▼ COM	19 💽	0.8	COM11	-	COM21	
© 2 COM15	COM	116 💽 📐	07	COM12	-	COM22	•
O 3 COM8	COM	118 🖵 🔪	0.6	COM13	-	COM23	
О 4 СОМЭ	COM	119 🚽	09	COM14	-	COM24	
O 5 COM10	COM	120 🖵	O 10	COM15	7	COM25	
Load from Information (.INF) file							
Load current values (from registry)							
Install	Update	Remove				Can	cel



If you have set things up correctly you should see a virtual serial port driver in the Device Manager



(HDR007.bmp)

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 $| 3^{rd}$ Party Serial Port, set this for com15 at the speed shown.

🛱 3rd-Party Serial Port 📉 🗙			×	
Introduction				
Ham Radio Deluxe supports 3rd-party programs such as logbooks via a virtual serial port.				
An example of a virtual serial port is available from Phil Covington N8VB, this will be available from the Ham Radio Deluxe downloads page <u>http://hrd.ham-</u> radio.ch/downloads.html.when it has finished beta			•	
Enable				
Connect when Ham Radio Deluxe starts				
Port:	СОМ15 💽	Reads: 0		
Mode:	Default 💽	Writes: 0		
Speed: 57600 💽 Default is 57,600				
Status: 06-Dec-2006 09:29:40 [COM15] Connected				
OK.	Apply	Cancel	1.	

(HRD003.bmp)

...and finally set up the radio configuration in Logger32 on port 16. Remember that the radio type – for what ever radio you actually have will ALWAYS be Kenwood.

🔜 Setup Radio	o 1			X
Com port Com 1	6 💽	Databits	8	•
Baudrate 57600) 💽	StopBits	2	•
Radio : Kenw	ood - all 📃 🔽	Parity	None	•
Data file :				
Set DTR high	Polling	interval (ms)	50	
Set RTS high	🔽 Icom ac	ddress (Hex)	:00	
OK	 Use narrow Show Radio 	CW filter Debug Win	dow	
	(HRD008.bn	np)		

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.

📲 Logger 32			
File Tools View Awards Setup Utilities Help			
TNC Telpet Messages AGMpe	Ella Edit View Brade Execution Ovide Save Masses Lephack Servering Tuning Teals Vision Viewaw Hale		
DX de EA7AYF: 18120.0 EH7CE 1048Z	PWB International Paral Para		
DX de 6K5BHZ: 10108.1 KH8/JA7GAX_TNX QSO	AFil off ATU Con-H M-Lck Rpt - Mode A: USB		
	SWR A > B		
DX Spots			
ZB2/403AL 14183.0 via EB7AEY 10:39 ER3GS	Fit B: Thru/2.4k		
EH7CE 14242.0 5/9 10:40 ON6QG			
ED4PPM 7040.0 QSL ESPECIAL -PUE 10:42 EB1EPI	Mem ANT Rx S1 1.933.050		
CP6XE 21274.0 Mike 10:43 GM4SNP	A:6kHz B:6kHz Dual Rpt + Tune Keyer ▼		
9N7JO 18100.6 BPSK31 10:44 G4UCJ I5LGN 7052.5 d.Puccini 10:44 IZ5BTC	₩ 06/12/2006 10:53 160m - 10m (Region 1)		
HZ1SK 21290.0 via iz8clm TNX for \$ 10:51 IZ7GXB EH7CE 18120.0 10:48 EA7AYF			
US5XD 24898.2 59+ 10:49 EA5FGE C91VB/4 24895.3 rather than VII7. 10:49 I1APO	Fine		
C91VB/4 24895.0 10:49 OK2PAY			
C91VB/4 24895.0 nice sig cq 10:50 S59Z	ALT BSP 160m 80m 60m 40m 30m 20m 17m 15m 12m 10m		
A22/JA4A11 24891.8 10:51 G4F0F 0N7JO 18100.0 OP:STIG SPLIT 1-2 10:53 EA5GOM			
Grayline 🛛	17m		
Grayline Satellite DX Spots IOTA Spots View DX			
	20m		
The second second	14.000 14.025 14.050 14.073 14.100 14.125 14.150 14.175 14.200 14.225 14.250 14.275 14.300 14.325 14.350		
	Worked/Confirmed		
and the second second	SSB PSK31 RTTY CW PSK63 QSO# Date Time Freq Band Mode Name Comment		
	15M		
and the second second	20M		
Trop 14 22098 Made SSB Band 20M			
Call	QSO # Date Time On Time Off Callsign WPX Freq Band Mode K INDEX RST S RST R CQZ ITUZ Na		
Sent Pfr 3rid Sg 2	1243 22 Nov 06 11:25 11:25 5A7A 5A7 24.89231 12M CW 1 599 599 34 38 Da 1244 28 Nov 06 16:43 16:43 5A7A 5A7 14.18000 20M SSB 2 59 59 34 38 Da		
	1245 28 Nov 06 17:16 17:16 PJ2/GORTN PJ2 14.00600 20M CW 2 599 599 09 11		
25E VI8 277	1247 01 Dec 06 00:43 00:43 807DV 807 3,52510 80M CW 4 599 599 22 41		
Name IOTA ?	1248 01 Dec 06 10:57 PJ2/GORTN PJ2 14.00240 20M CW 4 599 599 09 11 1249 01 Dec 06 12:17 12:17 VU7/VU2PAI= VU7 18.12200 17M SSB 2 59 22 41		
QTH	1250 01 Dec 06 16:18 16:18 HK0GU= HK0 18.07800 17M CW 2 599 07 11 1251 05 Dec 06 22:49 22:49 VU2PHD VU2 14.20000 20M SSB 59 59 22 41		
State ? County ?			
ľ			
06 Dec 06 10:53 Data Terminal Cluster Radio 1 Rotator	Telnet Antenna ### DVK		

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