

Hydrology Radio Issues/Troubleshooting

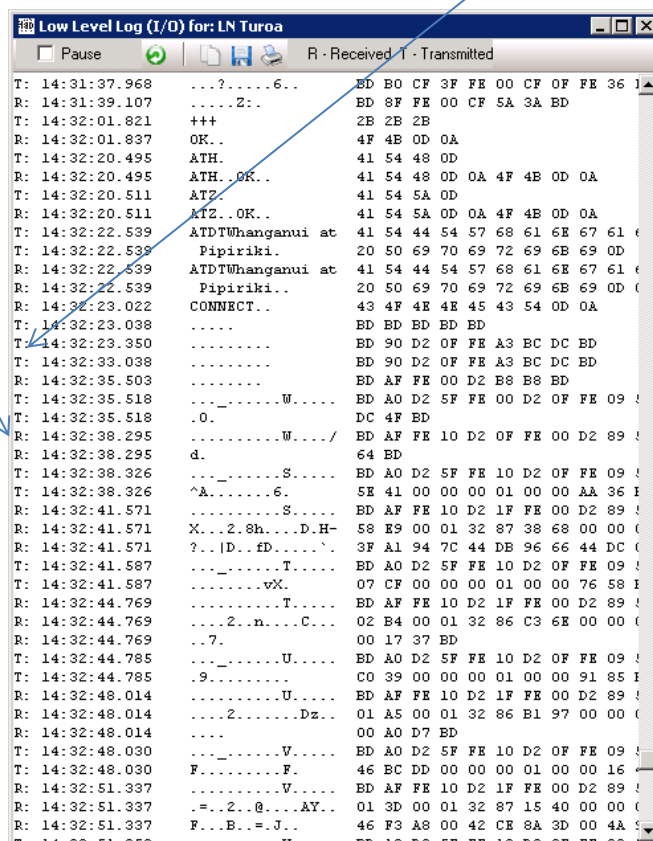
Overview:

This is a quick reference guide to help troubleshoot any radio connectivity issues.

If the site comms (radio) isn't working then check the following:

1. Check the LoggerNet server (loggernet.horizons.govt.nz, flcont, remote1)
 2. Look at the LogTool and I/O data as explained in the 'Radio_Office_Setup.pdf'
- Make sure that the Loggernet software is attempting to make a call, see below.

The 'Connect' word under 'Whanganui at Pipiriki' means that it has connected to the dual comms software (LN_Comms), and hasn't connected to the site yet. There are a series of data transmits (T) to the site, before the logger replies (R) and connects.



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Low Level Log (I/O) for: LN Turoa
[Pause] [Refresh] [Print] [Copy] [Paste] [R - Received] [T - Transmitted]

T: 14:31:37.968 ...?.....6.. BD B0 CF 3F FE 00 CF 0F FE 36 1
R: 14:31:39.107 .....2:.. BD 8F FE 00 CF 5A 3A BD
T: 14:32:01.821 +++ 2B 2B 2B
R: 14:32:01.837 OK.. 4F 4E OD OA
T: 14:32:20.495 ATH.. 41 54 48 OD
R: 14:32:20.495 ATH..OK.. 41 54 48 OD OA 4F 4B OD OA
T: 14:32:20.511 ATZ.. 41 54 5A OD
R: 14:32:20.511 ATZ..OK.. 41 54 5A OD OA 4F 4B OD OA
T: 14:32:22.539 ATDTWhanganui at 41 54 44 54 57 68 61 6E 67 61 6
T: 14:32:22.539 Pipiriki.. 20 50 69 70 69 72 69 6B 69 OD
R: 14:32:22.539 ATDTWhanganui at 41 54 44 54 57 68 61 6E 67 61 6
R: 14:32:22.539 Pipiriki.. 20 50 69 70 69 72 69 6B 69 OD
R: 14:32:23.022 CONNECT.. 43 4F 4E 4E 45 43 54 OD OA
T: 14:32:23.038 ..... BD BD BD BD BD
T: 14:32:23.350 ..... BD 90 D2 0F FE A3 BC DC BD
T: 14:32:33.038 ..... BD 90 D2 0F FE A3 BC DC BD
R: 14:32:35.503 ..... BD AF FE 00 D2 B8 B8 BD
T: 14:32:35.518 .....W..... BD A0 D2 5F FE 00 D2 0F FE 09
T: 14:32:35.518 .O. DC 4F BD
R: 14:32:38.295 .....W.... / BD AF FE 10 D2 0F FE 00 D2 89
R: 14:32:38.295 d. 64 BD
T: 14:32:38.326 .....S..... BD A0 D2 5F FE 10 D2 0F FE 09
T: 14:32:38.326 ^A.....6. 5E 41 00 00 00 01 00 00 AA 36
R: 14:32:41.571 .....S..... BD AF FE 10 D2 1F FE 00 D2 89
R: 14:32:41.571 X...2.8h....D.H- 58 E9 00 01 32 87 38 68 00 00
R: 14:32:41.571 ?...ID...fD..... 3F A1 94 7C 44 DB 96 66 44 DC
T: 14:32:41.587 .....T..... BD A0 D2 5F FE 10 D2 0F FE 09
T: 14:32:41.587 .....vX. 07 CF 00 00 00 01 00 00 76 58
R: 14:32:44.769 .....T..... BD AF FE 10 D2 1F FE 00 D2 89
R: 14:32:44.769 ...2...n....C... 02 B4 00 01 32 86 C3 6E 00 00
R: 14:32:44.769 ...7. 00 17 37 BD
T: 14:32:44.785 .....U..... BD A0 D2 5F FE 10 D2 0F FE 09
T: 14:32:44.785 .9..... CO 39 00 00 00 01 00 00 91 85
R: 14:32:48.014 .....U..... BD AF FE 10 D2 1F FE 00 D2 89
R: 14:32:48.014 ....2.....Dz.. 01 A5 00 01 32 86 B1 97 00 00
R: 14:32:48.014 .... 00 A0 D7 BD
T: 14:32:48.030 .....V..... BD A0 D2 5F FE 10 D2 0F FE 09
T: 14:32:48.030 F.....F. 46 BC DD 00 00 00 01 00 00 16
R: 14:32:51.337 .....V..... BD AF FE 10 D2 1F FE 00 D2 89
R: 14:32:51.337 ...2...@....AY.. 01 3D 00 01 32 87 15 40 00 00
R: 14:32:51.337 F...B...=J.. 46 F3 A8 00 42 CE 8A 3D 00 4A

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Logger Data

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- If this doesn't happen, then go to the base radio for that site and push the mic (plug in if needed). The radio should transmit and display the RSSI signal in the top left corner.

It should also have 'Telemetry' as the contact on the screen. This indicates the repeater is working correctly.

If it fails to 'key up' the repeater, it will fail saying 'Repeater Wake Up Failed!' This means the repeater has failed or is busy. It could have lost power, but more commonly is too busy to communicate with.

The usual cause for this is a hydro outstation constantly transmitting. These tend to be older CR10X sites.

If this is the case, the base radio will have a green (receive) light on which doesn't go away; indicating traffic on the network.

Turn the base radio off and on again, if you start receiving messages on the screen. Try to view the messages through the menu

