How to remotely access receivers that are being downloaded using the WIGATE software

296 Beth Bartel November 18, 2008 Software 1972

How to remotely access receivers that are being downloaded using the WIGATE software

This procedure will allow you to remotely access receivers that are being downloaded using the WIGATE software (e.g. Galapagos network). This procedure could also be used with any other type of setup. The trick is to redirect the serial port of the GPS receiver to an IP socket on the download computer.

When using WIGATE, you are enabling a feature the will open up an IP socket to the receiver. Since we're connected via IP and not serial on the local end you will need a device like a LANTRONIX or DIGIPORT or some port redirect software.

1.

Edit the WIGATE.properties file and add the serial number of the receiver's radio modem you are trying to connect to, and the port you wanted it directed to.

For example, receivers GV01 and GV02: bridge.static.port.9075750=20000 bridge.static.port.9075754=10000

2.

Kill the wigate processes and then restart. You will see some output like this:

Adding services here

Building a TDMA static mapped bridge

Serving 9075750 on 20000.

Serving 9075754 on 10000.

Starting a Raw Data Collector

All services added

RAW_DATA_COLLECTOR:(*1*)Detected 9075750 at 2005_01_06_1149 UTC RAW_DATA_COLLECTOR:(*2*)Detected 9075754 at 2005_01_06_1149 UTC RAW_DATA_COLLECTOR:(*3*)Detected 9032262 at 2005_01_06_1149 UTC RAW_DATA_COLLECTOR:(*4*)Detected 9000670 at 2005_01_06_1149 UTC RAW_DATA_COLLECTOR:(*5*)Detected 9027986 at 2005_01_06_1149 UTC RAW_DATA_COLLECTOR:(*6*)Detected 9027971 at 2005_01_06_1149 UTC

3. Create a SSH tunnel to the remote computer using the following ssh command:

ssh -L 20000:localhost:20000 wigate@xxx.yy.zz.19

)1

ssh -L 10000:localhost:10000 wigate@xxx.yy.zz.19

You will be prompted for a password.

This command will open up a SSH tunnel from port 20000 on the remote computer to port 20000 on the local computer.

4.

If telnet was enabled you could simply set the LANTRONIX to connect to port 20000. However, since it is not, you need to issue the following command to set up a temporary "telnet" port. Note: You will have to install netcat.

netcat -L localhost:20000 -p12345

5.

Set your LANTRONIX device to connect to port 12345 on the local machine (e.g. change dedicated tcp 192.168.1.100:12345T).

6.

Now you are ready to connect using MicroManager, rfile, sharc, ashtalker, etc. through the local computer's serial port.

Online URL:

https://kb.unavco.org/article/how-to-remotely-access-receivers-that-are-being-downloaded-using-the-wigate-software-296.html