

The steps outlined below will help determine the IP Address of a HeatNet™ bridge. This is useful in cases where the address was forgotten or programmed incorrectly.

You will need an Ethernet (Network) Cable, the *RUIPING* utility, and Network Analyzer Software that can capture packets in promiscuous mode. This document uses WireShark which is a free, open source program released under the GNU General Public License. The *RUIPING* and WireShark applications can be downloaded from the Literature Library on the HeatNet™ product website (Hydrotherm, RBI, etc).

- 1) Power up your computer and the bridge. Plug your computer directly into the bridge using an Ethernet cable and start the *RUIPING* utility as shown in Figure 1. This program continuously sends a broadcast message to all bridges on the network. In this case, we are plugged directly into the bridge so there is only one bridge on the network. If we receive a response, then it is from the bridge.

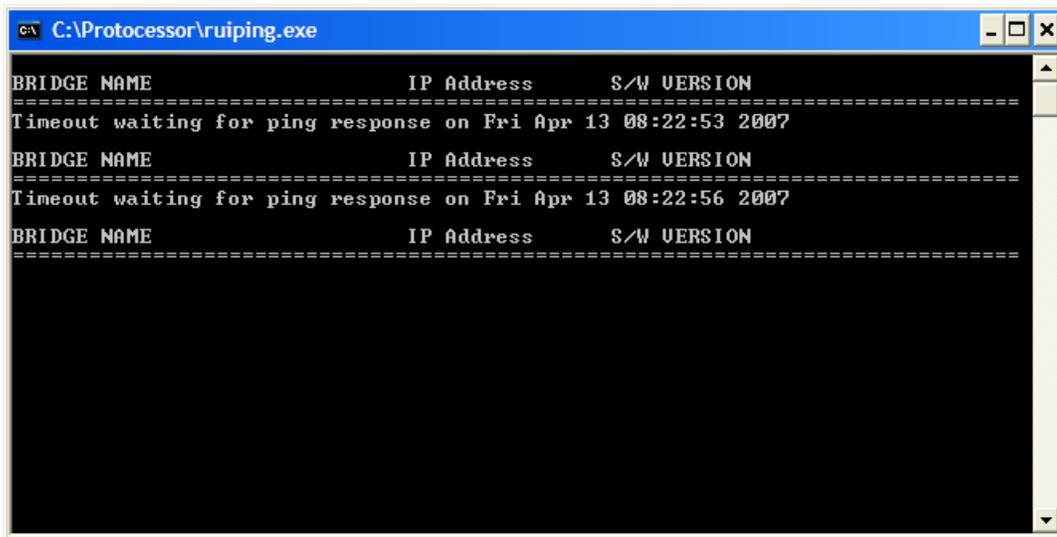


Figure 1. RUIPING

- 2) Start WireShark and select *Options* from the *Capture* menu to open the "Capture Options" dialog as shown in Figure 2. The only thing that needs to be set is the *Interface*. Choose the interface (network card) on your computer that is connected to the bridge. If you are not sure which *Interface* to choose, try following these steps with each available choice, there are usually only a few. Press the start button to start capturing network communications as shown in Figure 3.

- 3) Figure 3 shows how the captured packets should look. There may initially be other packets captured, especially if the computer or bridge has just started and is trying to acquire an address and other information about the network. However, the packets should eventually look like those shown in the figure. The IP address of the bridge is shown just after “Tell” in the ARP packets. None of the information indicates the subnet mask of the bridge, but usually a good guess can be made from the IP address. Often, the address will fall into blocks of addresses specifically reserved for internal networks:

IP Address Range	Typical Subnet Mask
10.0.0.0 – 10.255.255.254	255.255.0.0
172.16.0.0 – 172.31.255.254	255.255.255.0
192.168.0.0 – 192.168.255.254	255.255.255.0

Using this information, you should be able to change the IP address and subnet mask on your computer so that it can connect to the bridge using the *RUINET* utility to configure and change the address to meet your specific needs.