



Pro-Note No: 2012-02

Date: 29 Jan 2012

**Title:** R2Sonic or PC Freezing-Up When Snippets Activated

**Executive Summary:**

Force the PC LAN Adapter to 1Gbps data rate (preferred) or 100Mbps (minimum)

**Observations:**

Issue: Sonar Crashing When Snippets Switched On

The R2Sonic Manual states: "... please use 100BASE-T at minimum, snippets will not work with 10BASE-T; however, snippets will work over a 100BASE link."

Most new LAN connections on PCs are cable of 10/100/1000 BASE-T speeds and Windows (by default) will "auto negotiate" the network speed of the card when the PC is first connecting to a LAN. It has been observed that when the R2Sonic SIM is powered on, Windows will sometimes auto-negotiate 10 BASE-T if the Snippets box is not checked. When this low baud rate is used and Snippets is switched after the SIM Power-up sequence the sonar will crash. This is caused by increased network traffic due to Snippets being sent from the SIM and Windows not increasing the network baud rate to at least 100 BASE-T

**Solution:**

In the Windows Networking a Sharing Center, Configure the LAN Adapter as shown in the screen grabs on the following page:

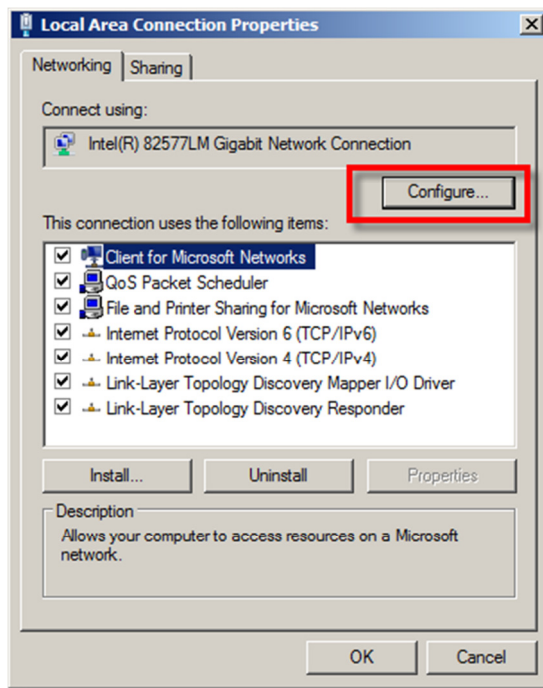


Figure 1

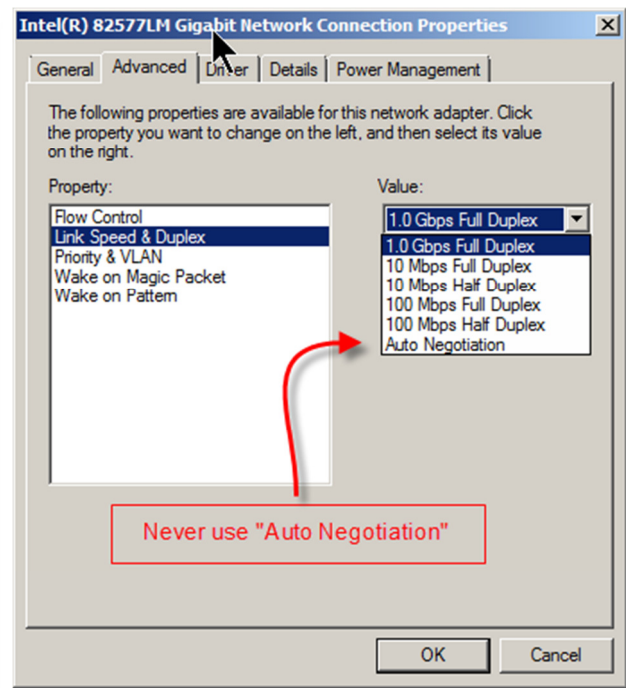


Figure 2

1. Open Windows Networking and Sharing Center
2. Select "Change Adapter Settings" located at left of Window
3. From Figure 1, select "Configure" in the Local Area Connection Properties Window
4. From Figure 2:
  - a. Select the "Advanced" tab
  - b. In the Value drop-down list choose at least 100mbps Full Duplex with 1Gbps being preferred
5. Select OK