



Setting your Network Port for Maximum Performance

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During a recent demonstration for collecting water column data, we experienced a backlog and buffering problem at the network port. To our surprise, we found that Windows® (Windows® 8, in this case) 'sets' or 'negotiates' the default speed at which the network port will read and work.

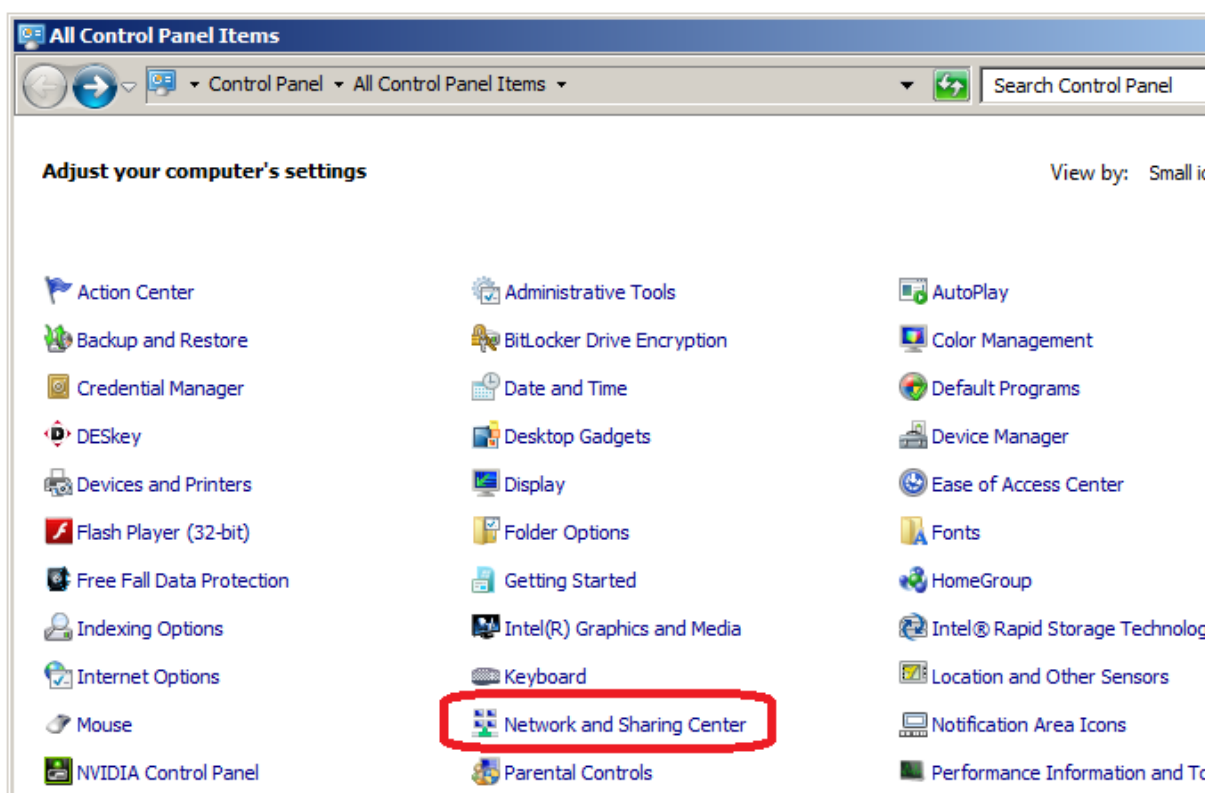
When your computer boots, it looks at the network port and, if nothing is happening across your 1 GHz network port, then its 1 GHz capability may get 'negotiated' to a default speed of 10 Mbps, or the slowest available speed.

When you start an application, like trying to log water column data, it can backlog at the network port if the negotiated rate wasn't 'negotiated' high enough. If you preset the network port to stay at 1GHz rate, it eliminates the problem (with reading).

Here's how to 'preset' your network port speed:

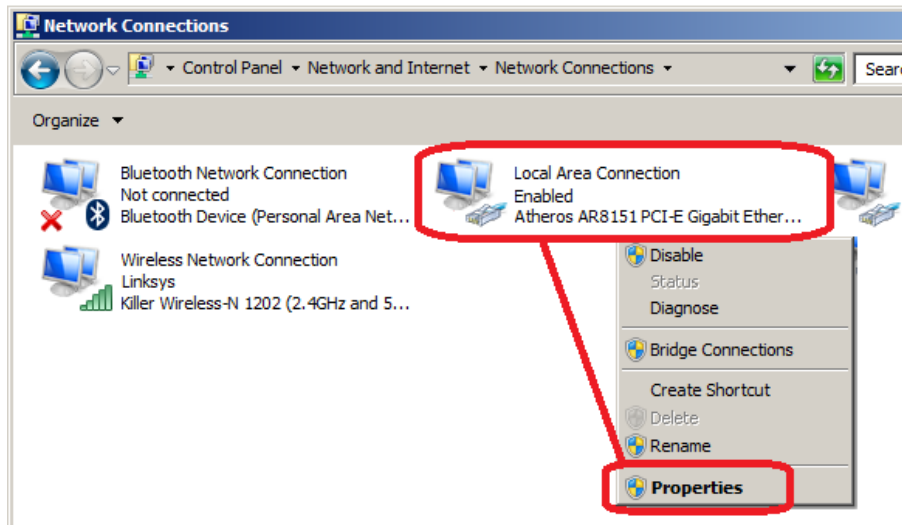
1. **Open the Windows® Control Panel.**
2. **Select 'Network and Sharing Center'.**

FIGURE 1. Accessing the Network and Sharing Center in the Windows® Control Panel

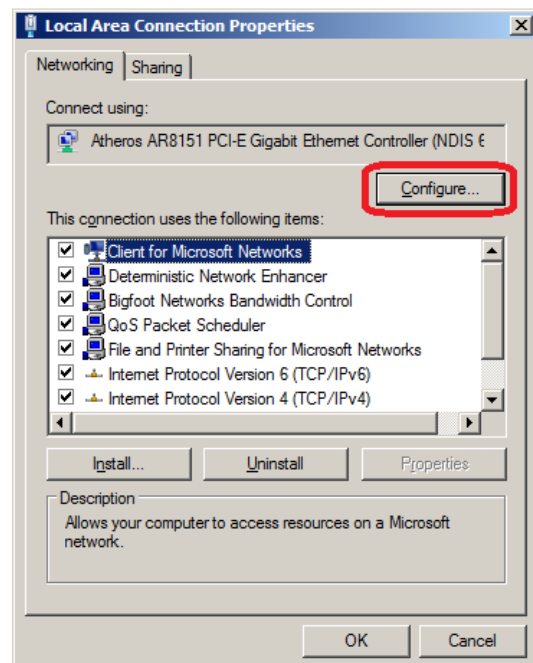


3. Select 'Change Adapter Settings'.
4. Right-click on your network adapter (local area connection) and select 'Properties'.

FIGURE 2. Local Area Connection Properties



5. Click 'Configure'



6. **Select the 'Advanced' Tab**
7. **Select 'Speed and Duplex'**
8. **Change the 'Value' to the highest setting available for your Adapter.**

Do not leave it on 'Auto Negotiation'. This is the Windows® setting that got us here in the first place.

Although this procedure has 'preset' your Network Port to its fastest 'Read Speed', you may still have an issue outputting the data to your Hard Drive fast enough...

Upgrading to a Solid State Drive (SSD), will resolve this issue.

A special thanks to Mike Brissette (R2Sonic) for showing us this setting.

