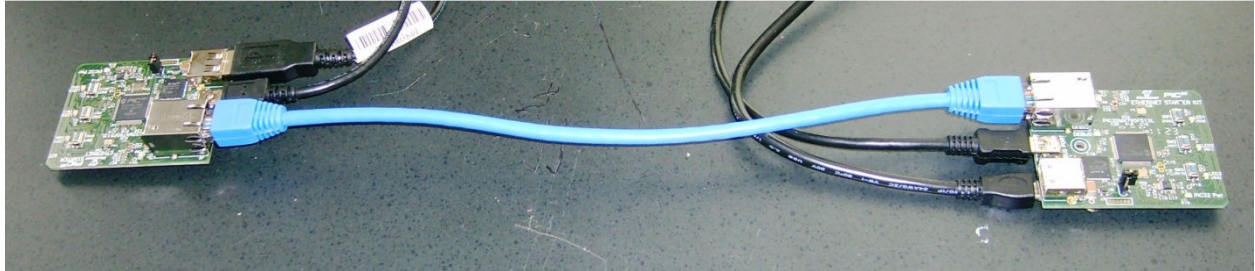


Quick Start Guide

In the example below, a developer is debugging a USB-over-ethernet extender. We want to view the packets on the blue CAT5 Ethernet cable:



To use the SharkTap to monitor the Ethernet packets on that link, connect the SharkTap as shown in the next picture:



The two Ethernet devices connect to the two side ports marked 'NETWORK'. All packets on either network port will be duplicated on the TAP port. (Any packets sent by the PC to the TAP port will be discarded, not forwarded to the NETWORK ports) The TAP port is typically connected to a PC running the Wireshark analyzer. Finally, connect the USB cable from the back port to any USB port, or use any cell phone charger with a micro-USB connector. The red LED on the back will light red to show power is attached. (The SharkTap will not show up as a device when connected to a PC, it only draws power) If there is DC power on the NETWORK ports (a VOIP phone system, for instance), it will be passed through. There are no settings, it's just passed through.

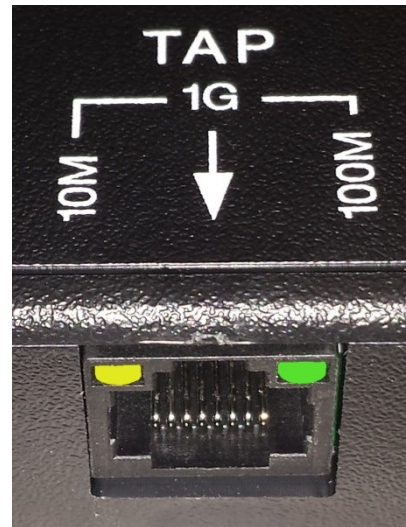
That's it! The open source (free!) Ethernet analyzer WireShark can be downloaded from www.wireshark.org. You'll also see links for documentation there as well.

Indicators:

The Red LED glows when power is applied. The SharkTap uses the standard 5V power from a USB port, and draws 450mA or less current.



Each port jack has two LEDs. At least one LED is on when there is a valid link connection. (Note that the SharkTap has a feature called MDIX, meaning that it will automatically crossover Tx and Rx pairs, so no crossover cable is ever needed.) The Yellow LED (only) is on if the link is 10Base-T. The Green LED (only) is on if the link is 100Base-T. Both LEDs are on if the connection is 1000Base-T. The LED(s) will blink when there are packets sent or received on that port.



Speed Matching: The two Network ports may autoconfigure at different speeds, which may or may not be desirable for your purposes. You can force the higher speed Network port to run at the speed of the lower speed link. Just plug the low speed link in first and wait for its LED(s) to illuminate. The second port plugged into the tap is then limited to the first port's speed. The same thing can be accomplished by removing the higher speed port and then re-connecting it. If you want a port to remain at its higher speed, connect it first, then connect the slower port. Disconnecting both Network cables will reset both ports to maximum speed.

The TAP port will always connect at the highest speed possible.

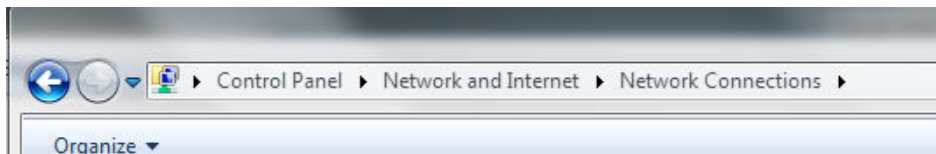
Questions? Send us an email at support@midbittech.com

www.midbittech.com

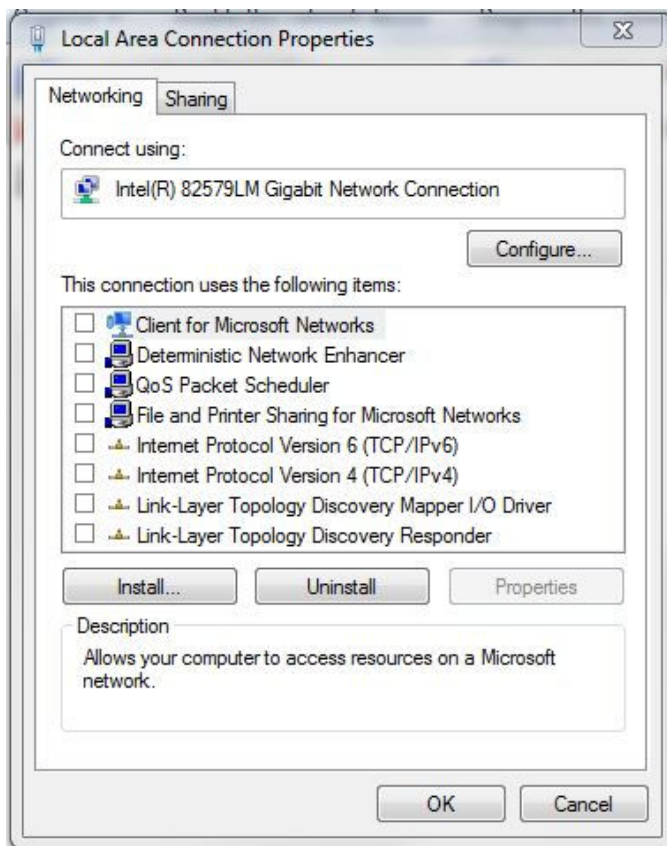
A Hint for your PC port:

For Windows setups that have a spare Ethernet port that you can use to connect to the SharkTap, such as a laptop that uses Wifi for internet access, here's a hint for setting up the wired port that will avoid Windows sending packets out the port, so you will only show packets from the network you are monitoring. Note that the Sharktap will not actually forward any packets from the PC to the Network ports, but they are seen by Wireshark as the PC sends them, and this can clutter up your capture.

Edit the properties for the spare port, which can be reached from



And then double clicking on the spare port. This will bring up a dialog like the following:



Click on the check boxes to remove the check marks from all the protocols that the connection uses. This will prevent Windows from trying to access the Internet or a Windows network over this port. (And don't forget to re-check the boxes if you later want to use the port for networking)