Description:

The Arduino Ethernet board is programmed to:

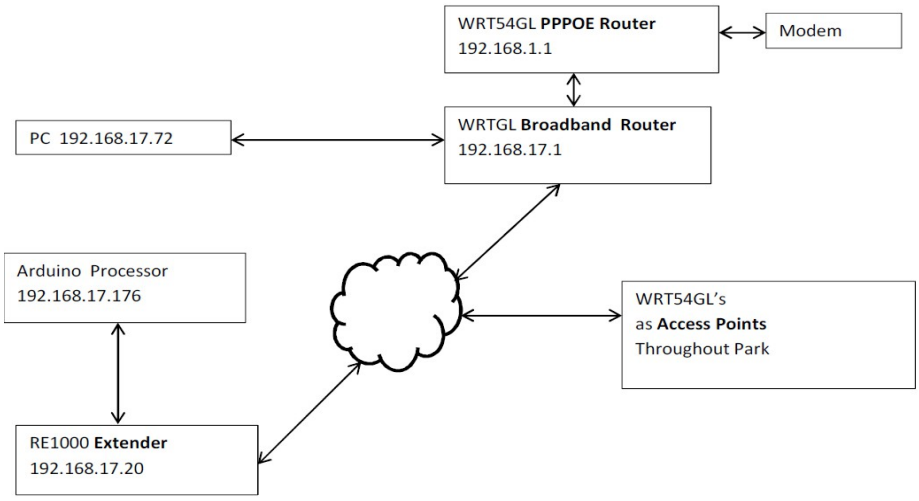
1. Once per hour;
    1. Get the date and time from the internet
    2. Get the meter reading
    3. Write the date, time and reading to the SD card
2. Listen for a request for data.

This Neptune water meter is located in a pit. It is wired to a R900 RF Transponder used for drive by reading by the utility.

I tapped into the wires going from the meter to the R900 RF transponder and connected them to an interface /isolation board connected to the Arduino Ethernet board.

The Arduino Ethernet board is cabled to a Cisco extender for wireless queries.

The network looks like this:



The PC (or anyone locally) can query the arduino processor for data.

The meter was Originally a Neptune ProRead and then changed to a Neptune E-Coder.

I believe the Arduino can be programmed for Sensus (Inversys) ECR II and ECRIII as well although I have not done it.