Using the 515RTAENI Ethernet-to-Serial Converter with RMC75E/150E

Due to the obsolescence of the Allen-Bradley 1761-NET-ENI, the Real Time Automation 515RTAENI is our current recommendation for Ethernet-to-Serial communication. This device can convert serial DF1 to Ethernet, allowing an Ethernet enabled RMC to communicate with a serial device such as older Allen Bradley MicroLogix and SLC PLCs and is generally used with the MSG instruction. The serial device must support DF1.

1. **Connect Cables**
    a. Connect the RMC to your ethernet switch
    b. Connect the 515RTAENI to your ethernet switch
    c. Connect PC to ethernet switch
    d. Connect power to the 515RTAENI as directed in RTA User Guide
2. **Follow the RTA User Guide to set up 515RTAENI**
   The 515RTAENI includes a browser-based configurator which is covered in their User Guide. Also covered is:
    a. Powering the 515RTAENI
    b. Connecting to the 515RTAENI from a PC
    c. Configuring the ethernet setting for the 515RTAENI
    d. Configuring serial settings for serial device (Baud rate must be manually configured)
3. **Set the 515RTAENI IP Settings**
    a. Configure the 515RTAENI for a Static IP such as:
        i. IP Address: **192.168.0.1**
        ii. Subnet Mask: **255.255.255.0**
4. **Configure the RMC IP Settings**
    a. In RMCTools, in the Ethernet settings, choose **Use the following IP address** and set it as needed. Example below:
        i. IP Address: **192.168.0.150**
        ii. Subnet Mask: **255.255.255.0**
        iii. Default Gateway: leave this blank
5. Apply the RMC Ethernet settings and update Flash.
6. **Configure the 515RTAENI Mapping**
    a. Under the Configurable Mapping in the RTA browser-based configurator, enter the RMC IP Address in the respective Node being used by your Serial device (Local Node Address).
7. **Connect Serial Cable**
   Connect a null-modem DB9 cable from the serial device to the DB9 connector on the 515RTAENI cable's DB9 connector. You may need to use gender changers. Null-modem means pins 2 and 3 are crossed over, and pin 5 is straight through.
8. **Start Communicating**
   Communications should start as soon as the serial device starts communicating. The serial device should write to its respective Node.