Using the Web Mountain RUC-02 with a serial PIM (SPIM) as an Ethernet PIM with Upstart
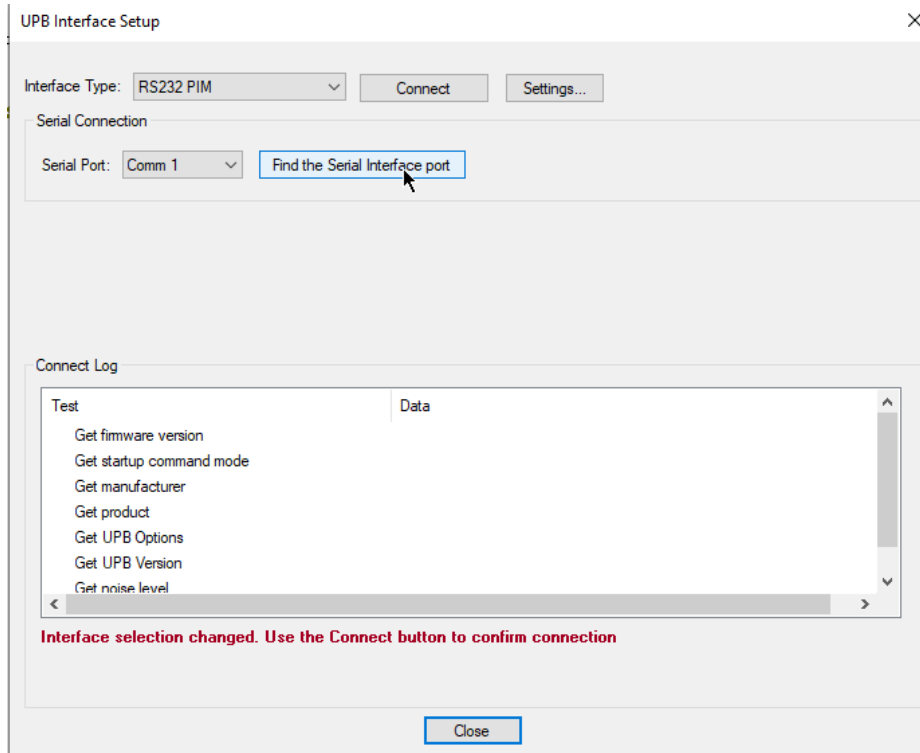
Upstart is the programming tool for UPB products. In order to use Upstart, you must have the program loaded on your Windows computer plus provide some type of powerline interface, in order to transmit and receive powerline commands. Typically, this had been done by directly connecting an RS-232 serial PIM (SPIM) or a USB PIM to your local PC. However, with the advent of the RUC-02 with its connected serial PIM, you can now use Upstart over the Ethernet without have a SPIM or USB PIM connected directly to your PC.
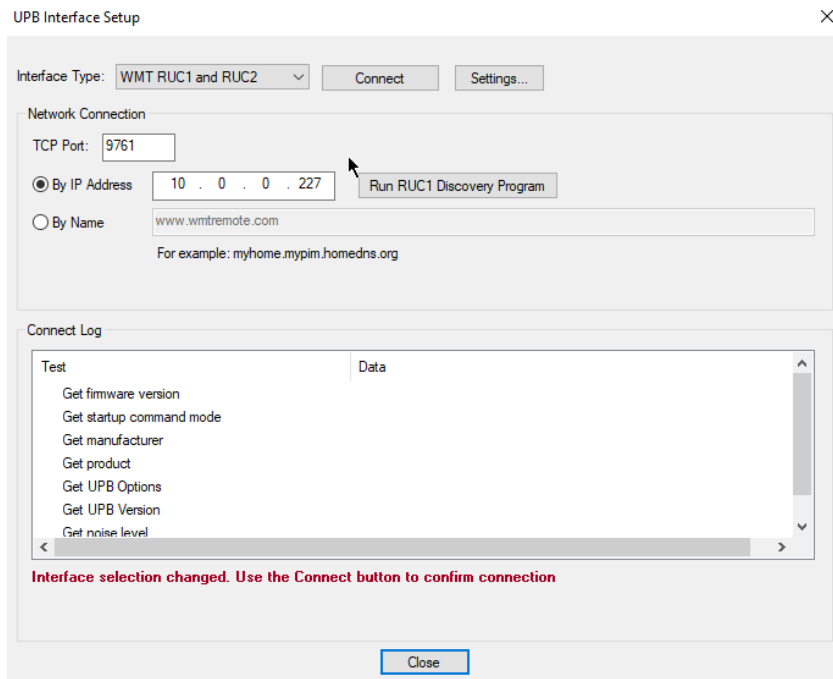
There are a couple of big advantages to this.

- With the Web Mountain RUC as a dedicated controller, you don't need two PIMs – one for the RUC and one for your PC, in order to use the controller and to run Upstart. You can use the SPIM connected to the RUC with Upstart as well as using it for the controller.
- If you are doing an install of multiple devices, in the past you would typically move your laptop with a connected PIM around the install location to each device to be programmed. Now, you can take your laptop, connected to WIFI, to each device location without having to unplug, then replug the PIM. Just leave the RUC-02 with its SPIM installed in one location and connected to your laptop over the LAN.

Here's how you use the RUC-02 as an Ethernet PIM with Upstart:

1. Install the RUC-02, with it's connected SPIM, as described in the RUC-02 installation guide. Make sure you know the Local IP address of the RUC-02. It will be something like 192.168.xxx.xxx or 10. Xxx.xxx.xxx.
2. Now, open Upstart. It will pop up a window asking what task you want to perform – open an existing network, create a new network, etc. Pick the option you want.
3. If you don't have a PIM connected to your PC, it will now pop up a new window saying something like "Error Accessing Powerline Interface", or "No powerline interface found" with a button to "Connect the PIM".
4. Depending on the popup screen you received, either click on the "Connect the PIM" button, or close the popup, and from the main menu of Upstart, Select Network at the top, then "Configure" from the ribbon. Either way, you should see the following screen:
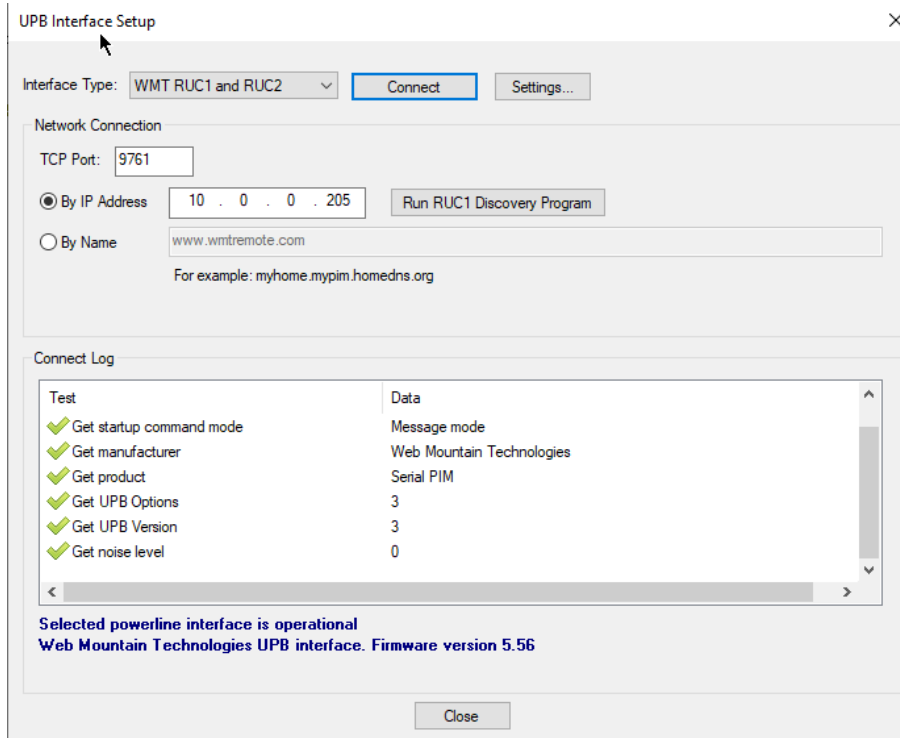
5. If you look at the dropdown for Interface type, you will see multiple options. Select the one labeled "WMT RUC1 and RUC2". Now the screen changes to this:

Now, we need to know the local IP address as stated earlier in Step 1. Make sure you have selected "By IP Address", then enter the IP address from Step 1 into the fields next to "By IP Address". DO NOT attempt to use the button next to this that says "Run RUC1 Discovery Program" – that only works with the older, now obsoleted WMT RUC-01 unit.   Also, make sure the TCP Port is set to 9761 (assumes the SPIM is connected to COM1 on the RUC-02. If the SPIM is connected to COM2, then use 9762).

6. Now, click on the "Connect" button at the top of this screen. If you watch, down in the Connect Log towards the bottom of this screen, you should see a series of green or blue checkmarks on steps as Upstart connects to the PIM and reads details from the PIM.

Notice at the bottom of the screen, it says "Selected Powerline interface is operational". Now, you're ready to go! Just use Upstart as you normally do, but you didn't have to connect a PIM directly to your PC or laptop.

You can also use the RUC-02 with its connected SPIM to run Upstart over the Internet remotely. To do this, from the UPB Interface Setup screen above, rather than selecting "By IP Address", select "By Name". You will notice that the text box says www.wmtremote.com. Leave that as is. However, up in the TCP Port box, change from 9761 to the remote access port number of your specific RUC-02 "+ 1". The remote port is the port that shows up on the Networking Configuration page on the RUC-02s user interface and is also written on the label on the back of the RUC-02. It will be something like 10xxx. So, for instance, if the remote port for your specific RUC-02 is 10400, then you will enter in 10401 for the TCP Port in the UPB Interface Setup window.

Now, this assumes you have the SPIM connected to COM1 on the RUC-02. If you have the RUC-02 connected to COM2, then use "+ 2", or 10402.

Then, click on the Connect button and you should see the checkmarks show up. One word of caution. On remote connections like this over the Internet, you will see some lag time. And, on congested networks, you could see PIM disconnections, killing the Upstart session. If you see this, contact us and we'll help you with that.