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Network Solution

One issue with the Hass.io installation is that the GUI is accessed through the network and is set up for a private home network. With me being on a college campus our network had restrictions that did not allow the installation to finalize and I was unable to access the GUI to work on anything in Hass.io. I spoke to the System Admin on campus and he explained to me that I could get the MAC address from a wired connection and then use the MAC to trace an IP address to the pi and connect that way. Unfortunately in my dorm there is only one ethernet port and if I use a switch or a splitter it will interfere with the network.

In my trouble shooting in the IT offices I plugged both the raspberry pi and my desktop into an hp procurve switch and logged into the switch to find the MAC address. Once I had the MAC address I searched it on the network with admin privileges to find the IP. I grabbed the IP and then added Hass.io’s extension to get into the GUI for Hass.io. Once I was at the GUI I could not find network under configuration settings and found that they had not developed an easier solution. It says that in the future there will be more network accessibility but for now this is how I had to get to the GUI. The problem with this is that I need a switch with DHCP and two ethernet ports which I do not have. Hass.io does not have a static IP like Debian so if I just used a wireless connection I would have to search for the Pi’s IP in the network with about four thousand other connected devices which is a needle in a haystack.

The solution from here was to either get a switch in which I could plug both my desktop and pi into that allowed DHCP and a login to get the IP or to get a router with four ports and use the router to split the connection from my one ethernet port to my desktop and the raspberry pi. This will allow me to get the IP of the Pi with the MAC address and easily access the GUI. This might be an issue in the future because the smart devices that I will be working with utilize the wireless network, no the wired. Even if Hass.io is wired and my desktop is, I am not sure if the devices will communicate or not. I will not know the answer to this question until I fool around with IFTTT and Hass.io a bit more now that I can get into it. Coming up this weekend I will be purchasing a router to split the wired connection and get started on the coding aspect.