DHCP IP Reservation on M4300

Concept

You can easily reserve IP addresses on your M4300 if you want to make certain devices always pull the same IP address from the built in DHCP server in the switch.

We will create a DHCP scope for VLAN 200 which has an IP address of 192.168.200.1 255.255.255.0 and reserve an IP address of 192.168.200.10 for a laptop.

Configuration

Via Main Web GUI

Step 1 – Create the DHCP pool.

Login to the switch and go to System – Services – DHCP Pool Configuration and configure a DHCP pool for VLAN 200.

Specify the subnet (not the IP address) and the subnet mask. Be sure to select Dynamic for the Type of Binding. You can specify the duration you want (we'll make it 1 day) and the Default Router (this time you use the actual IP of the VLAN) and any DNS addresses you want to use and click Add.
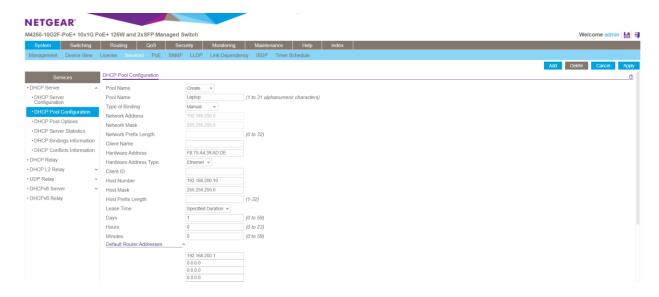
Step 2 – Create a Manual address reservation of 192.168.200.10 for the laptop.

Click on the drop down box next to Pool Name and select Create.

You can give the device you want to reserve the IP address to a name (a good idea) so you can identify which device is getting what IP address. The Binding will now be manual and this time you'll specify the hardware or MAC address of device and set the Hardware Address Type to Ethernet. Please note that the hardware or MAC address is the address for the actual port on the device receiving the IP address. So, for example, the laptop has a wireless adapter and a physical LAN adapter. Because we're connecting my physical LAN adapter to the switch I'll use the hardware or MAC address of that physical LAN adapter for the IP address reservation.

Finally, you'll specify the Lease Time and the Default Router address (again use the VLAN IP address here) and click Add.

Step 3 – Now connect your device to a port in that VLAN and you should pull the IP address you specific in the step above.

Success!

If you have numerous devices this process could be tedious however there's a way to make this easier if you're comfortable using the CLI. You can simply copy and paste the command for reserving the IP address and change the IP you want to use and specify the hardware or MAC address of each device and then paste your finished configuration back into the switch:

```
service dhcp
ip dhcp pool "VLAN 200"
default-router 192.168.200.1
network 192.168.200.0 255.255.255.0
netbios-node-type b-node
exit

ip dhcp pool "Laptop"
default-router 192.168.200.1
hardware-address f8:75:a4:39:ad:de
host 192.168.200.10 255.255.255.0
netbios-node-type b-node
exit

ip dhcp pool "Printer"
default-router 192.168.200.1
hardware-address f8:75:a4:39:ad:de
host 192.168.200.11 255.255.255.0
netbios-node-type b-node
exit

ip dhcp pool "Desktop"
default-router 192.168.200.1
hardware-address f8:75:a4:39:ad:de
host 192.168.200.12 255.255.255.0
netbios-node-type b-node
exit
```