Commissioning Guide

Lantronix & Core Switch Configuration Instructions

This guide will help walk you through the set-up of a single or multiple Lantronix PoE Switches as well as the Cisco Core switch (when applicable).

Initial Set-Up:

Before going to the field, make sure to have the WiFi Name and password for the jobsite. Once the laptop is connected to the WIFI network, we can begin the commissioning process.

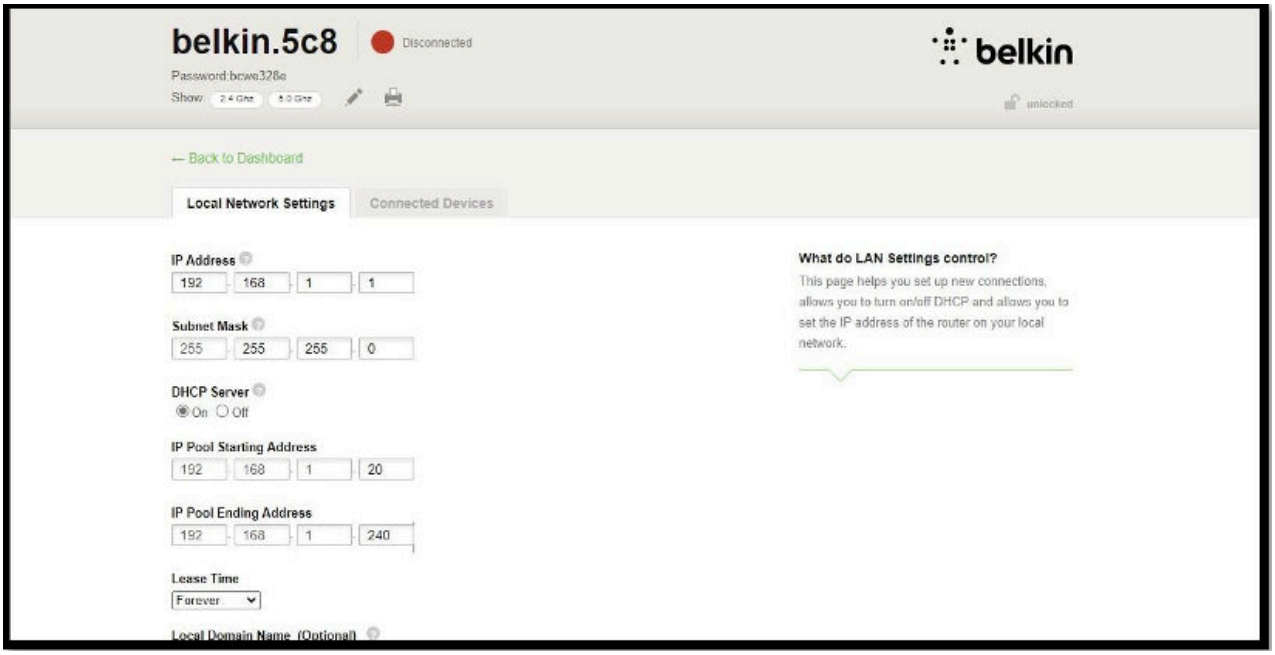
To properly configure each Lantronix switch connected in a stack, follow these step-by-step instructions. Ensure each switch is isolated by disconnecting uplink cables during configuration.

Note: Uplink cables are jumper cables linking switches together, connected to the 25th and 26th ports of the Lantronix switch.

- All Lantronix switches have a default IP of 192.168.1.77
- To set-up each Lantronix switch in the stack, you have to use your own Belkin router. Note that our Belkin router should be under 192.168.1.0 network.

Step 1: Setting up the Belkin router as 192.168.1.0 network

- Connect your laptop to Belkin. Open your browser and type the IP 192.168.1.1
- After this you will get router setting page. Go to LAN settings do exact same configuration shown below:



Step 2: Connect your Belkin router to the Lantronix switch

- When connecting your Belkin to one of the Lantronix switches, double check to make sure that switch is not connected to any other switches.
- Unplug all uplink cables and then connect your Belkin router.

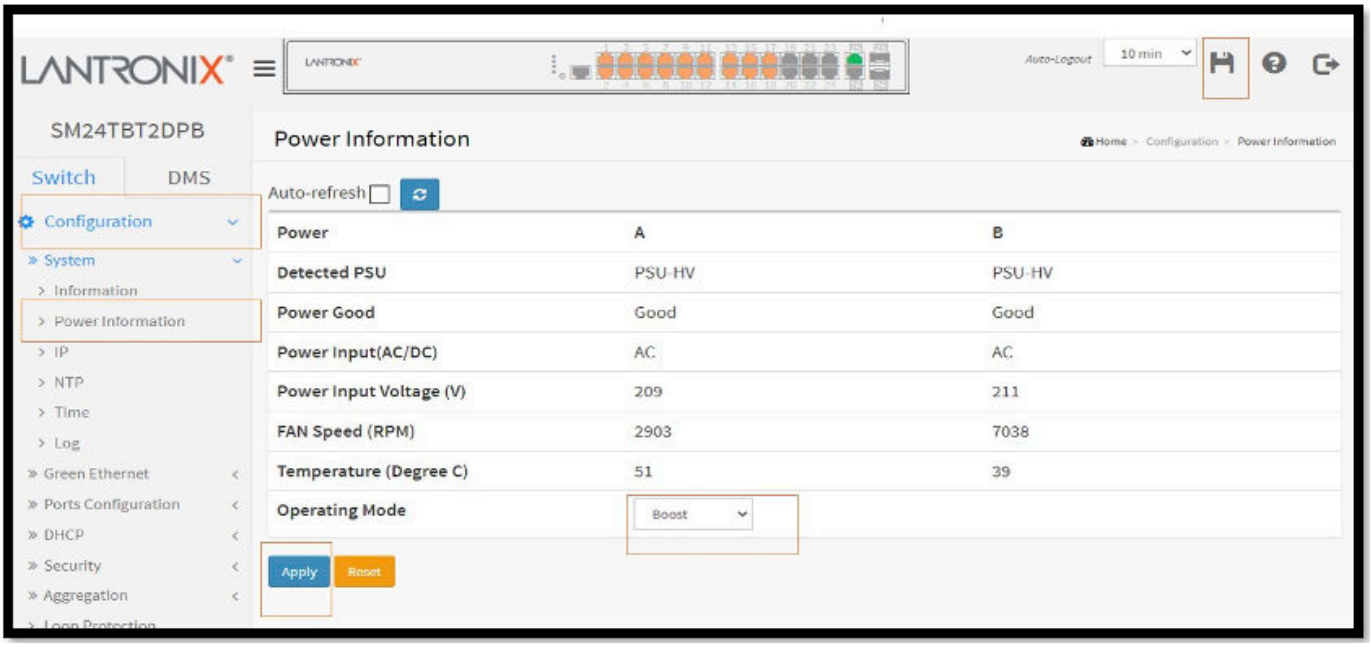
Note: Prior to connecting your Belkin to the Lantronix switch, make sure the uplink cable is disconnected from the Lantronix switch. Uplink cables are used to connect the Lantronix switches to one another.

Step 3: Access the Lantronix Switch

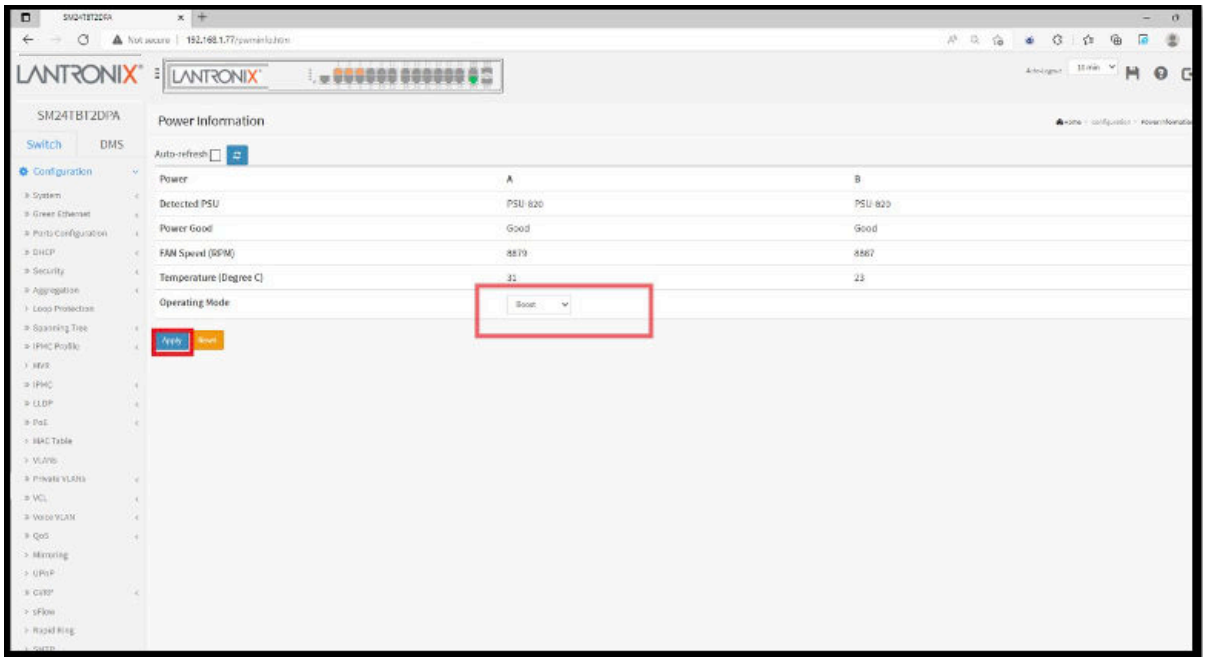
- Each Lantronix switch has a default IP address: 192.168.1.77.
- Open a web browser and enter 192.168.1.77 to access the Lantronix login page.
- Use the following credentials: Username: admin | Password: admin.
- Change the password and set a new IP address based on your network requirements.

Step 4: Change Power Settings

- Navigate to Configuration → System → Power Information.
- Change the operating mode from "Redundant" to "Boost."
- Apply the changes and save the configuration.

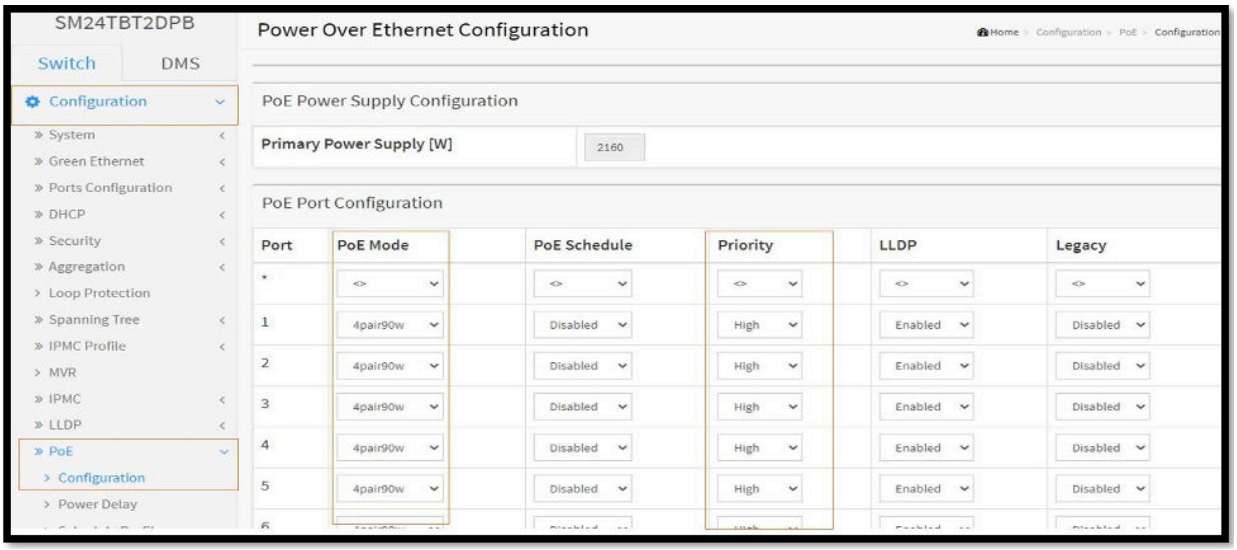


Step 4: Change Power Settings (Con't)



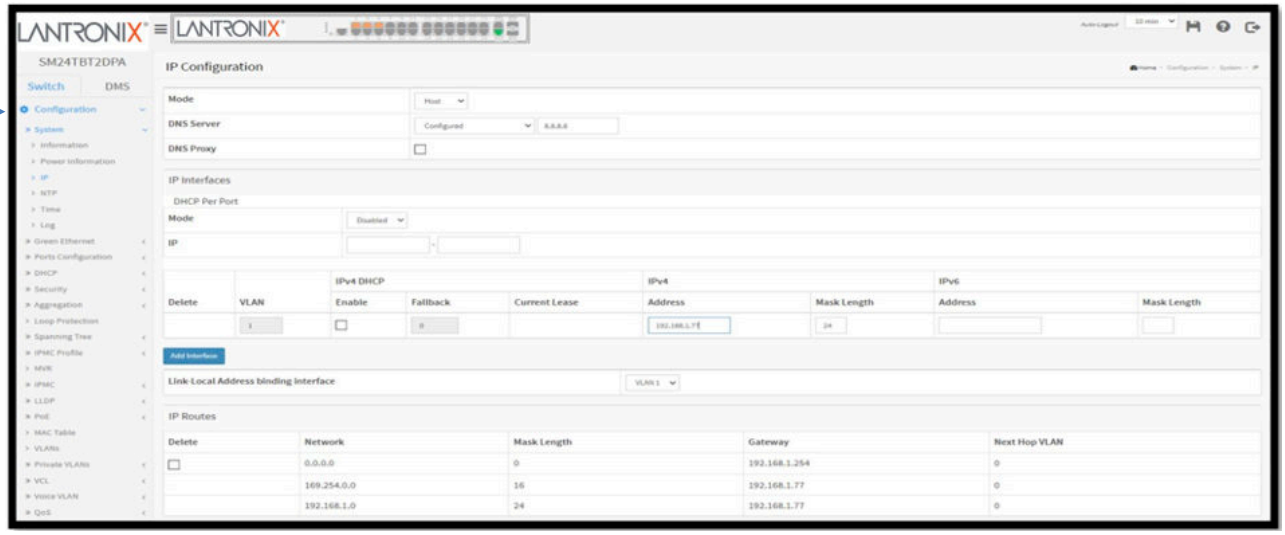
Step 5: Configure POE Settings

- Go to Configuration → POE → Configuration.
- Set POE Mode to "4pair90W" and Priority to "high."
- Apply the changes and save the configuration.

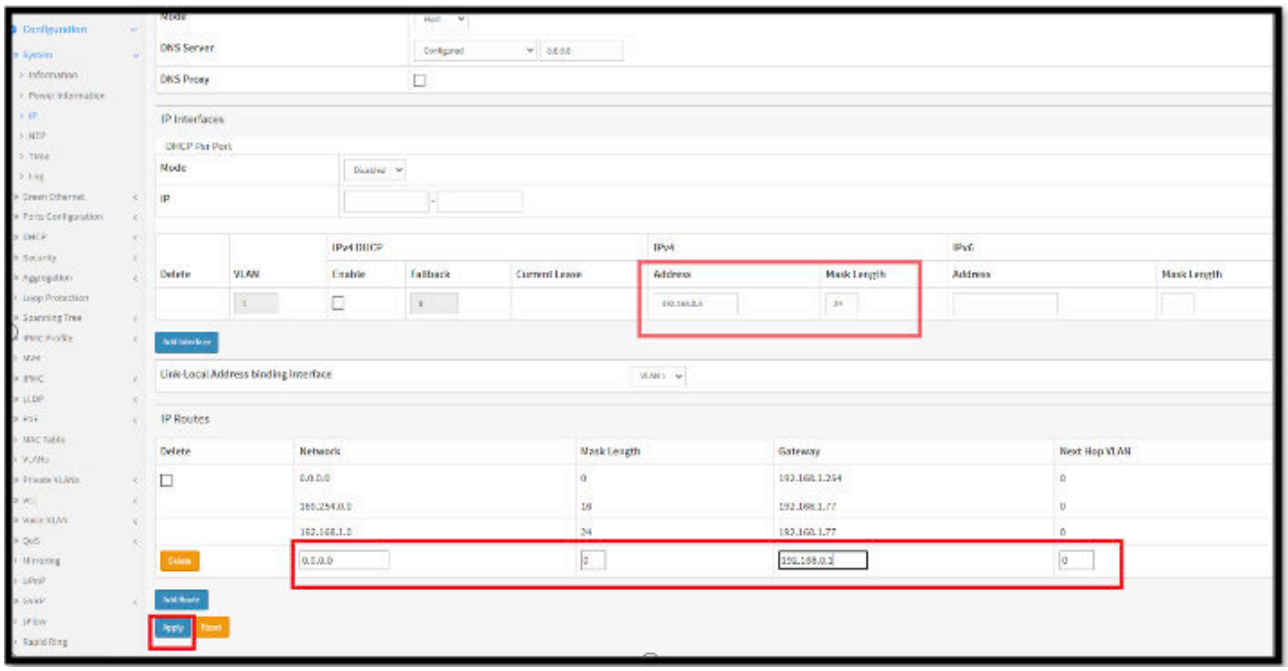


Step 6: Assign a Unique IP Address:

- Navigate to Configuration → System → IP. (Figure 1)



- Change the IP address from 192.168.1.77 to a new IP, e.g., 192.168.0.5.
- Add a route for the new IP and apply the changes. (Note: After applying changes, you will lose access to the Lantronix page since the IP changed from 192.168.1.77 to 192.168.0.5)



Step 7: Save Configuration and Switch to New IP

- Disconnect the router from the 25th port (which was under the 192.168.1.0/24 network)
- Connect the TP-Link router cable back to the first Lantronix switch on the 25th port
- Connect your laptop to the TP-Link router
- Open a web browser and type in the new IP address 192.168.0.5
- The Lantronix login page with the new IP address should be visible
- Login using the following credentials: **username: admin/password: admin**
- Save the configuration as shown below. Once saved, you have successfully configured the first transition switch connected in the stack.

Step 8: Configure Additional Lantronix Switches

- Disconnect two uplink cables from Lantronix Switch #2 (Located on the 25th and 26th port)
- Once those cables are disconnected, take the cable from the router and connect it to the same Lantronix Switch on port 25.
- Enter 192.168.1.77 into your browser
- Login into the 2nd Lantronix switch using the following credentials: **Username: admin/Password: password**
- Once you've successfully logged in, repeat the steps for power settings, POE settings, and IP address configuration as outlined above.
- Follow the same steps for each additional switch in the stack

Step 9: Final notes regarding IP Addresses for switches

- For a stack of three switches the IP addresses would be as follows:
  - Switch 1: 192.168.0.5
  - Switch 2: 192.168.0.6
  - Switch 3: 192.168.0.7

Congratulations! You have successfully configured each Lantronix switch in the stack following the provided instructions.

Cisco Core Switch Configuration

If the core switch is installed, it will be topmost switch in the stack. The Core switch will distribute the IP's to all of the other switches. Remember to configure each Cisco switch you will need console cable, connect your console cable and open your tera-term application and do the same settingsas mentioned above.

As soon as you will see black color terminal page. Perform the following configuration

for core switch:

- Enable
- Config T
- Ip dhcp pool INX_POE
- Network 10.10.0.0 255.255.248.0
- Default-router 10.10.0.1
- Do wr
- Ip dhcp excluded-address 10.10.0.1 10.10.0.20
- Do wr
- Exit

Note: every letter in the command is lowercase. Talk with MHT engineers if you are unsure about switch configurations.