

# 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:

belkin.5c8 Disconnected Password bows328e Show: 24 Gas as State: I I I I I I I I I I I I I I I I I I I	
Eack to Dashboard      Local Network Settings      Connected Devices	
IP Address 192 168 1 1 Subnet Mask 255 255 255 0 DHCP Server © On O Off	What do LAN Settings control? This page helps you set up new connections, allows you to turn on/off DHCP and allows you to set the IP address of the router on your local network:
IP Pool Starting Address	
IP Pool Ending Address       192     168     1     240       Lease Time       Forever       Local Domain Name (Optional)	

## 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.

Username Password Login	LISERNAME Password Login	
Username Password Login	Username Password Login	LA
Login	Login	Username
		1 85970 0

# **Step 4: Change Power Settings**

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

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SM24TBT2DPB	Power Information		Home > Configuration > Power Information						
Switch DMS	Auto-refresh 🗌 😖								
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> System ~	Detected PSU	PSU-HV	PSU-HV						
> Power Information	Power Good	Good	Good						
> IP	Power Input(AC/DC)	AC	AC						
> NTP	Power Input Voltage (V)	209	211						
> Log	FAN Speed (RPM)	2903	7038						
» Green Ethernet <	Temperature (Degree C)	51	39						
» Ports Configuration <	Operating Mode	Boost 🗸							
» Security <									
» Aggregation <	мриу								
> Loon Protection									



# Step 4: Change Power Settings (Con't)

#### **Step 5: Configure POE Settings**

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

SM24TBT2DPB	Powe	r Over Ethernet Co	nfiguration		🔁 Hom	e > Configuration > PoE > Configuration
Switch DMS	-					
Configuration ~	PoE Po	ower Supply Configura	ation			
» System (	Primar	y Power Supply [W]	2160			
» Ports Configuration < » DHCP <	PoE Po	ort Configuration				
» Security <	Port	PoE Mode	PoE Schedule	Priority	LLDP	Legacy
<ul> <li>» Aggregation </li> <li>&gt; Loop Protection</li> </ul>			~ <b>v</b>	<ul> <li>✓</li> </ul>	◇ ∨	
» Spanning Tree <	1	4pair90w 🗸	Disabled 🗸	High 🗸	Enabled 🗸	Disabled 🗸
> MVR	2	4pair90w 🗸	Disabled 🗸	High 🗸	Enabled 🛩	Disabled 🗸
» IPMC <	3	4pair90w 🛩	Disabled 🗸	High 🛩	Enabled 🗸	Disabled 🗸
» PoE s	4	4pair90w 🗸	Disabled 🗸	High ~	Enabled 🗸	Disabled 🗸
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# Step 6: Assign a Unique IP Address:

• Navigate to Configuration  $\rightarrow$  System  $\rightarrow$  IP. (Figure 1)

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e System v	-	DNS Server			Configured v 8.8.8.											
> Information		DNS Proxy														
> Power Information > IP		IP Interface														
> NTP		IP Interfaces														
> Time		Mode	on	Disabled	~											
> Log > Green Ethernet (		IP														
> Ports Configuration <																
> DHCP <				IPv4 DHCP			IPv4			IPv6						
> Aggregation c		Delete	VLAN	Enable	Fallback	Current Lease	Address	Mask Length		Address		Mask Length				
> Loop Protection			A		0		192.168.1.7		24							
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> MVR		Add linestace														
> IPMC <		Unk-Local Address binding interface														
CLLDP C																
> MAC Table		IP ROUCES														
> VLANS		Delete Network				Mask Length		Gateway		Next Hop						
Private VLANs <				0.0.0.0		0		192.168.1.25	4		0					
> VCL <				169.254.0.0		16		192.168.1.77	r		0					
> 0o5				192.168.1.0		24		192.168.1.77	r		0					

- 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)

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# Step 7: Save Configuration and Switch to New IP

- Disconnect the router from the 25<sup>th</sup> 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 25<sup>th</sup> 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.

LANTRONI <mark>X</mark> °			Antriquet Dimin V H O C
SM24TBT2DPA	System Information	Ationa - Monitor - System - Information	
Switch DMS			
O Configuration	Model Name	SM24TBT2DPA	
• • • • • • • • • • • • • • • • • • • •	System Description	Managed Switch, 24-port Gigabit PoE++, 2-port SFP/RJ-45 Combo	
🖾 Monitor 🗸 🗸	Location		
System     v     information	Contact		
> IP Status	System Name	SM24TBT2DPA	
> Log	System Date	2011-01-01720:21:42+00:00	
> Detailed Log	System Uptime	20:21:42	
> Green Ethernet	Bootloader Version	v1.15f	
≫ Ports c	Firmware Version	VB6.54.3576 2020-09-18	
⇒ DHCP <	PoE Firmware Version	208-352	
<ul> <li>Security </li> <li>Aggregation </li> </ul>	Hardware Version	v1.02	

# Step 8: Configure Additional Lantronix Switches

- Disconnect two uplink cables from Lantronix Switch #2 (Located on the 25<sup>th</sup> and 26<sup>th</sup> 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 2<sup>nd</sup> 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
  - o 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 settings 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.