



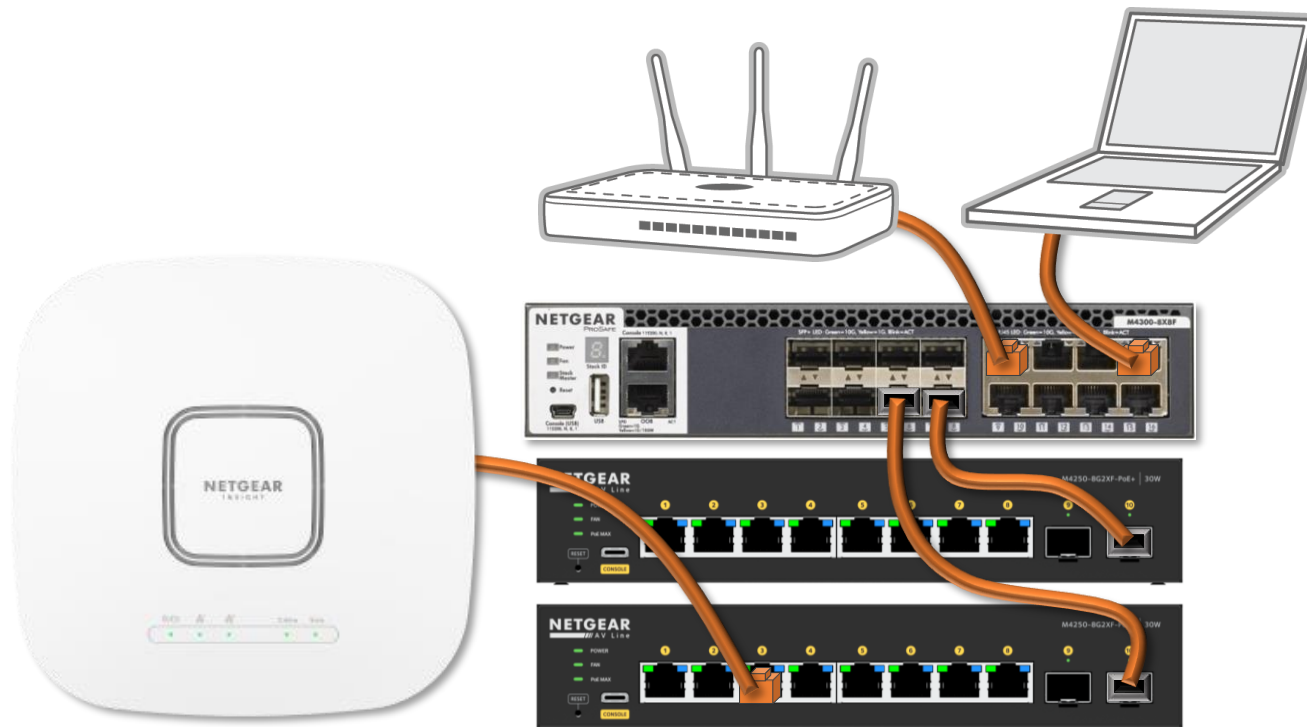
# Configuring Access Point ports with multiple VLANs

How to configure an access point with multiple SSIDs on separate VLANs and port configuration on a ProAV switch.

# Configuring AP ports on a ProAV switch for multiple VLANs

In this guide we will go over how to configure a ProAV switch and a NETGEAR access point with multiple SSIDs on separate VLANs.

We are first going to configure the port on the switch to tag for VLANs 10 and 20 using Engage, then configure multiple SSIDs on a NETGEAR access point, where each SSID will be on a separate VLAN. VLAN 1 will not be tagged on the port, giving us 3 separate SSIDs for VLANs 1, 10, and 20.



Open the Engage controller and go to "Site Settings."

**Managed Devices** Maintenance

Managed Devices

Switch Model <span>▼</span>	System Name <span>▼</span>	Serial Number	IP Address	FW Version	AV Version	Status	
M4250-8G2XF-PoE+ GSM4210PX	Lobby	6YX32A5NA0109	192.168.88.109	13.0.4.19	2.2.6.9	Online	<input type="button" value="Configure"/> <span>⋮</span>
M4250-8G2XF-PoE+ GSM4210PX	CR	6YX32A5FA00F7	192.168.88.37	13.0.4.19	2.2.6.9	Online	<input type="button" value="Configure"/> <span>⋮</span>
M4300-8X8F XSM4316S	Core	4G3N2979D0132	192.168.88.254	12.0.17.16	2.2.6.9	Online	<input type="button" value="Configure"/> <span>⋮</span>

Total 3  ◀ **1** ▶ Go to

Discovered Devices

Switch Model	System Name	Serial Number	MAC Address	IP Address	FW Version	AV Version	
M4250-12M2XF MSM4214X	M4250-12M2XF-B3E330	6VE2265BA0015	34:98:B5:B3:E3:33	192.168.88.12	13.0.4.13	2.2.3.16	<input type="button" value="Onboard"/>

Total 1  ◀ **1** ▶ Go to

Here we can see that we already have two VLANs configured, VLAN 10 and 20.  
For a guide on creating a new VLAN please go over the "Engage Provisioning AV Profiles" technical guides.

## Network Profiles

[Export Worksheet](#) [Create New Profile](#)

Profile Name	Profile Template	VLAN ID	Management VLAN	
Default	Data	1		
Dante 1	Audio Dante	10		
Lighting	Lighting	20		

Total 3   Go to

Click on the menu icon to the right of VLAN 10.

## Network Profiles

[Export Worksheet](#) [Create New Profile](#)

Profile Name	Profile Template	VLAN ID	Management VLAN	
Default	Data	1		
Dante 1	Audio Dante	10		
Lighting	Lighting	20		

Total 3   Go to

Edit

Routing

Delete

Click on "Edit."

Edit Profile

[Back to Network Profiles](#)

1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Template

Select the profile overview template to provide your AV profile template options

Profile Template

Audio Dante

Click on "Next."

Edit Profile

[Back to Network Profiles](#)

- 1 Profile Template**
- 2 Profile Settings**
- 3 Port Assignment

Profile Settings

Configure your profile settings and preferences

Profile Name

Profile Template

VLAN ID

Color  #0CC48C

Click on "Next."

Edit Profile

[Back to Network Profiles](#)

- 1 Profile Template
- 2 Profile Settings
- 3 Port Assignment

Profile Name: **Dante 1** | VLAN ID: **10** | Profile Template: **Audio Dante**

[Show Legends](#) [Refresh](#)



The access point that we are configuring is on port 3 of the "Lobby" switch.

Total Number of Configured Switches: 2

Switch Name <span>▼</span>	Model <span>▼</span>	Configured Number of Ports <span>▼</span>	Configured Ports
Lobby	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 1 2
Core	M4300-8X8F	1	M4300-8X8F 2

[Previous](#)

[Cancel](#)

[Apply](#)



Edit Profile

[Back to Network Profiles](#)

- 1 Profile Template
- 2 Profile Settings
- 3 Port Assignment

Profile Name: Dante 1 | VLAN ID: 10 | Profile Template: Audio Dante

[Show Legends](#) Refresh



Lobby ×

Untag all

Click twice on the port that the access point is connected on until you see a small "T" on the port.

Total Number of Configured Switches: 2

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports		
Lobby	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 1 2		
Core	M4300-8X8F	1	M4300-8X8F 2		

Previous

Cancel

Apply

Edit Profile

[Back to Network Profiles](#)

- 1 Profile Template
- 2 Profile Settings
- 3 Port Assignment

Profile Name: **Dante 1** | VLAN ID: **10** | Profile Template: **Audio Dante**

[Show Legends](#) [Refresh](#)



Lobby

Untag all

Here is what the port will look like when you manually tag the port.

Total Number of Configured Switches: 2

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports	
Lobby	M4250-8G2XF-PoE+	3	M4250-8G2XF-PoE+ 1 2 3	
Core	M4300-8X8F	1	M4300-8X8F 2	

Previous

Cancel

Apply

Click on "Apply."

Edit Profile

[Back to Network Profiles](#)

1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Name: **Dante 1** | VLAN ID: **10** | Profile Template: **Audio Dante**[Show Legends](#) [Refresh](#)Edit Profile ×

Are you sure you want to apply network port assignments to all the switches on the site?

No

Yes

Total Number of Configured Switches: 2

Switch Name <span>↓</span>	Model <span>↓</span>	Configured Number of Ports <span>↓</span>	Configured Ports
----------------------------	----------------------	---	------------------

Lobby	M4250-8G2XF-PoE+	3	M4250-8G2XF-PoE+ <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>
-------	------------------	---	--

Core	M4300-8X8F	1	M4300-8X8F <input type="text" value="2"/>
------	------------	---	--

PreviousCancelApply

A pop-up will ask you if you are sure you want to make the changes.

Click on "Yes."

Now that we have VLAN 10 configured we are going to configure VLAN 20.

## Network Profiles

[Export Worksheet](#) [Create New Profile](#)

Profile Name	Profile Template	VLAN ID	Management VLAN	
Default	Data	1		
Dante 1	Audio Dante	10		
Lighting	Lighting	20		

Total 3   Go to 

Click on the menu icon to the right of VLAN 20.

Network Profiles [Export Worksheet](#) [Create New Profile](#)

Profile Name	Profile Template	VLAN ID	Management VLAN	
Default	Data	1		
Dante 1	Audio Dante	10		
Lighting	Lighting	20		

Total 3   Go to

- Edit
- Set as Management VLAN
- Routing
- Delete

Click on "Edit."

Edit Profile

[Back to Network Profiles](#)

1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Template

Select the profile overview template to provide your AV profile template options

Profile Template

Lighting

Click on "Next."

Edit Profile

[Back to Network Profiles](#)

- 1 Profile Template**
- 2 Profile Settings
- 3 Port Assignment

Profile Settings

Configure your profile settings and preferences

Profile Name

Profile Template

VLAN ID

Color  #08A7D7

Click on "Next."

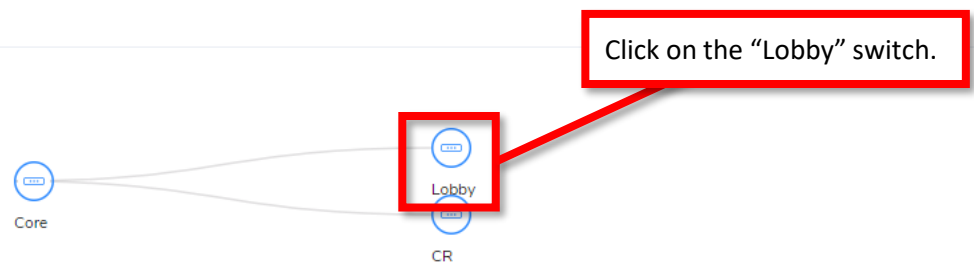
Edit Profile

[Back to Network Profiles](#)

- 1 Profile Template
- 2 Profile Settings
- 3 Port Assignment

Profile Name: **Lighting** | VLAN ID: **20** | Profile Template: **Lighting**

[Show Legends](#)



Total Number of Configured Switches: 0

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports
---------------	---------	------------------------------	------------------



You have no configured switches for this network profile.  
Please assign ports for this network profile by clicking on the Switch from the above section.



Edit Profile

[Back to Network Profiles](#)

1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Name: **Lighting** | VLAN ID: **20** | Profile Template: **Lighting**

[Show Legends](#) Refresh



Lobby

Untag all

Click twice on the port that the access point is connected on until you see a small "T" on the port.

Total Number of Configured Switches: 0

Switch Name ↓ Model ↓ Configured Number of Ports ↓ Configured Ports



You have no configured switches for this network profile.  
Please assign ports for this network profile by clicking on the Switch from the above section.

Previous

Cancel

Apply

Edit Profile

[Back to Network Profiles](#)

1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Name: **Lighting** | VLAN ID: **20** | Profile Template: **Lighting**

[Show Legends](#) [Refresh](#)



Lobby



Untag all

Total Number of Configured Switches: **1**

Switch Name <span>▼</span>	Model <span>▼</span>	Configured Number of Ports <span>▼</span>	Configured Ports
Lobby	M4250-8G2XF-PoE+	1	M4250-8G2XF-PoE+ 3

Previous

Cancel

Apply

Click on "Apply."

Edit Profile

[Back to Network Profiles](#)

1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Name: **Lighting** | VLAN ID: **20** | Profile Template: **Lighting**[Show Legends](#) Refresh

Lobby

Are you sure you want to apply network port assignments to all the switches on the site?

Total Number of Configured Switches: 1

Switch Name	Model	Configured Number of Ports	Configured Ports
-------------	-------	----------------------------	------------------

Lobby	M4250-8G2XF-PoE+	1	M4250-8G2XF-PoE+ 3
-------	------------------	---	-----------------------

A pop-up will ask you if you are sure you want to make the changes.

Click on "Yes."

## Network Profiles

[Export Worksheet](#) [Create New Profile](#)

Profile Name	Profile Template	VLAN ID	Management VLAN
Default	Data	1	
Dante 1	Audio Dante	10	
Lighting	Lighting	20	

Total 3

50/page



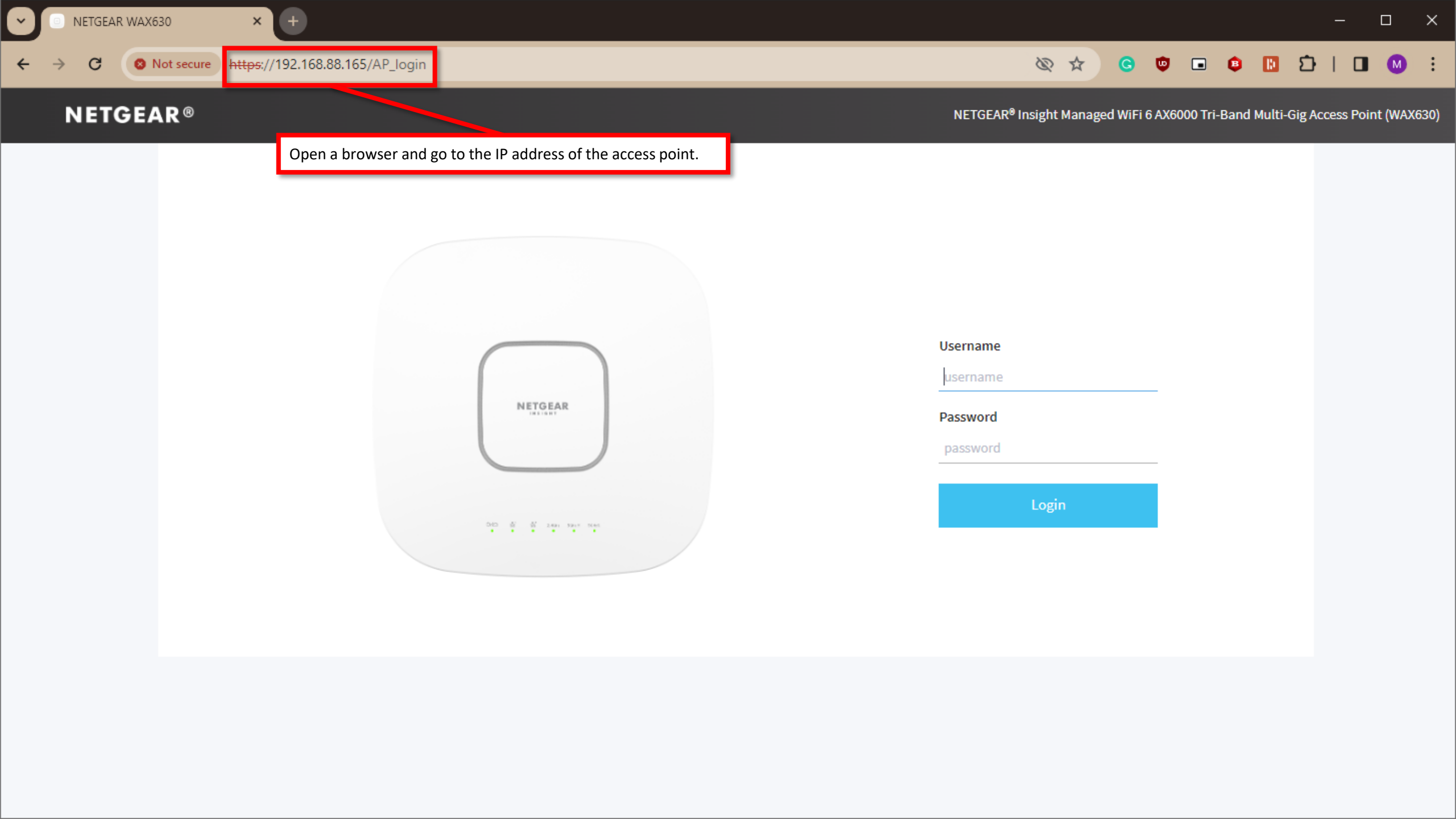
1



Go to

1

Now that we have the switch configured, we are going to go through the configuration on the access point.



NETGEAR®

NETGEAR® Insight Managed WiFi 6 AX6000 Tri-Band Multi-Gig Access Point (WAX630)

Open a browser and go to the IP address of the access point.



Username

Password

Login

Managed Devices Maintenance

If you are not sure what the IP address of the access point is click on "Configure" on the switch the access point is connected to.

Managed Devices

Switch Model <span>▼</span>	System Name <span>▼</span>	Serial Number	IP Address	FW Version	AV Version	Status	
M4250-8G2XF-PoE+ GSM4210PX	Lobby	6YX32A5NA0109	192.168.88.109	13.0.4.19	2.2.6.9	Online	<input type="button" value="Configure"/> <span>⋮</span>
M4250-8G2XF-PoE+ GSM4210PX	CR	6YX32A5FA00F7	192.168.88.37	13.0.4.19	2.2.6.9	Online	<input type="button" value="Configure"/> <span>⋮</span>
M4300-8X8F XSM4316S	Core	4G3N2979D0132	192.168.88.254	12.0.17.16	2.2.6.9	Online	<input type="button" value="Configure"/> <span>⋮</span>

Total 3  < 1 > Go to

Discovered Devices

Switch Model	System Name	Serial Number	MAC Address	IP Address	FW Version	AV Version	
M4250-12M2XF MSM4214X	M4250-12M2XF-B3E330	6VE2265BA0015	34:98:B5:B3:E3:33	192.168.88.12	13.0.4.13	2.2.3.16	<input type="button" value="Onboard"/>

Total 1  < 1 > Go to

### Overview

Configure | Overview

M4250-8G2XF-PoE+

Show Legends



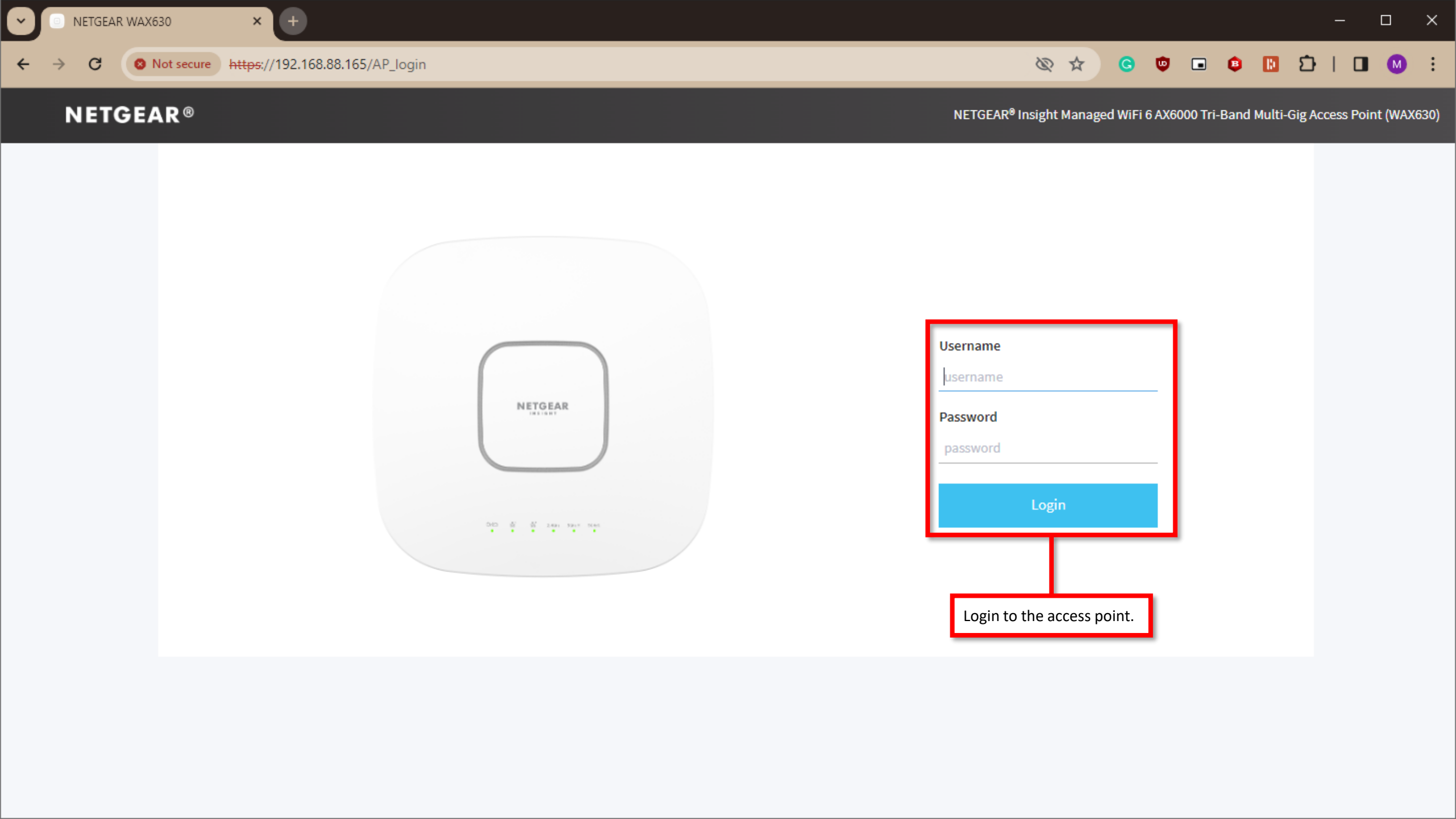
- Connected
- Available
- Force-Authorized
- LAG
- PoE Disabled
- Crestron Device Connected

Host : WAX630  
MAC Address : C8-9E-43-08-32-BF  
**IP Address : 192.168.88.165**  
LLDP Remote ID : C8-9E-43-08-32-BF  
Received Rate(Mbps) : 0.0  
Transmitted Rate(Mbps) : 6.0  
Power Usage : 9 Watts  
Port Type : Copper  
Link Speed : 1000 Full  
VLAN ID : 10.20.1

Here we can see the IP address of the access point.

### Device Details

Product Name	Serial Number	Model	Date & Time	Country/Region	Base MAC Address	System Name
M4250	6YX32A5NA0109	M4250-8G2XF-PoE+	2024-01-19 23:59:56	N/A	94:18:65:7D:5D:6D	Lobby
Firmware Version	AV UI Version	Boot Version	System Uptime	OOB IP Address	Management IP Address	STP Network Redundancy
13.0.4.19	2.2.6.9	1.0.0.11	0 days, 0 hrs, 39 mins, 20 secs	0.0.0.0	192.168.88.109	Neutral mode (default)



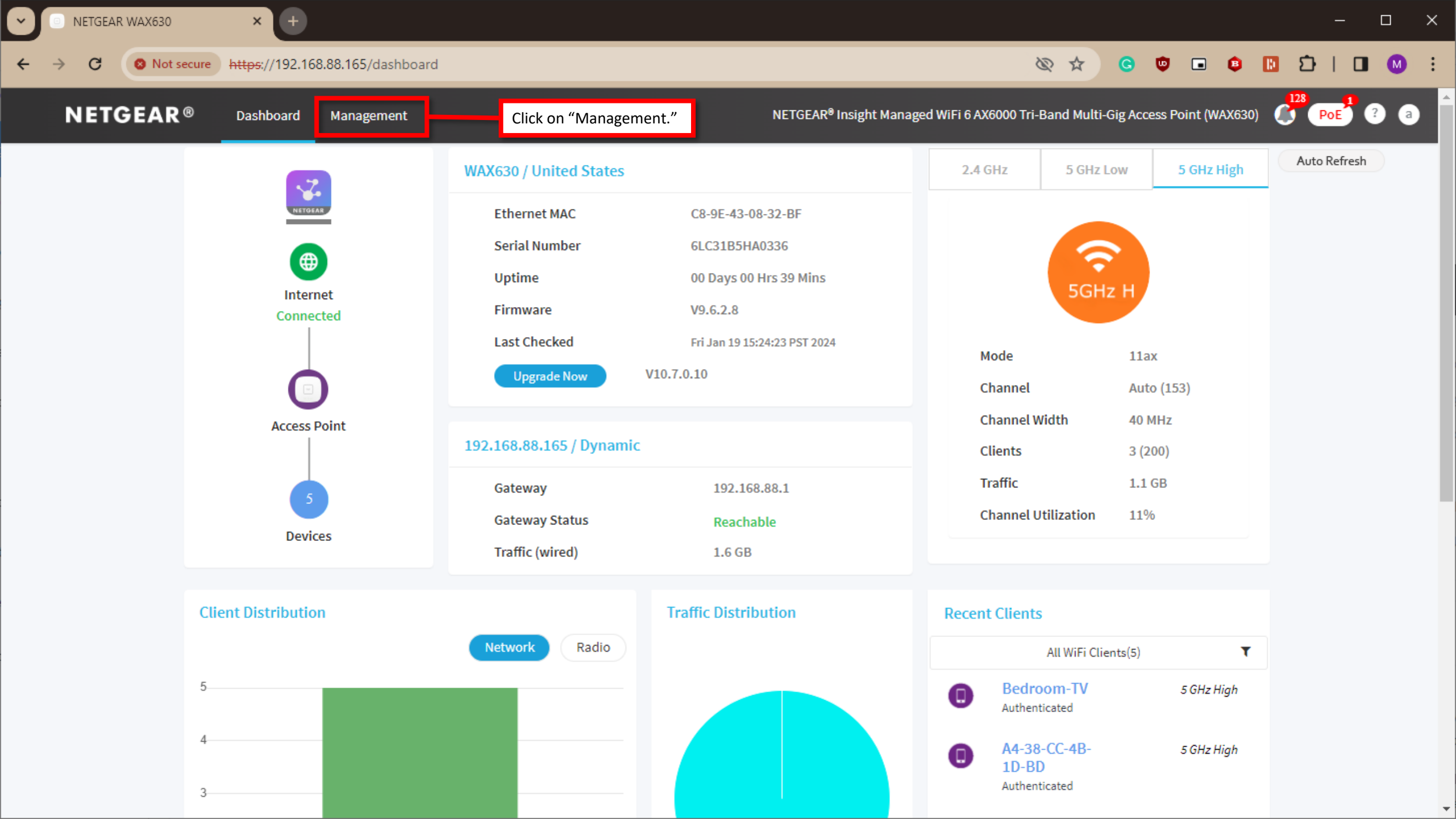
Username

Password





Login

Login to the access point.





Click on "Management."

  
  
 Internet Connected  
  
 Access Point  
  
 5  
 Devices

WAX630 / United States

Ethernet MAC	C8-9E-43-08-32-BF
Serial Number	6LC31B5HA0336
Uptime	00 Days 00 Hrs 39 Mins
Firmware	V9.6.2.8
Last Checked	Fri Jan 19 15:24:23 PST 2024

Upgrade Now

V10.7.0.10

192.168.88.165 / Dynamic

Gateway	192.168.88.1
Gateway Status	Reachable
Traffic (wired)	1.6 GB

2.4 GHz 5 GHz Low 5 GHz High



Auto Refresh

Mode	11ax
Channel	Auto (153)
Channel Width	40 MHz
Clients	3 (200)
Traffic	1.1 GB
Channel Utilization	11%

Client Distribution

Network Radio



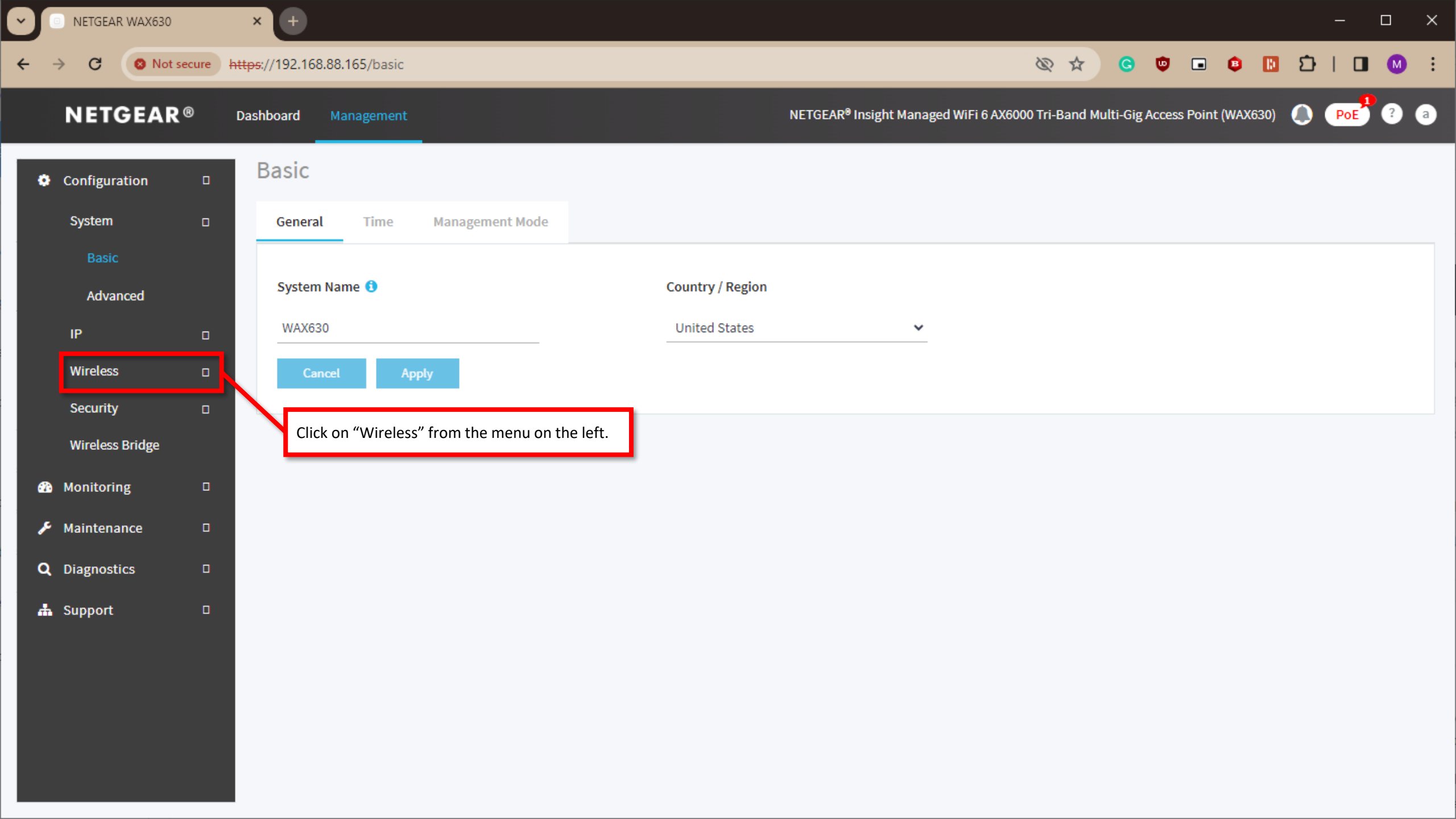
Traffic Distribution



Recent Clients

All WiFi Clients(5)

- 
**Bedroom-TV**  
 Authenticated 5 GHz High
- 
**A4-38-CC-4B-1D-BD**  
 Authenticated 5 GHz High



Configuration

System

Basic

Advanced

IP

Wireless

Security

Wireless Bridge

Monitoring

Maintenance

Diagnostics

Support

## Basic

General Time Management Mode

System Name ⓘ

WAX630

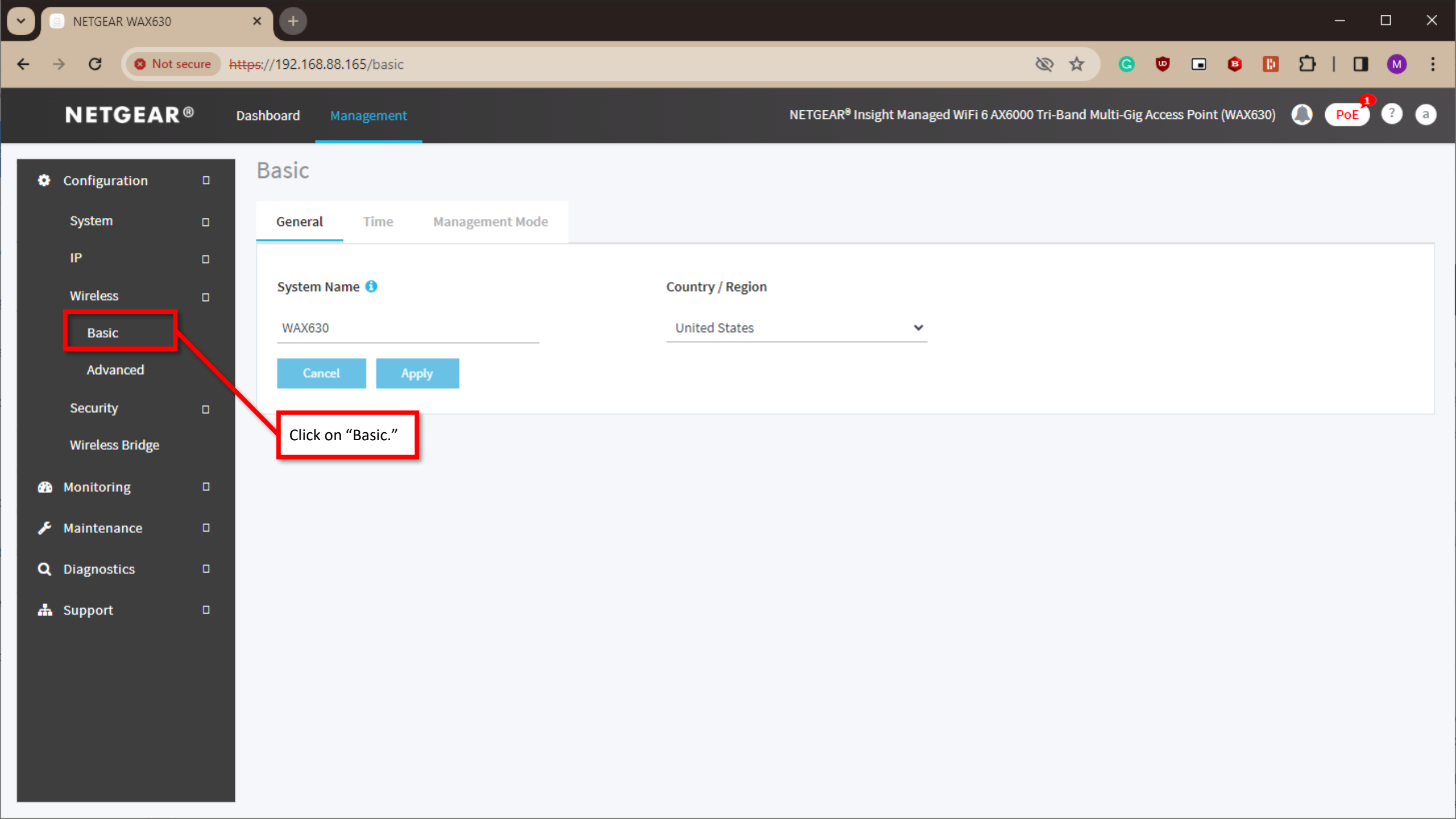
Cancel

Apply

Country / Region

United States

Click on "Wireless" from the menu on the left.



- Configuration
- System
- IP
- Wireless
- Basic**
- Advanced
- Security
- Wireless Bridge
- Monitoring
- Maintenance
- Diagnostics
- Support

## Basic

General Time Management Mode

System Name ⓘ

WAX630

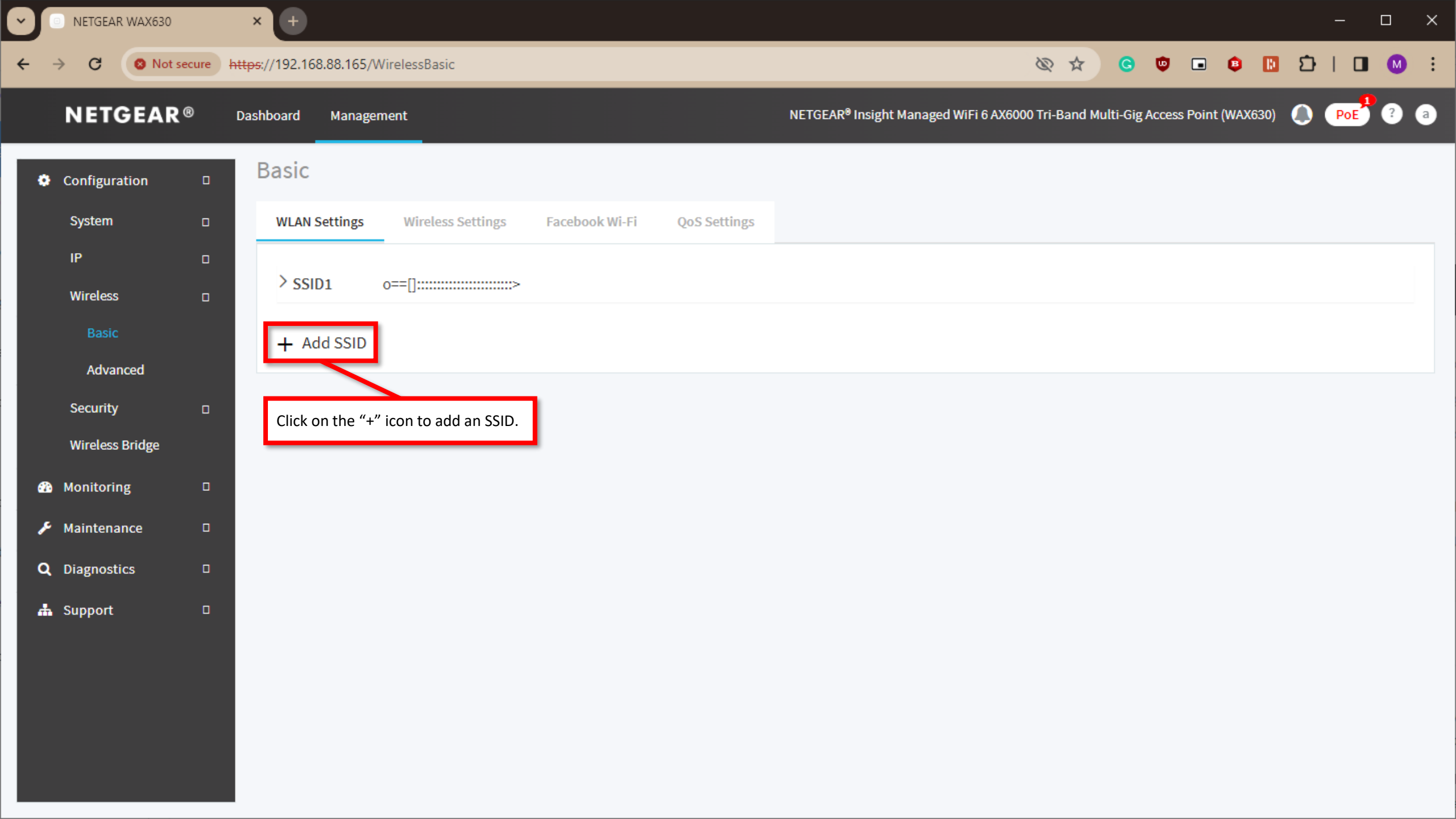
Country / Region

United States

Cancel

Apply

Click on "Basic."



- Configuration
- System
- IP
- Wireless
  - Basic
  - Advanced
- Security
- Wireless Bridge
- Monitoring
- Maintenance
- Diagnostics
- Support

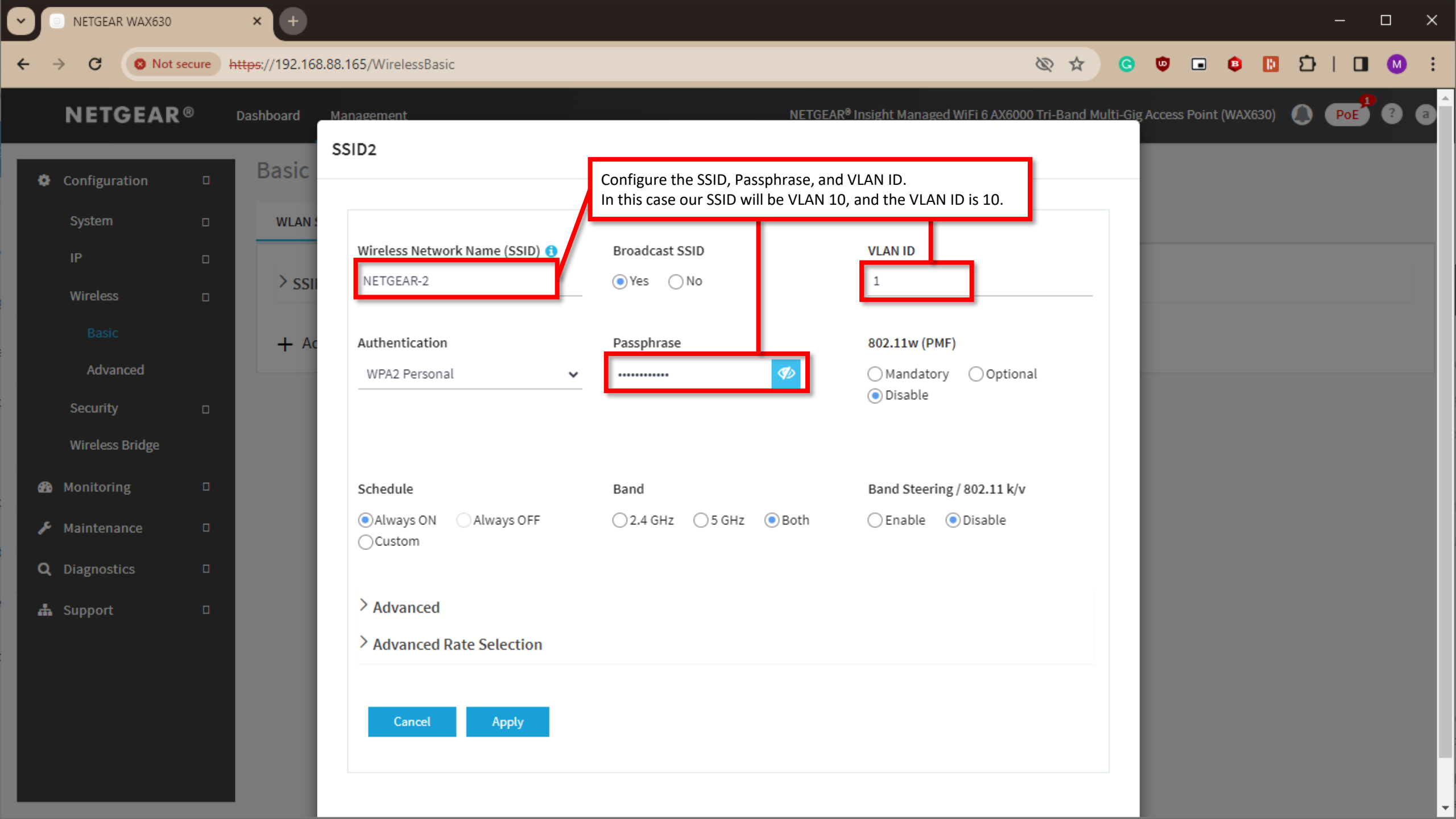
## Basic

WLAN Settings Wireless Settings Facebook Wi-Fi QoS Settings

> SSID1

+ Add SSID

Click on the "+" icon to add an SSID.



## SSID2

Configure the SSID, Passphrase, and VLAN ID.  
In this case our SSID will be VLAN 10, and the VLAN ID is 10.

Wireless Network Name (SSID) ⓘ

NETGEAR-2

Broadcast SSID

Yes  No

VLAN ID

1

Authentication

WPA2 Personal ▼

Passphrase

.....

802.11w (PMF)

Mandatory  Optional  
 Disable

Schedule

Always ON  Always OFF  
 Custom

Band

2.4 GHz  5 GHz  Both

Band Steering / 802.11 k/v

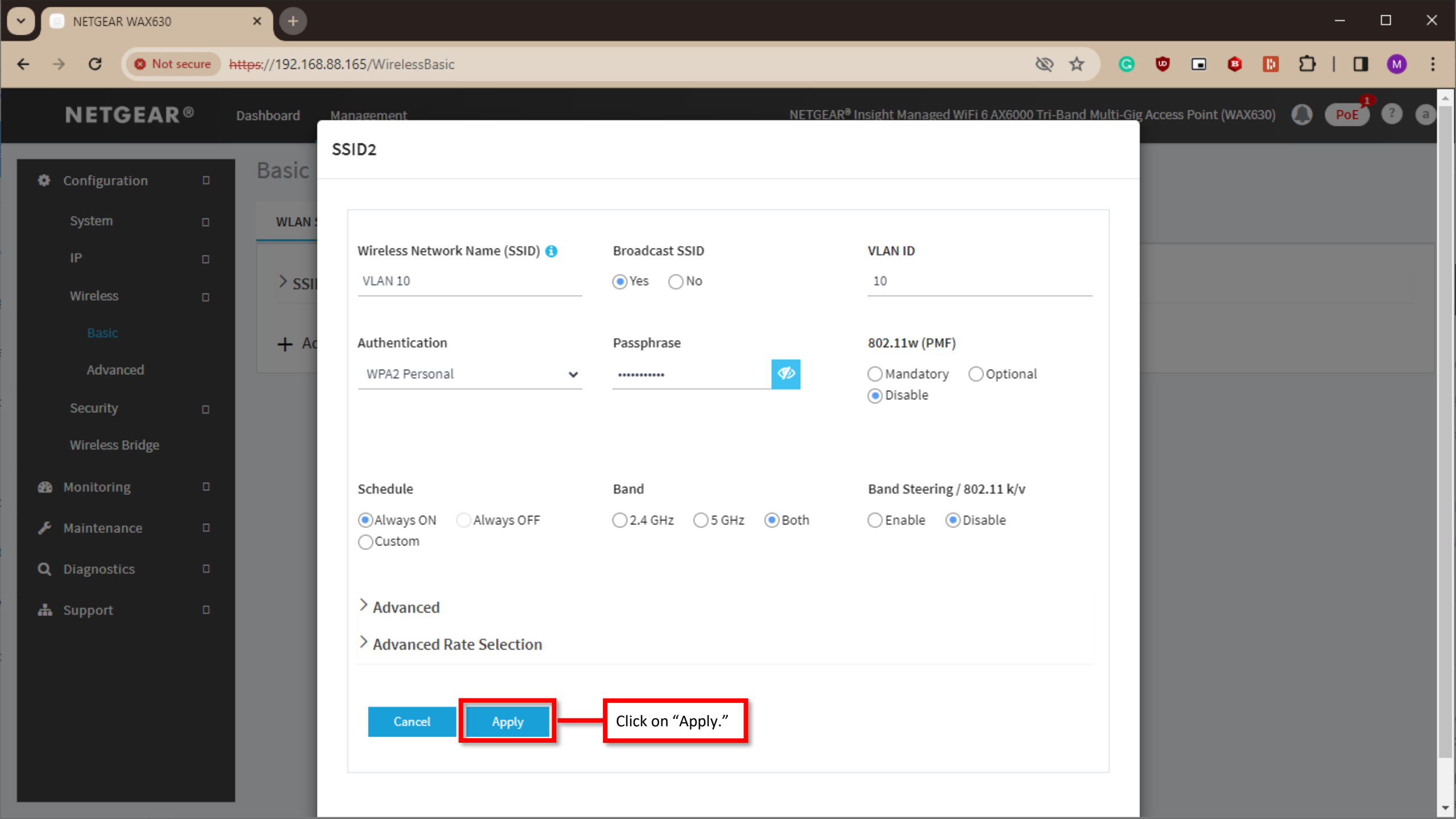
Enable  Disable

> Advanced

> Advanced Rate Selection

Cancel

Apply



### SSID2

Wireless Network Name (SSID) ⓘ

VLAN 10

Broadcast SSID

Yes  No

VLAN ID

10

Authentication

WPA2 Personal ▼

Passphrase

.....



802.11w (PMF)

Mandatory  Optional  
 Disable

Schedule

Always ON  Always OFF  
 Custom

Band

2.4 GHz  5 GHz  Both

Band Steering / 802.11 k/v

Enable  Disable

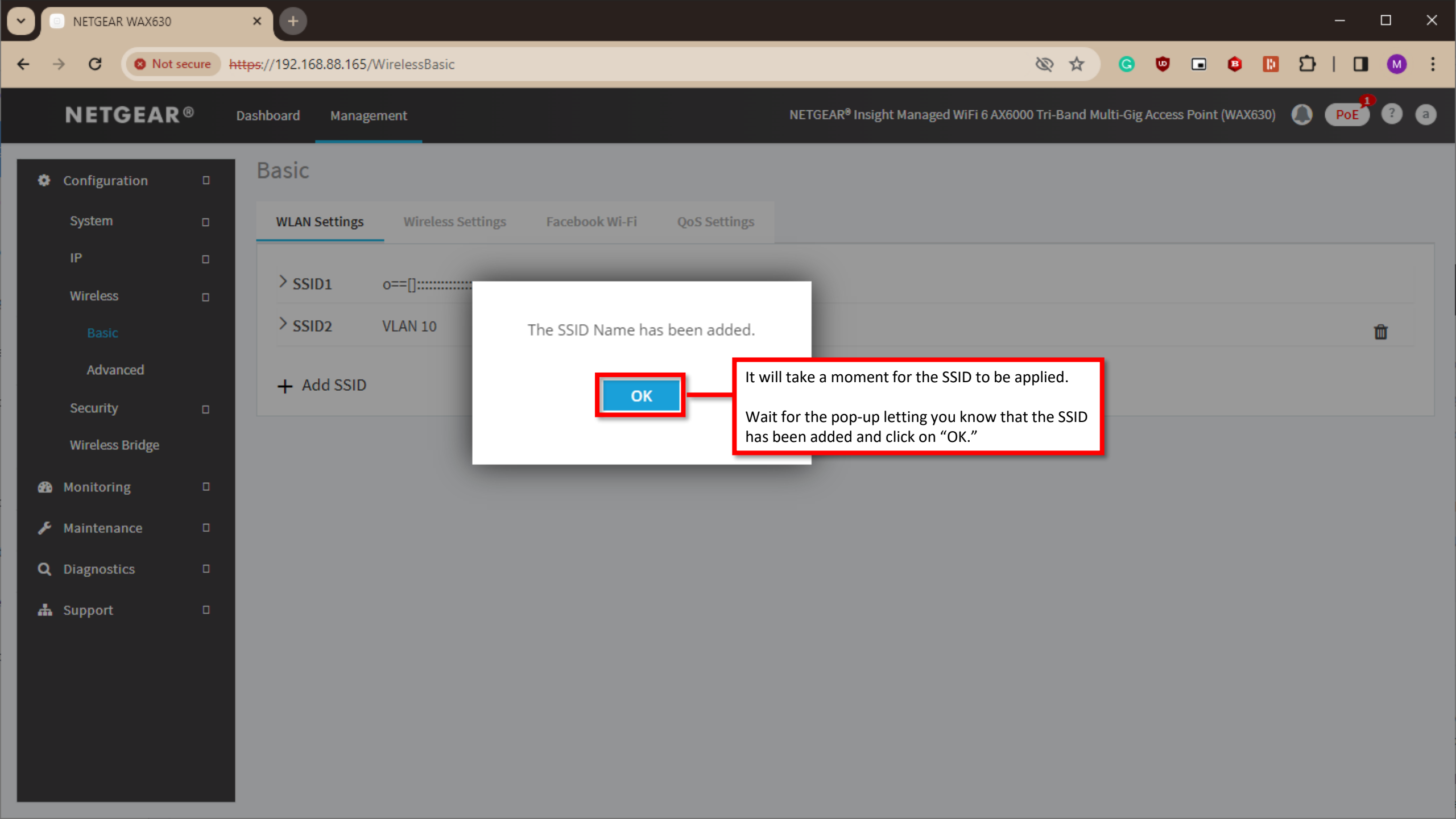
> Advanced

> Advanced Rate Selection

Cancel

Apply

Click on "Apply."



- Configuration
- System
- IP
- Wireless
  - Basic
  - Advanced
- Security
- Wireless Bridge
- Monitoring
- Maintenance
- Diagnostics
- Support

## Basic

WLAN Settings Wireless Settings Facebook Wi-Fi QoS Settings

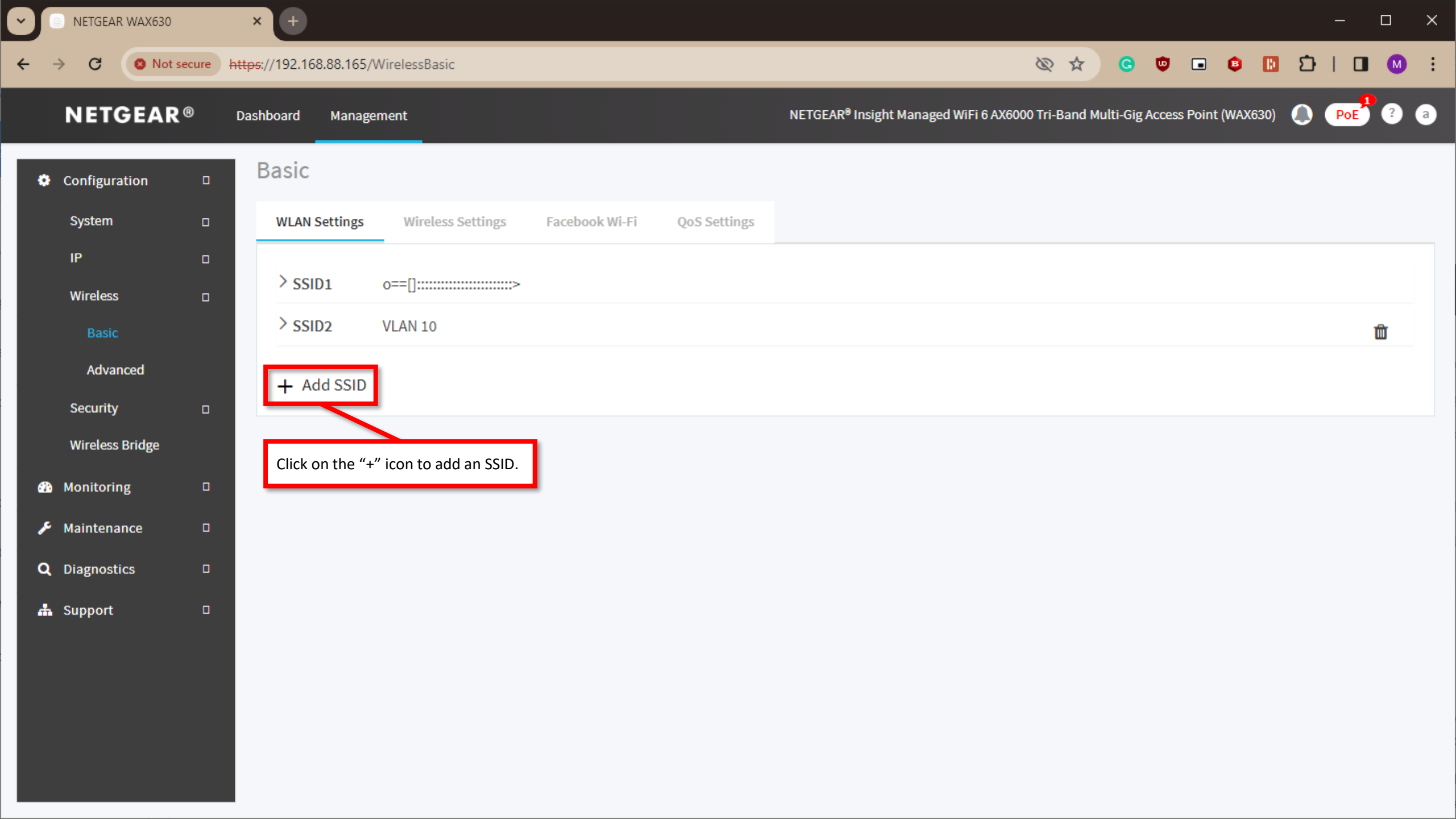
> SSID1	o==[]:.....
> SSID2	VLAN 10
+ Add SSID	

The SSID Name has been added.

OK

It will take a moment for the SSID to be applied.

Wait for the pop-up letting you know that the SSID has been added and click on "OK."



- Configuration
- System
- IP
- Wireless
  - Basic
  - Advanced
- Security
- Wireless Bridge
- Monitoring
- Maintenance
- Diagnostics
- Support

## Basic

WLAN Settings Wireless Settings Facebook Wi-Fi QoS Settings

> SSID1 o==[]:.....>

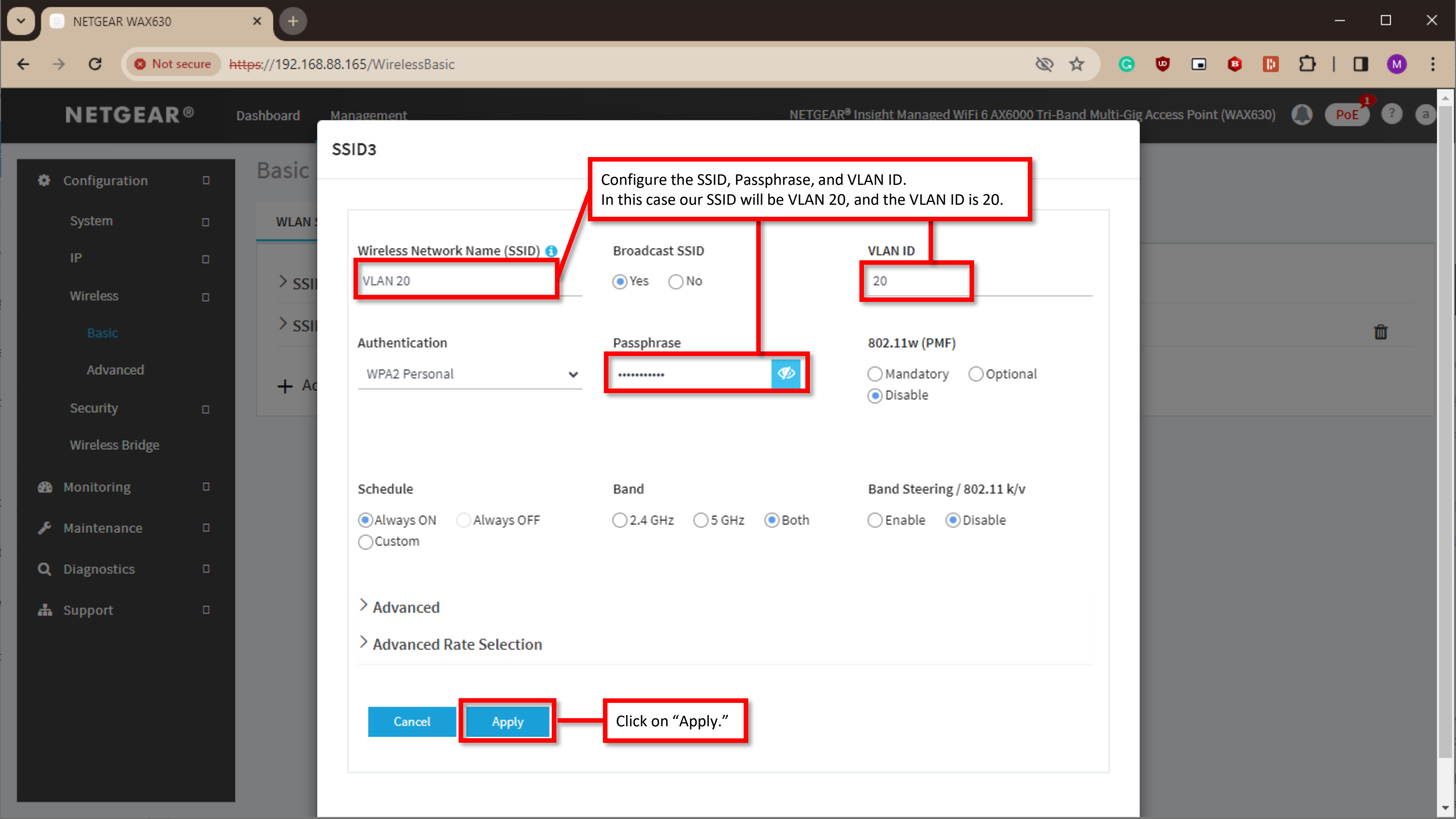
> SSID2 VLAN 10



+ Add SSID

Click on the "+" icon to add an SSID.





SSID3

Configure the SSID, Passphrase, and VLAN ID.  
In this case our SSID will be VLAN 20, and the VLAN ID is 20.

Wireless Network Name (SSID) ?  
VLAN 20

Broadcast SSID  
 Yes  No

VLAN ID  
20

Authentication  
WPA2 Personal ▼

Passphrase  
..... 👁

802.11w (PMF)  
 Mandatory  Optional  
 Disable

Schedule  
 Always ON  Always OFF  
 Custom

Band  
 2.4 GHz  5 GHz  Both

Band Steering / 802.11 k/v  
 Enable  Disable

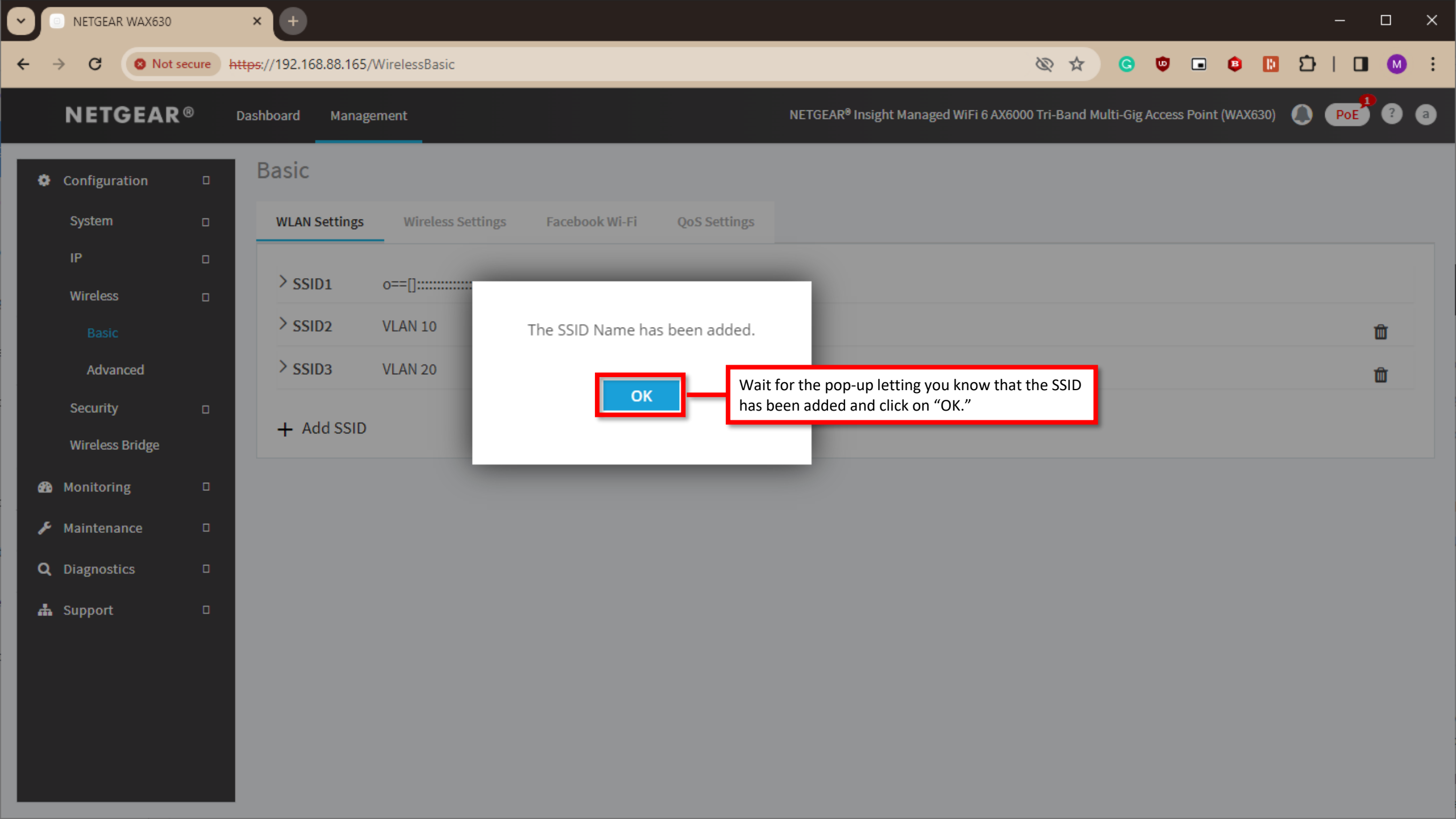
> Advanced

> Advanced Rate Selection

Cancel

Apply

Click on "Apply."



- Configuration
- System
- IP
- Wireless
  - Basic
  - Advanced
- Security
- Wireless Bridge
- Monitoring
- Maintenance
- Diagnostics
- Support

## Basic

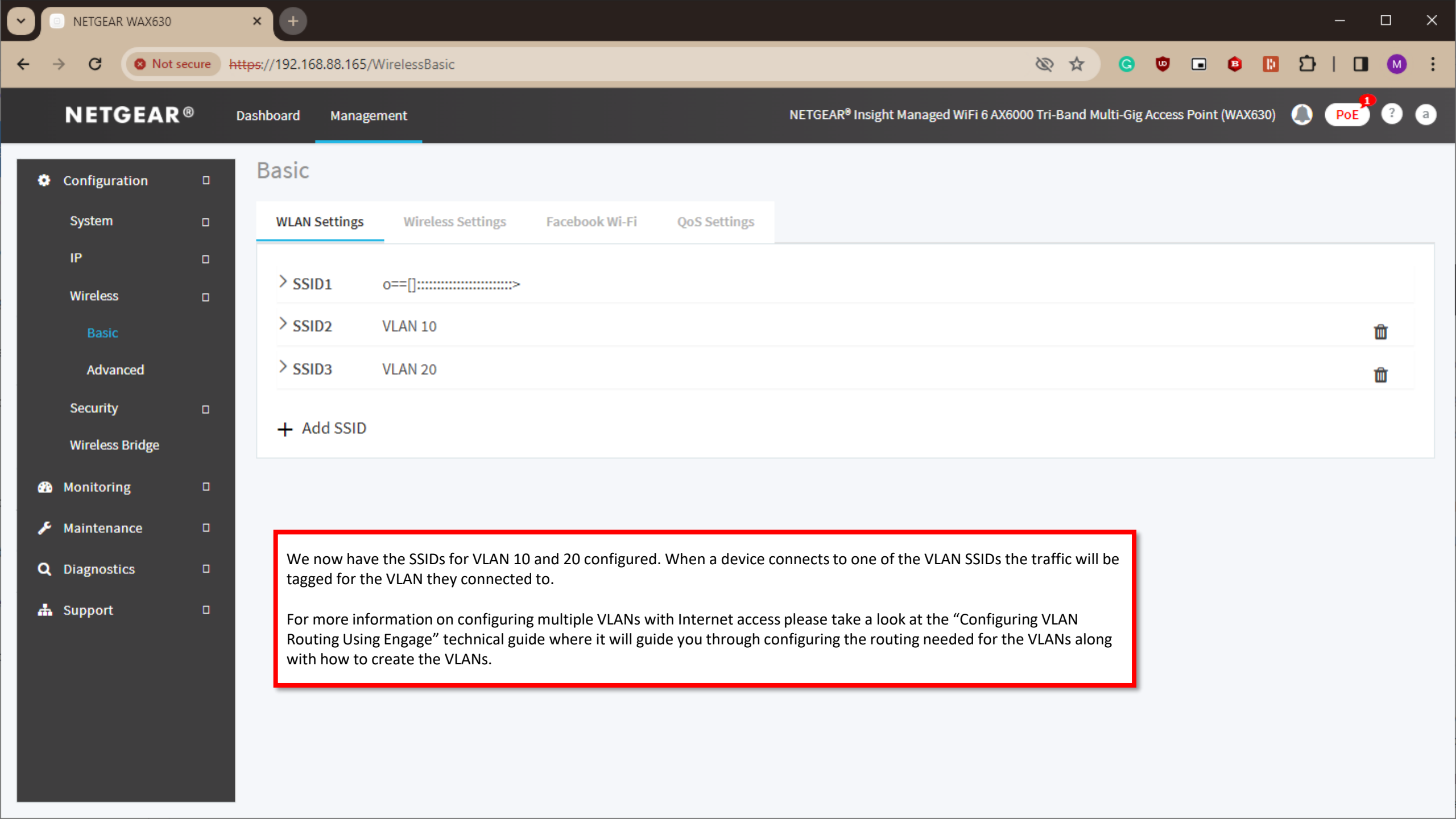
WLAN Settings Wireless Settings Facebook Wi-Fi QoS Settings

> SSID1	o==[]:.....	
> SSID2	VLAN 10	
> SSID3	VLAN 20	
+ Add SSID		

The SSID Name has been added.

OK

Wait for the pop-up letting you know that the SSID has been added and click on "OK."



## Basic

WLAN Settings Wireless Settings Facebook Wi-Fi QoS Settings

> SSID1 o==[]:.....>

> SSID2 VLAN 10



> SSID3 VLAN 20



+ Add SSID

We now have the SSIDs for VLAN 10 and 20 configured. When a device connects to one of the VLAN SSIDs the traffic will be tagged for the VLAN they connected to.

For more information on configuring multiple VLANs with Internet access please take a look at the “Configuring VLAN Routing Using Engage” technical guide where it will guide you through configuring the routing needed for the VLANs along with how to create the VLANs.

- Configuration
- System
- IP
- Wireless
  - Basic
  - Advanced
- Security
- Wireless Bridge
- Monitoring
- Maintenance
- Diagnostics
- Support

End

