

## INTRODUCTION

The Pulse-Eight OneIP Multiviewer is an ultra-low latency, AV-over-IP solution capable of distributing UltraHD 4K HDMI 2.0 video (18Gbps), with support for HDR, over a 1Gbps Ethernet network.

The following is a step-by-step tutorial for configuring the Pakedge MS series switches for use with Pulse-Eight OneIP TRX units. Please follow the instructions below before connecting any OneIP devices to the switch.



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## SUPPORTED PRODUCTS

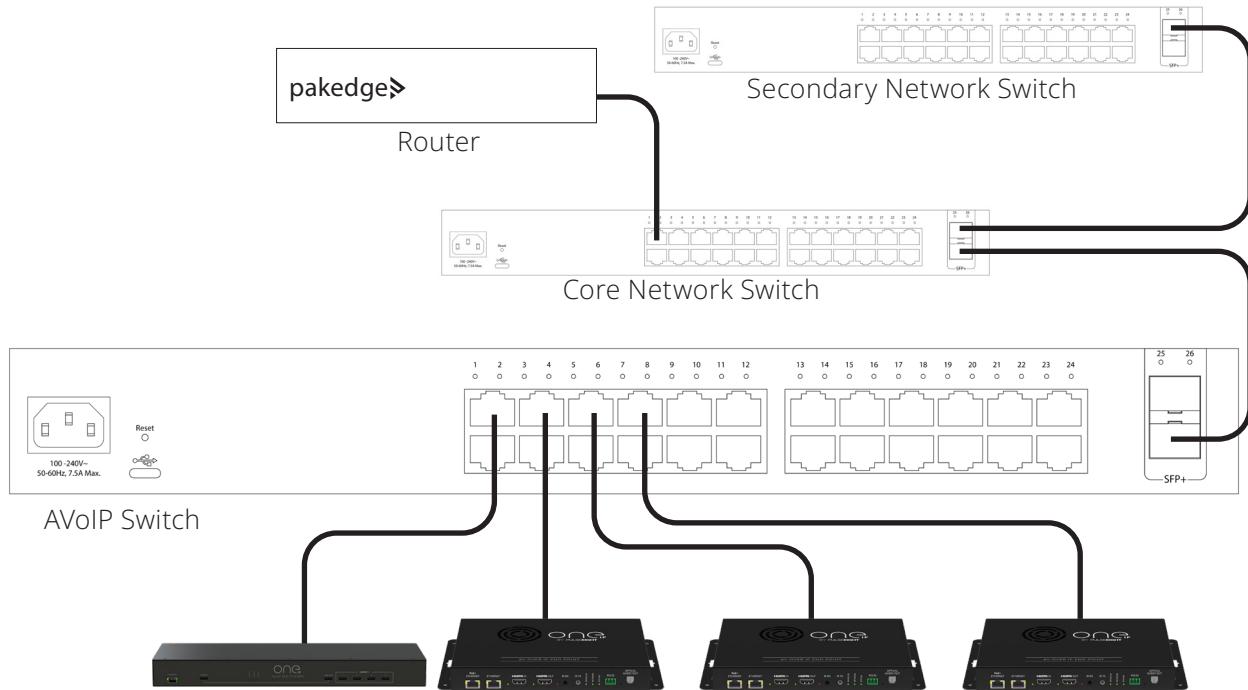
- Pakedge MS series switches.

 *Note: Please note this has only been tested with MS2424 at the present time.*

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## IMPORTANT NOTES!

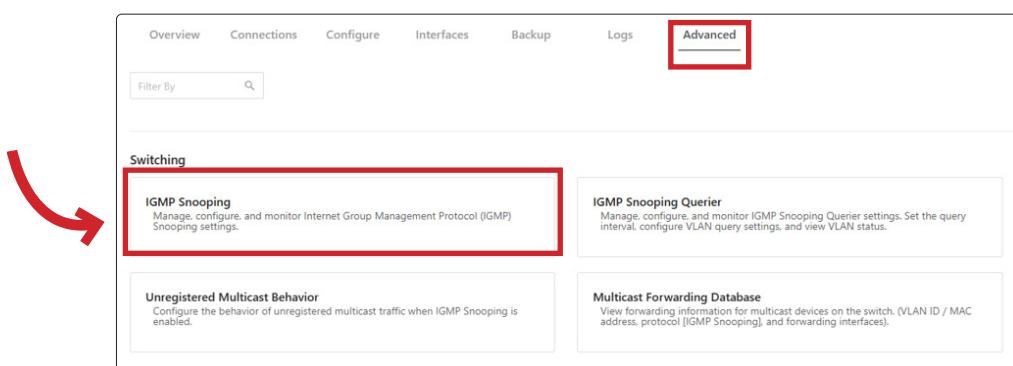
Do **NOT** connect any OneIP devices to the switch before configuration is completed, doing so may cause the switch to run slow or crash due to multicast data flooding the network.



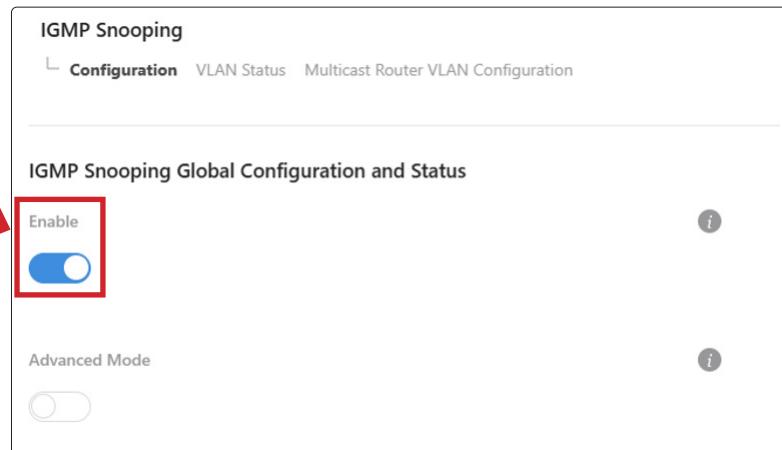
## CORE SWITCH (OR SINGLE SWITCH) CONFIGURATION

Log in to the Pakedge Switch web interface. The Pakedge MS switches are set to DHCP by default; to find an IP address, you need to scan the network or check the DHCP server; if no DHCP server is available, the switch will default to 192.168.1.205.

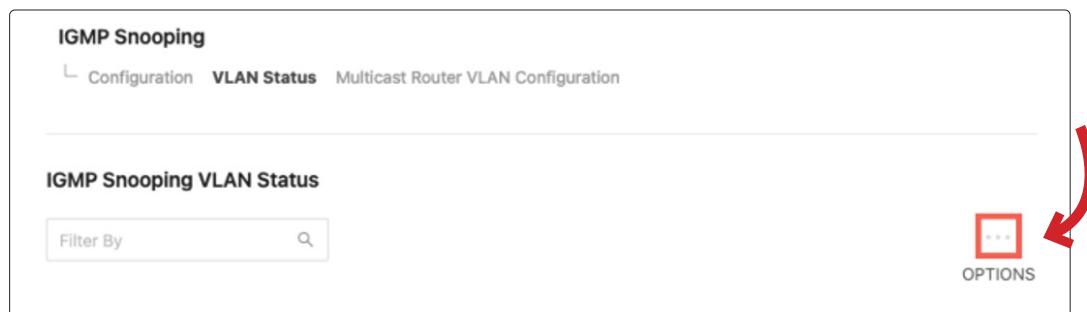
1. Log in to the Web UI. The default credentials are **admin** and **password**.
2. Create a new secure password and username.
3. Set the switch to a static IP address or DHCP reserved from the DHCP server (optional).
  - a. Select "**Configure**" then under "**LAN**" change mode to Static and set the desired IP address, Subnet Mask, and Gateway.
  - b. Save the settings by clicking "**Apply**" in the top right corner of the screen. The switch will reboot and use the static or reserved IP address.
  - c. Once "**Submitting**" shows on the screen, close the browser window.
4. Log in to the Web UI using the new IP address, username, and password.
5. From the main menu, select "**Advanced**" and then '**IGMP Snooping**' under the switching section.



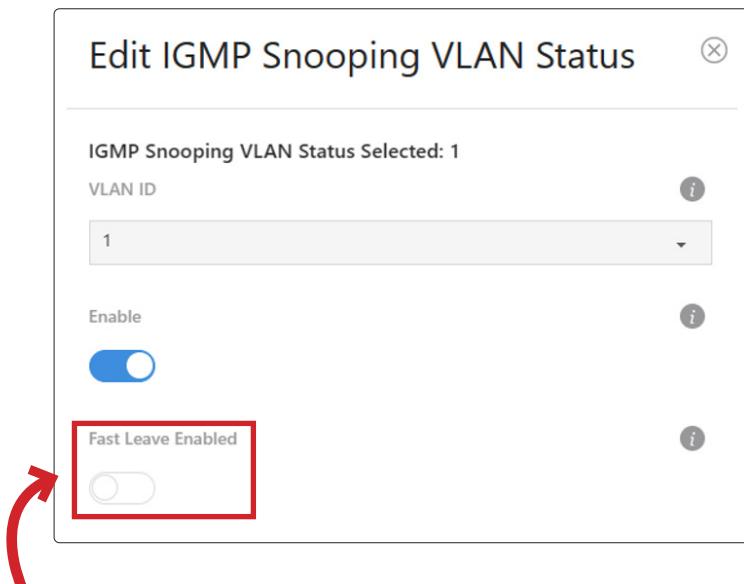
6. Enable the IGMP Snooping Global Configuration and Status toggle switch and click “**Apply**”.



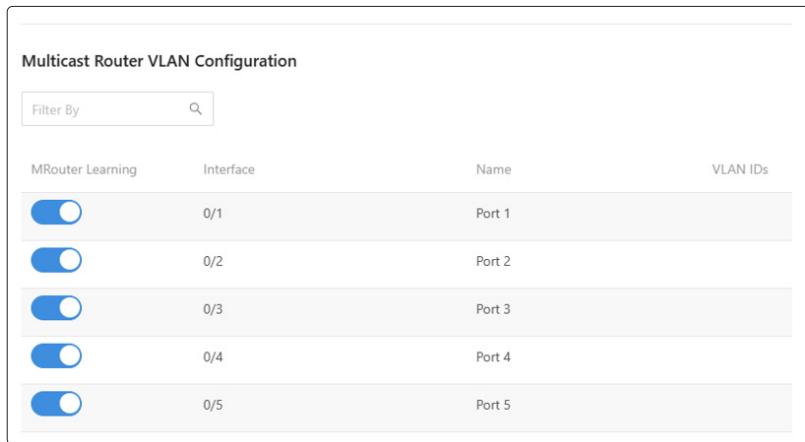
7. Move to the VLAN Status page, and click “**OPTIONS**” button to add a VLAN entry.



8. Select the VLAN ID on which the OneIP devices are connected and disable Fast Leave for all switches.

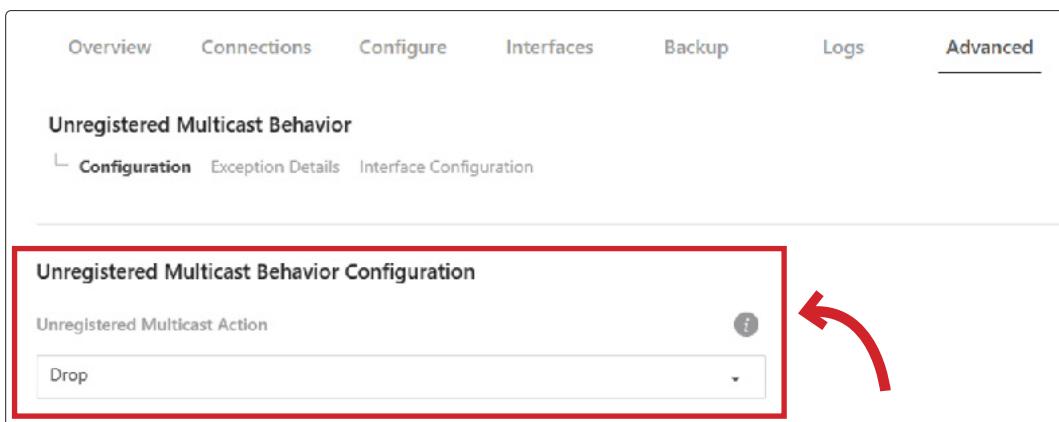


9. Click the **Apply** button in the top right corner of the page.
10. On the **Multicast Router VLAN Configuration** page, enable MRouter Learning on all ports and click **Apply**.



Multicast Router VLAN Configuration			
Filter By	Interface	Name	VLAN IDs
<input checked="" type="checkbox"/>	0/1	Port 1	
<input checked="" type="checkbox"/>	0/2	Port 2	
<input checked="" type="checkbox"/>	0/3	Port 3	
<input checked="" type="checkbox"/>	0/4	Port 4	
<input checked="" type="checkbox"/>	0/5	Port 5	

11. Go to **Advanced > Unregistered Multicast Behaviour > Configuration**. Set **Unregistered Multicast Behaviour Configuration** to Drop. Click **Apply**.



Unregistered Multicast Behavior

↳ Configuration Exception Details Interface Configuration

Unregistered Multicast Behavior Configuration

Unregistered Multicast Action

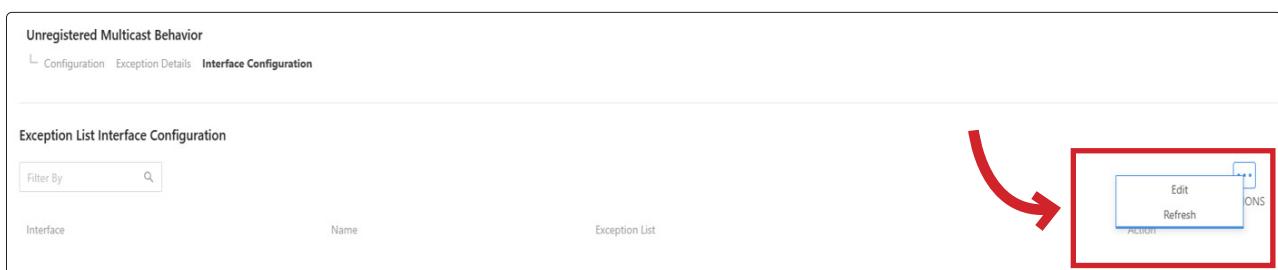
Drop

12. If you notice an entry for **EXC\_default\_list** under the Exemptions list, proceed to the next steps. If not, then your configuration is complete.



Exception List Name	Action
EXC_default_list	

13. Click on the **Interface Configuration** tab, then select **Options** and **Edit**.



Unregistered Multicast Behavior

↳ Configuration Exception Details Interface Configuration

Exception List Interface Configuration

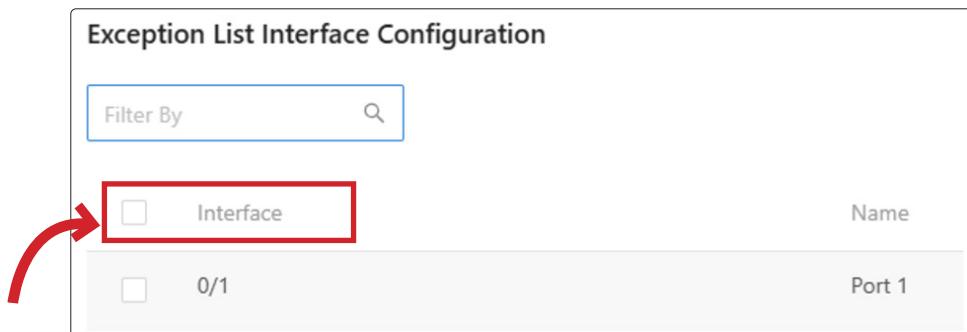
Filter By

Interface	Name	Exception List
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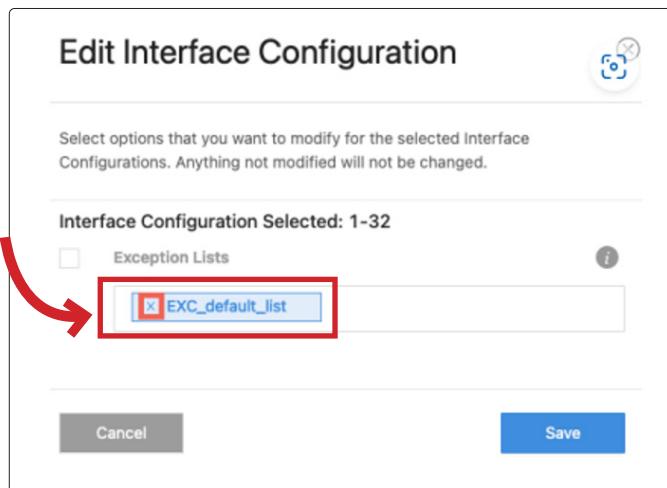
ACTION

Edit Refresh

14. To select all entries in the **EXC\_default\_list**, click the box next to Interface. Then, click Edit Selected.



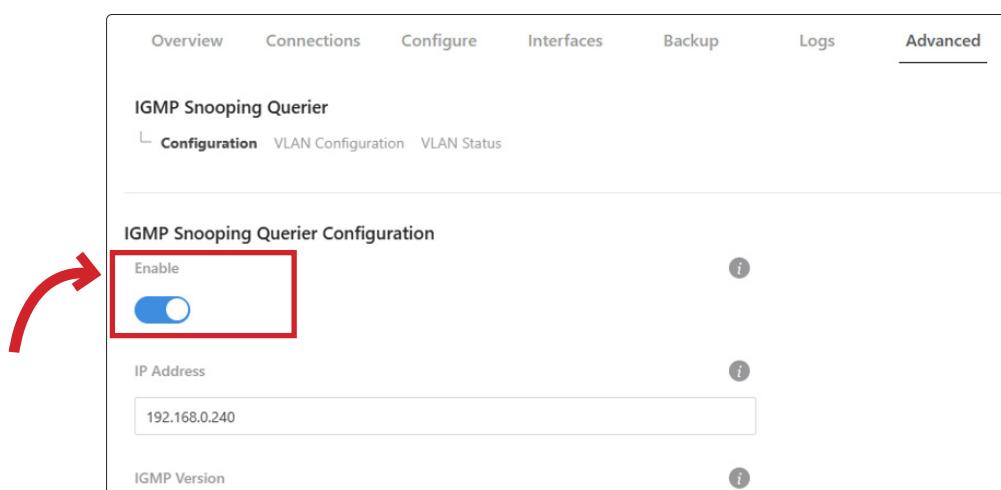
15. Click the "x" in the **EXC\_default\_list** object to delete it.



16. Click **Save** and then **Apply** at the top of the page.

17. Go to **Advanced > IGMP Snooping Querier > Configuration**. Click **Enable** and make sure the **IGMP Version** is set to **V2**, then click **Apply** at the top of the page.

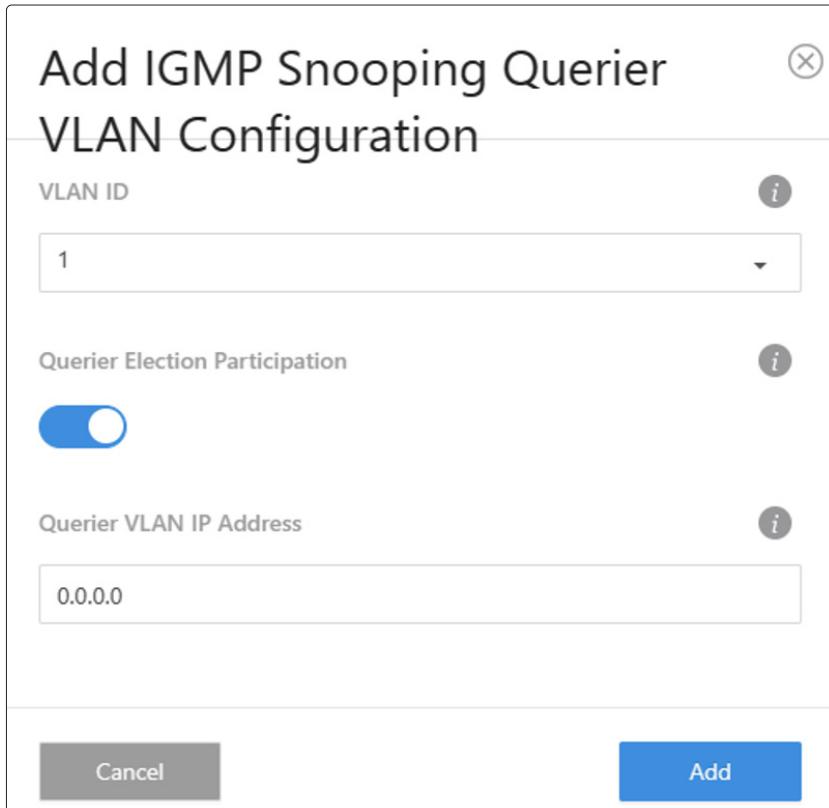
18. The Querier IP address should be set to the same IP address as the switch.



19. Select the **VLAN Configuration Tab** in the **IGMP Snooping Querier** menu.
20. On the right side, select the three dots under **OPTIONS** and choose 'Add'.



21. Confirm VLAN 1 is selected and enable 'Querier Election Participation'. The VLAN IP can be 0.0.0.0.
22. Then, click **Add** button.



Add IGMP Snooping Querier VLAN Configuration

VLAN ID: 1

Querier Election Participation:

Querier VLAN IP Address: 0.0.0.0

**Add**

23. Click the **Apply** button in the top right corner of the screen.
24. This is all that is needed for a single switch setup.

## MANUAL VERSION HISTORY

V1.0 - 8th February 2024. First version.