V 1.0



INTRODUCTION

The Pulse-Eight OneIP transceiver 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 Packedge MS series switches for use with Pulse-Eight OneIP TRX units. Please follow the instructions below before connecting any OneIP devices to the switch.



SUPPORTED PRODUCTS

• Pakedge MS series switches.

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

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.

	Overview Connections Configure Interfaces Backup	Logs Advanced		
4	Switching IGMP Snooping Manage: configure. and monitor Internet Group Management Protocol (IGMP) Snooping settings.	IGMP Snooping Querier Manage, configure, and monitor IGMP Snooping Querier settings. Set the query interval, configure VLAN query settings, and view VLAN status.		
	Unregistered Multicast Behavior Configure the behavior of unregistered multicast traffic when IGMP Snooping is enabled.	Multicast Forwarding Database View forwarding information for multicast devices on the switch. (VLAN ID / MAC address. protocol (ICM/P Snooping), and forwarding interfaces).		



6. Enable the IGMP Snooping Global Configuration and Status toggle switch and click "Apply".

	IGMP Snooping	
	Configuration VLAN Status Multicast Router VLAN Configuration	
1	ICMD Careering Clabel Configuration and Status	
	IGMP Snooping Global Configuration and Status	
y	Enable	•
	Advanced Mode	Ø

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

└─ Configuration	VLAN Status	Multicast Router VLAN Configuration	
GMP Snooping V	/LAN Status		

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

IGMP Snooping V	LAN Status Selected: 1	
VLAN ID		i
1		-
Enable		1
Fast Leave Enabled		G
Tube Ecure Enubled		



- 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.

ilter By	٩		
IRouter Learning	Interface	Name	VLAN IDs
	0/1	Port 1	
	0/2	Port 2	
	0/3	Port 3	
0	0/4	Port 4	

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

Overview	Connections	Configure	Interfaces	Backup	Logs	Advanced
Unregistered I	Multicast Behavic	nterface Config	guration			
Unregistered M Unregistered Multi Drop	lulticast Behavior	Configuration		•	5	

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.



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

Unregistered Multicast Behavior	ce Configuration			
Exception List Interface Configuration				Edit
Interface	Name	Exception List	7	Refresh



14. To select all entries in the **EXC_default_list**, click the box next to Interface. Then, click Edit Selected.

Exception List Interf	ace Configuration	
Filter By	Q	
Interface]	Name
0/1		Port 1

15. Click the "x" in the **EXC_default_list** object to delete it.

	C.
Select options that you want to modify for the selected Configurations. Anything not modified will not be chang	Interface ged.
Interface Configuration Selected: 1-32	
Exception Lists	0
EXC_default_list	
•	
Canaal	Sauce

- 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.

Overview	Connections	Configure	Interfaces	Backup	Logs	Advanced
IGMP Snoopi	ng Querier					
Configuration	on VLAN Configura	tion VLAN Status				
IGMP Snooping	g Querier Config	uration				
Enable				0		
IP Address				0		
192.168.0.240						
IGMP Version				0		



- 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**'.

MP Snooping Queri	er VLAN Configuration		
filter By	٩		Edit
	Outside Floration Distriction	Our site 18 AM ID Address	Add
	spena sector rancipulor	Spartici Screet in Polarica	Refresh

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

Add IGMP Snooping Querier	\otimes
VLAN ID	i
1	•
Querier Election Participation	i
Querier VLAN IP Address	i
0.0.0.0	
Cancel	dd

- 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.