

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 Cisco CBS350 series switch for use with Pulse-Eight OneIP (TRX/TX/RX) units. Please follow the instructions below before connecting any OneIP devices to the switch.

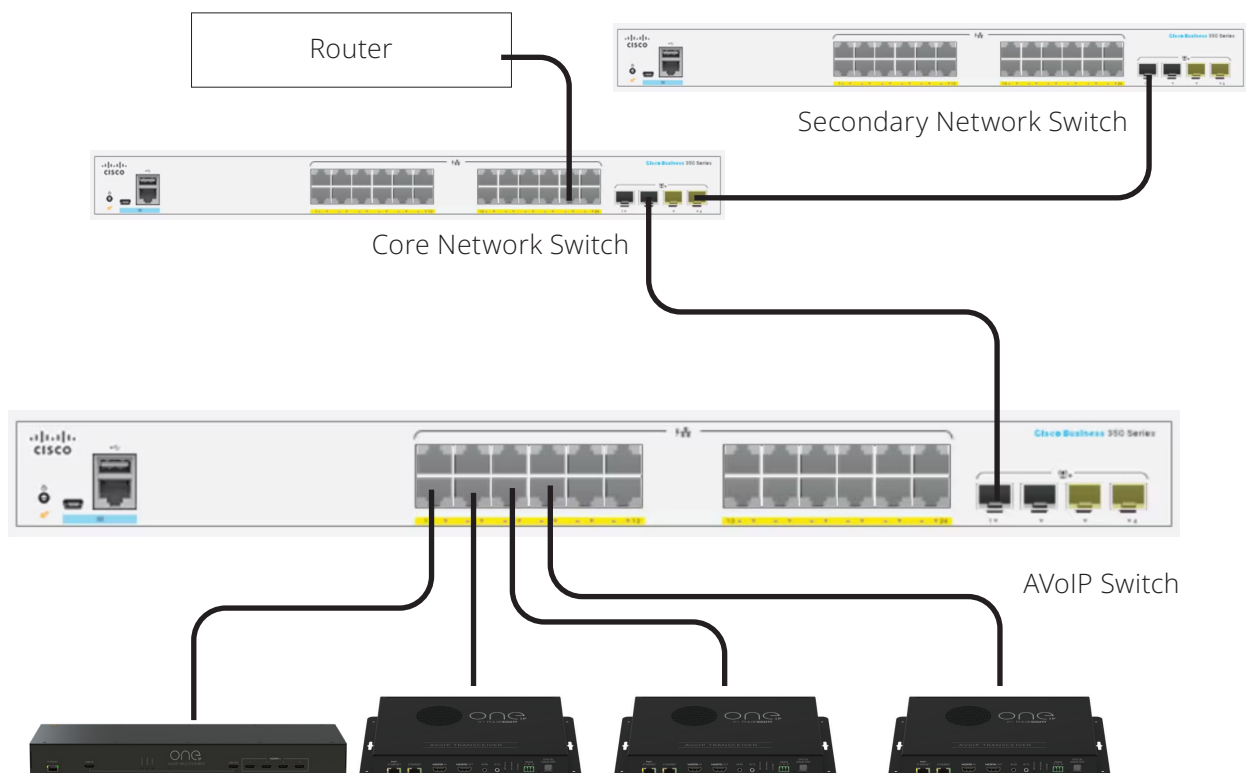


SUPPORTED PRODUCTS

- Cisco CBS350 series switches

IMPORTANT NOTES!

Do **NOT** connect any OneIP devices to the switch before configuration is complete, doing so may cause the switch to run slow or crash due to multicast data flooding the network. Ensure that Querier IP address is pointing at the AV Switch.



CORE SWITCH (OR SINGLE SWITCH) CONFIGURATION

Log into the Cisco Switch web interface, the Cisco CBS350 switches are set to DHCP by default, you will need to scan the network or check DHCP server to find IP address, if no DHCP server is available the switch will default to 192.168.1.254

1. Log into the Web UI. Default credentials are **cisco** and **cisco**.
2. Create a new secure Username and Password and click Apply at top right hand side of screen
3. Log in with New Credentials
4. In the top right drop down menu change access from **Basic** to **Advanced**



5. Navigate to **Port management > Green Ethernet > Properties** Disable 802.3 EEE and click apply

Properties

For the functions and/or parameters configured on this page to become effective, you may have to configure the corresponding port based parameters on [Port Settings](#) page.

Energy Detect Mode: ☐ Enable

Short Reach: ☐ Enable

Port LEDs: ☒ Enable

802.3 Energy Efficient Ethernet (EEE): ☐ Enable

6. Navigate to **Multicast > Properties** and set Bridge Multicast Filtering Status to Enable click apply

Bridge Multicast Filtering Status: ☒ Enable



7. Navigate to **Multicast > IPv4 Multicast Configuration > IGMP Snooping**
- Enable IGMP Snooping Status
 - Enable IGMP Querier Status
 - Click Apply

IGMP Snooping Status: ☒ Enable

IGMP Querier Status: ☒ Enable

8. From the same page click select the radio button in the IGMP snooping table next to Entry No.1 and click the edit button (pencil icon)

IGMP Snooping Table

	Entry No.	VLAN ID
<input type="radio"/>	1	1

9. Adjust the following settings
 - a. Enable IGMP Snooping Status
 - b. Enable Immediate Leave
 - c. Enable IGMP Querier Status
 - d. Enable IGMP Querier Election
 - e. Set IGMP Querier to V2
 - f. Set Querier Source IP Address to Auto

Edit IGMP Snooping Settings

VLAN ID:

IGMP Snooping Status: ☒ Enable

MRouter Ports Auto Learn: ☒ Enable

Immediate Leave: ☒ Enable

Last Member Query Counter: ☒ Use Query Robustness (2)
☐ User Defined (Range: 1 - 7)

IGMP Querier Status: ☒ Enable

IGMP Querier Election: ☒ Enable

IGMP Querier Version: ☒ v2
☐ v3

Querier Source IP Address: ☒ Auto
☐ User Defined

10. Click **Apply**

11. Navigate to **Multicast > Unregistered Multicast** and set all ports to Filtering and click Apply

Unregistered Multicast

Filter: *Interface Type* equals to

Port	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10
Forwarding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filtering	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>

12. Navigate to **Multicast > Multicast router port** and set port connected to core switch or router to 'Forbidden' click apply

Filter: *VLAN ID* equals to AND *IP Version* equals to

Port	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10
Static	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dynamic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forbidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
None	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

13. Once configuration is complete select the red save icon at the top of the screen

13. Switch configuration is now complete you can go ahead and connect the OnelP devices

MANUAL VERSION HISTORY

V1.0 - 24th April 2024