

ZyPer4K Network Switch Configuration Checklist



Intelligent AV Distribution

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Basic Switch Requirements

The ZyPer4K requires that network switches meet the following basic requirements.

1. Must support layer 2 / layer 3 IPV4 protocols
2. Must support 10Gb minimum bandwidth per port
3. Must be a fully “non-blocking” switch
4. Multicast support
5. IGMP v2 with IGMP snooping

Switch Configuration Checklist

Some Switches will work directly out of the box with zero configuration required. Nearly all switches however will provide the user some ability to customize the configuration. The list below includes various switch configuration options that ZeeVee has encountered. Look for these or similar options when configuring your switch.

1. Enable IGMP Snooping
 - a. Must be enabled
2. Enable IGMP Snooping on VLAN used by ZyPer4K system
 - a. Must be enabled when all ports default to VLAN used by ZyPer4K system
3. Filter/Drop unregistered Multicast traffic
 - a. If not applied, the behavior of the switch will be to broadcast multicast packets if the switch has no known destination for that packet.
 - b. Must be enabled if found
4. Unregistered Multicast Flooding
 - a. Must be disabled if found
5. Filter Unregistered Multicast (different wording than number 4 above)
 - a. Must be enabled if found
6. Disable IGMP Query
7. Disable IGMP Query on VLAN used by ZyPer4K system
8. Set IGMP Version to IGMP V2
 - a. Must be set if found
9. Enable FASTLEAVE on port X



- a. Should be enabled, if found
- 10. Enable FASTLEAVE for VLAN used by ZyPer4K system
 - a. Should be enabled if found
- 11. Disable Multicast Storm Control on **Netgear switches**. (*Security-Traffic Control-Storm Control-Status=Disable*)



Appendix 1: Recommended Switches

The following 10Gbit switches are recommended for use with the ZyPer4K. Please note this is not an all-inclusive list. There are many other switches available that will function with the ZyPer4K.

Manufacturer	Model #	Number of Ports		Notes
		Copper	Fiber	
Netgear	ProSafe XS708T	8	2 (shared)	Disable Multicast Storm Control
Netgear	ProSafe XS712T	12	2 (shared)	Smart Switch
Netgear	ProSafe XS716T	16	2 (shared)	Smart Switch
Netgear	M4300-8x8F	8	8	Fully Managed Switch
Netgear	M4300-12x12F	12	12	Fully Managed Switch
Netgear	M4300-16X	16	0	Fully Managed Switch
Netgear	M4300-24X	24	4 (shared)	Fully Managed Switch
Netgear	M4300-24XF	2 (shared)	24	Fully Managed Switch
Netgear	M4300-24x24F	24	24	Fully Managed Switch
Netgear	M4300-48X	48	4 (shared)	Fully Managed Switch
Netgear	M4300-48XF	2 (shared)	48	Fully Managed Switch
Netgear	M4300-96X	96	96	96 Max Ports. Configurable as mix of Copper/Fiber.
Netgear	M4500-48XF8C	0	48	Included 8 100Gb uplink ports for connection to spine switch
Netgear	M4500-32C	0	32	32-port 100G fiber spine switch
Extreme	X670-G2-48x-4q	0	48	4x 40Gb QSFP+ ports
Extreme	X690-48x-2q-4c	0	48	2x 40Gb QSFP+ ports
Extreme	X690-48t-2q-4c	48	0	2x 40Gb QSFP+ ports
Arista	7050TX-48	32		
Arista	7050TX-64	48		
Arista	7050TX-128	96		
Arista	DCS-7504E	192		Linecard based
Arista	DCS-7508E	384		Linecard based
Arista	DCS-7512E	576		Linecard based
Arista	7150S-24		24	
Arista	7150S-52		52	
Arista	DCS-7504N		576	Linecard based
Arista	DCS-7508N		1152	Linecard based
Arista	DCS-7512N		1728	Linecard based
Dell	X4012		12	
Dell	S4048-ON		48	Up to 72 10GbE ports with breakout cables.
Ruckus	ICX7500	48	4	
Ruckus	ICX7750-48F		54*	48 10GbE SFP+ ports and 6 40 GbE QSFP+ ports



Ruckus	ICX7750-48C	48	6	Fiber ports are 40 GbE QSFP+ ports
Cisco	Nexus 2348TQ	48	48	
Cisco	WS-C3580-48XS		48	48 10GbE SFP+ ports and 4 40GbE QSFP+ ports
Huawei	S6720-30C-EI-24S		24	24 10GbE SFP+ ports and 2 40 GbE QSFP+ ports
Huawei	S6720-54C-EI-24S		48	48 10GbE SFP+ ports and 2 40 GbE QSFP+ ports