Multicast Catalyst Switches Support Matrix

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Related Information

Introduction

This document provides information on the support of Layer 2 multicast features in various Cisco Catalyst Series Switches.

These tables provide more information:

- CGMP and IGMP Snooping Catalyst Switches Support Matrix
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Refer to the <u>IP Multicast</u> support page for additional information on implementing the multicast feature and for sample configurations and troubleshooting tips.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

Conventions

Refer to the Cisco Technical Tips Conventions for more information on document conventions.

CGMP and IGMP Snooping Catalyst Switches Support Matrix

This table provides information related to Cisco Group Management Protocol (CGMP) and Internet Group Management Protocol (IGMP) snooping feature support in Cisco Catalyst Switches.

Catalyst Platform	CGMP (Minim um Softwa re Versio n)	Def ault	IGMP Snoopin g (Minimu m Software Version)	Defau It	IGMP V3 (Minimu m Software Version)
Catalyst 6000 - Catalyst OS (CatOS) Software	Not support ed ⁽¹⁾	N/A	Yes (all versions)	Enabl ed (since 5.5.9 and 6.3.1)	Yes (7.5)
Catalyst 6000- Cisco IOS® Software	Not support ed ⁽¹⁾		Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(8a)E)
Catalyst 5000	Yes (2.2)	Dis abl ed	Yes (4.1) ⁽³⁾	Disabl ed	Not supported
Catalyst 4000 - CatOS (Supervisor Engine 1/2) / (2948G/491 2G/2980G)	Yes (2.2)	Dis abl ed	Not supported	N/A	Not supported
Catalyst 4000 - Cisco IOS (Supervisor Engine 2+/3/4/5)	Not support ed ⁽¹⁾	N/A	Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E W)
<u>Catalyst</u> <u>3550</u>	Not support ed ⁽¹⁾	N/A	Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E A1)

<u>Catalyst</u> <u>3560</u>	Not Suppor ted	N/A	Yes (Cisco IOS Software Release 12.1(19)E A1)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E A1)
<u>Catalyst</u> <u>3750</u>	Not support ed ⁽¹⁾	N/A	Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E A1)
Catalyst 2940	Not support ed ⁽¹⁾	N/A	Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E A1)
Catalyst 2950; Catalyst 295 5	Not support ed	N/A	Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E A1)
Catalyst 2960	Not support ed	N/A	Yes (all versions)	Enabl ed	Yes (all versions)
Catalyst 2970	Not support ed	N/A	Yes (all versions)	Enabl ed	Yes (Cisco IOS Software Release 12.1(19)E A1)
Catalyst 2900XL; Catalyst 350 0XL	Yes (all version s)	Ena ble d	Not supported	N/A	Not supported
Catalyst 2948G-L3 / Catalyst 490 8G-L3	Yes (suppor ts CMF in all version s) ⁽⁴⁾	N/A	Not supported	N/A	Not supported
Catalyst 1900 / Catalyst 282	Yes (5.33)	Dis abl ed	Not supported	N/A	Not supported

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<u>8500</u>	Yes (suppor ts CMF in all version s) ⁽⁴⁾	Dis abl ed	Not supported	N/A	Not supported

- ⁽¹⁾ The CGMP server feature is supported in Multilayer Switch Feature Card (MSFC), MSFC2, Catalyst 4000 Supervisor Engine III/IV and Catalyst 3550 and 3750 switches. The CGMP Layer 2 feature is not supported.
- ⁽²⁾ On Catalyst 6500s, before software release 6.3(10), an IGMP Version 3 (V3) packet with more than one group in the same packet was discarded. This is rectified in software release 6.3(10). Software releases 6.3(x) run IGMP Version 2 (V2), and there is no support for V3. An IGMP V3 report is treated as a set of IGMP V2 reports for each of the multicast groups forming the group records in IGMP V3. This happens regardless of the filter mode of the IGMP V3 report. Refer to Cisco bug ID <u>CSCdw61628</u> (registered customers only) for more information. IGMP V3 is supported beginning with version 7.5 software (only in Supervisor Engine II-based Catalyst 6500 systems), and Cisco IOS Software Release 12.1(11b)E1 or later is required on the MSFC2.
- ⁽³⁾ For Catalyst 5000s, Supervisor Engine II G or III G, or Supervisor Engine III with a NetFlow Feature Card (NFFC) or NFFC II, is required for IGMP snooping support. Supervisor Engine software release 4.1 or later is required. Certain hardware requires a later version of software. (For example, the NFFC II requires software release 4.3 or later.)
- ⁽⁴⁾ Constrained Multicast Flooding (CMF) is a Cisco IOS Software method of performing IGMP snooping. It was created for Cisco IOS Layer 3 switches.

CGMP Feature Catalyst Switches Support Matrix

This table lists the CGMP feature support and the commands to enable the feature.

Catalyst Platform	CGMP	CGMP leave	Fastleave
Catalyst 5000	set cgmp {enable disable }	set cgmp leave {enable disable}	Not supported
Catalyst 4000 - CatOS (Supervisor Engine 1/2) / (2948G/4912G/2980G)	set cgmp {enable disable }	set cgmp leave {enable disable}	set cgmp fastleave {enable disable}
Catalyst 2900XL; Catalyst 3500XL	[no] cgmp	[no] cgmp leave processin	Not supported

		g	
Catalyst 2948G-L3 / Catalyst 4908G-L3	[no] bridge cmf	Not supported	Not supported
Catalyst 1900 / Catalyst 2820	[no] cgmp	[no] cgmp leave processin g	Not supported
Catalyst 8500	[no] bridge cmf	Not supported	Not supported

IGMP Snooping Feature Catalyst Switch Support Matrix

This table lists IGMP snooping, IGMP querier, IGMP Filtering, IGMP Throttling, and IGMP Multicast VLAN Registration feature support and the commands needed in order to enable the feature.

Catal yst Platf orm	IG MP Sn oop ing	IGMP Fastleave	IGMP Filtering (Minimu m Softwar e Version)	IGM P Quer ier (Mini mum Soft ware Versi on)	IGM P Thro ttling (Mini mum Soft ware Versi on)	Multi cast VLA N Regi strati on (Mini mum Soft ware Versi on)
Catal yst 6000 - CatO S Softw are	set igm p {en abl e dis abl e}	set igmp fastleave {enable disable}	Not supporte d	set igmp queri er {disa ble enab le} vlan _id 7.1	Not supp orted	Not supp orted
Catal yst 6000- Cisco IOS Softw are	[no] ip igm p sno opi ng	[no] ip igmp snooping fastleave	Not supporte d	[no] ip igmp snoo ping queri er	Not supp orted	Not supp orted

				(und er VLA N interf ace) (Cisc o IOS Softw are Rele ase 12.1(8a)E)		
Catal yst 5000	set igm p {en abl e dis abl e}	set igmp fastleave {enable disable}	Not supporte d	Not supp orted	Not supp orted	Not supp orted
Catal yst 4000 : Cisco IOS Softw are (Sup ervis or Engin e 2+/3/ 4)	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.1(11b)EW)	Curre ntly not supp orted	Not supp orted	Not supp orted
Catal yst 3550	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.1(8)E A1)	Curre ntly not supp orted	Yes (Cisc o IOS Softw are Rele ase 12.1(19)E A1	Yes (Cisc o IOS Softw are Rele ase 12.1(8)EA 1
Catal yst	[no] ip	[no] ip igmp snooping	Yes (Cisco	Yes (Cisc	Yes (Cisc	Yes (Cisc

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3560	igm p sno opi ng	<i>vlan_id</i> immediate- leave	IOS Software Release 12.1(19) EA1)	o IOS Softw are Rele ase 12.2(25)S EA)	o IOS Softw are Rele ase 12.1(19)E A1)	o IOS Softw are Rele ase 12.1(19)E A1)
<u>Catal</u> <u>yst</u> 3750	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.1(11) AX)	Yes (Cisc o IOS Softw are Rele ase 12.2(25)S EA	Yes (Cisc o IOS Softw are Rele ase 12.1(19)E A1	Yes (Cisc o IOS Softw are Rele ase 12.1(11)A X
Catal yst 2940	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.1(11) AX)	Curre ntly not supp orted	Yes (Cisc o IOS Softw are Rele ase 12.1(19)E A1	Yes (Cisc o IOS Softw are Rele ase 12.1(13)A Y
Catal yst 2 950; Catal yst 2 955	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.1(9)E A1)	2950 : Not supp orted 2955 : Yes (Cisc o IOS Softw are Rele ase 12.1(22)E A4	Yes (Cisc o IOS Softw are Rele ase 12.1(19)E A1	2950 : Yes (Cisc o IOS Softw are Rele ase 12.1(6)EA 2c 2955 : Yes (Cisc o IOS Softw are Rele ase

Catal yst 2960	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.2(25) FX	Yes (Cisc o IOS Softw are Rele ase 12.2(25)F X	o IOS	12.1(12c) EA1 Yes (Cisc o IOS Softw are Rele ase 12.2(25)F X
Catal yst 2970	[no] ip igm p sno opi ng	[no] ip igmp snooping <i>vlan_id</i> immediate- leave	Yes (Cisco IOS Software Release 12.1(11) AX)	Yes (Cisc o IOS Softw are Rele ase 12.2(25)S EA	o IOS	Yes (Cisc o IOS Softw are Rele ase 12.1(11)A X

Additional Notes

- 1. IGMPv3 join and leave messages are not supported on switches that run IGMP Filtering or Multicast VLAN Registration.
- 2. Switches support IGMPv3 snooping based only on the destination multicast MAC address and does not support snooping based on the source MAC address or on the proxy reports.

GMRP and RGMP Catalyst Switches Support Matrix

This table lists support for Generic Attribute Registration Protocol (GARP) Multicast Registration Protocol (GMRP) and Router-Port Group Management Protocol (RGMP) support on Catalyst Switches.

Catalyst Platform	GMRP (Minimum Software Version)	RGMP (Minimum Software Version)
Catalyst 6000 - CatOS Software	Yes (5.2)	Yes (5.4)
Catalyst 6000 - Cisco IOS Software	Not supported	Yes (Cisco IOS Software Release 12.1E)
Catalyst 5000	Yes ⁽¹⁾ (5.1)	Yes (5.4)

Catalyst 4000 - CatOS (Supervisor Engine 1/2) / (2948G/4912G/2980G)	Yes (5.1)	Not supported
Catalyst 4000 - Cisco IOS Software (Supervisor Engine 2+/3/4)	Not supported	Not supported
Catalyst 3550	Not supported	Not supported
Catalyst 3750	Not supported	Not supported
Catalyst 2940	Not supported	Not supported
Catalyst 2950; Catalyst 2955	Not supported	Not supported
Catalyst 2970	Not supported	Not supported
Catalyst 2900XL; Catalyst 3500XL	Not supported	Not supported
Catalyst 2948G-L3 / Catalyst 4908G-L3	Not supported	Not supported
Catalyst 1900 / Catalyst 2820	Not supported	Not supported
Catalyst 8500	Not supported	Not supported

^{• &}lt;sup>(1)</sup> Catalyst 5000 requires Supervisor Engine II, IIG, III, or IIIG for GMRP support.

Additional Notes

- You cannot enable GMRP if IGMP snooping is enabled.
- RGMP requires that IGMP snooping is enabled on the switch.
- Both GMRP and RGMP are disabled by default on all supported switches.

Related Information

- IP Multicast Support Page
- Multicast in a Campus Network: CGMP and IGMP Snooping
- Using RGMP: Basics and Case Study
- Constraining Multicast Traffic with Source and Receivers on the Same VLAN on Catalyst Switches Running Catalyst OS
- Switches Product Support
- LAN Switching Technology Support
- Technical Support & Documentation Cisco Systems