



Supported Devices and Software Releases for CiscoWorks QoS Policy Manager 3.1

The tables below describe the devices and software releases that CiscoWorks QoS Policy Manager (QPM) 3.1 supports, and the QoS techniques you can use on the supported platforms. Please note that the information in the tables is subject to change, depending on specific devices and their QoS support.

- [Supported Devices for QPM 3.1, page 1](#)
- [Supported Devices and QoS Techniques for IOS Software Releases, page 8](#)
- [Supported Devices and QoS Techniques for CATOS Software Releases, page 29](#)

Supported Devices for QPM 3.1

[Table 1](#) shows the devices supported by QPM 3.1. For each device series, the table shows the supported device OIDs (Object IDs) and device names.

Table 1 *Devices Supported by QPM 3.1*

Cisco System Device	Device OID	Device Name
1600	1.3.6.1.4.1.9.1.113	cisco1601
	1.3.6.1.4.1.9.1.114	cisco1602
	1.3.6.1.4.1.9.1.115	cisco1603
	1.3.6.1.4.1.9.1.116	cisco1604
	1.3.6.1.4.1.9.1.117	ciscoPro1601
	1.3.6.1.4.1.9.1.118	ciscoPro1602
	1.3.6.1.4.1.9.1.119	ciscoPro1603
	1.3.6.1.4.1.9.1.120	ciscoPro1604
	1.3.6.1.4.1.9.1.172	cisco1605
1720	1.3.6.1.4.1.9.1.201	cisco1720
	1.3.6.1.4.1.9.1.444	cisco1721



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Table 1 Devices Supported by QPM 3.1 (continued)

Cisco System Device	Device OID	Device Name
1750	1.3.6.1.4.1.9.1.216	cisco1750
	1.3.6.1.4.1.9.1.326	cisco1751
1760	1.3.6.1.4.1.9.1.416	cisco1760
2500	1.3.6.1.4.1.9.1.13	cisco2500
	1.3.6.1.4.1.9.1.17	cisco2501
	1.3.6.1.4.1.9.1.18	cisco2502
	1.3.6.1.4.1.9.1.19	cisco2503
	1.3.6.1.4.1.9.1.20	cisco2504
	1.3.6.1.4.1.9.1.21	cisco2505
	1.3.6.1.4.1.9.1.22	cisco2506
	1.3.6.1.4.1.9.1.23	cisco2507
	1.3.6.1.4.1.9.1.24	cisco2508
	1.3.6.1.4.1.9.1.25	cisco2509
	1.3.6.1.4.1.9.1.26	cisco2510
	1.3.6.1.4.1.9.1.27	cisco2511
	1.3.6.1.4.1.9.1.28	cisco2512
	1.3.6.1.4.1.9.1.29	cisco2513
	1.3.6.1.4.1.9.1.30	cisco2514
	1.3.6.1.4.1.9.1.31	cisco2515
	1.3.6.1.4.1.9.1.42	cisco2516
	1.3.6.1.4.1.9.1.55	ciscoPro2500PCE
	1.3.6.1.4.1.9.1.56	ciscoPro2501
	1.3.6.1.4.1.9.1.57	ciscoPro2503
	1.3.6.1.4.1.9.1.58	ciscoPro2505
	1.3.6.1.4.1.9.1.59	ciscoPro2507
	1.3.6.1.4.1.9.1.60	ciscoPro2509
	1.3.6.1.4.1.9.1.61	ciscoPro2511
	1.3.6.1.4.1.9.1.62	ciscoPro2514
	1.3.6.1.4.1.9.1.63	ciscoPro2516
	1.3.6.1.4.1.9.1.64	ciscoPro2519
	1.3.6.1.4.1.9.1.67	cisco2517
	1.3.6.1.4.1.9.1.68	cisco2518
	1.3.6.1.4.1.9.1.69	cisco2519
	1.3.6.1.4.1.9.1.70	cisco2520
	1.3.6.1.4.1.9.1.71	cisco2521
1.3.6.1.4.1.9.1.72	cisco2522	

Table 1 *Devices Supported by QPM 3.1 (continued)*

Cisco System Device	Device OID	Device Name
2500 (continued)	1.3.6.1.4.1.9.1.73	cisco2523
	1.3.6.1.4.1.9.1.74	cisco2524
	1.3.6.1.4.1.9.1.75	cisco2525
	1.3.6.1.4.1.9.1.104	ciscoPro2520
	1.3.6.1.4.1.9.1.105	ciscoPro2522
	1.3.6.1.4.1.9.1.106	ciscoPro2524
	1.3.6.1.4.1.9.1.130	ciscoPro2502
	1.3.6.1.4.1.9.1.131	ciscoPro2504
	1.3.6.1.4.1.9.1.132	ciscoPro2506
	1.3.6.1.4.1.9.1.133	ciscoPro2508
	1.3.6.1.4.1.9.1.134	ciscoPro2510
	1.3.6.1.4.1.9.1.135	ciscoPro2512
	1.3.6.1.4.1.9.1.136	ciscoPro2513
	1.3.6.1.4.1.9.1.137	ciscoPro2515
	1.3.6.1.4.1.9.1.138	ciscoPro2517
	1.3.6.1.4.1.9.1.139	ciscoPro2518
	1.3.6.1.4.1.9.1.140	ciscoPro2523
	1.3.6.1.4.1.9.1.141	ciscoPro2525
	1.3.6.1.4.1.9.1.153	ciscoAS2509RJ
	1.3.6.1.4.1.9.1.154	ciscoAS2511RJ
1.3.6.1.4.1.9.1.165	cisco2501FRADFX	
1.3.6.1.4.1.9.1.166	cisco2501LANFRADFX	
1.3.6.1.4.1.9.1.167	cisco2502LANFRADFX	
2600	1.3.6.1.4.1.9.1.185	cisco2610
	1.3.6.1.4.1.9.1.186	cisco2611
	1.3.6.1.4.1.9.1.187	cisco2612
	1.3.6.1.4.1.9.1.195	cisco2613
	1.3.6.1.4.1.9.1.208	cisco2620
	1.3.6.1.4.1.9.1.209	cisco2621
	1.3.6.1.4.1.9.1.319	cisco2650
	1.3.6.1.4.1.9.1.320	cisco2651
	1.3.6.1.4.1.9.1.413	cisco2691
	1.3.6.1.4.1.9.1.466	cisco2610XM
	1.3.6.1.4.1.9.1.467	cisco2611XM
	1.3.6.1.4.1.9.1.468	cisco2620XM
1.3.6.1.4.1.9.1.469	cisco2621XM	

Table 1 *Devices Supported by QPM 3.1 (continued)*

Cisco System Device	Device OID	Device Name
2600 (continued)	1.3.6.1.4.1.9.1.470	cisco2650XM
	1.3.6.1.4.1.9.1.471	cisco2651XM
3200	1.3.6.1.4.1.9.1.479	cisco3250
3600	1.3.6.1.4.1.9.1.110	cisco3640
	1.3.6.1.4.1.9.1.122	cisco3620
	1.3.6.1.4.1.9.1.205	cisco3660
	1.3.6.1.4.1.9.1.338	cisco3661Ac
	1.3.6.1.4.1.9.1.339	cisco3661Dc
	1.3.6.1.4.1.9.1.340	cisco3662Ac
	1.3.6.1.4.1.9.1.341	cisco3662Dc
	1.3.6.1.4.1.9.1.342	cisco3662AcCo
	1.3.6.1.4.1.9.1.343	cisco3662DcCo
3700	1.3.6.1.4.1.9.1.414	cisco3725
	1.3.6.1.4.1.9.1.436	cisco3745
3800	1.3.6.1.4.1.9.1.157	ciscoMC3810
	1.3.6.1.4.1.9.1.286	ciscoMc3810V3
4000	1.3.6.1.4.1.9.1.7	cisco4000
4500	1.3.6.1.4.1.9.1.14	cisco4500
	1.3.6.1.4.1.9.1.66	ciscoPro4500
4700	1.3.6.1.4.1.9.1.50	cisco4700
	1.3.6.1.4.1.9.1.142	ciscoPro4700
7100	1.3.6.1.4.1.9.1.259	cisco7120QuadT1
	1.3.6.1.4.1.9.1.260	cisco7120T3
	1.3.6.1.4.1.9.1.261	cisco7120E3
	1.3.6.1.4.1.9.1.262	cisco7120At3
	1.3.6.1.4.1.9.1.263	cisco7120Ae3
	1.3.6.1.4.1.9.1.264	cisco7120Smi3
	1.3.6.1.4.1.9.1.265	cisco7140DualT3
	1.3.6.1.4.1.9.1.266	cisco7140Duale3
	1.3.6.1.4.1.9.1.267	cisco7140Dualat3
	1.3.6.1.4.1.9.1.268	cisco7140Dualae3
	1.3.6.1.4.1.9.1.269	cisco7140Dualmm3
1.3.6.1.4.1.9.1.277	cisco7140Dualfe	

Table 1 *Devices Supported by QPM 3.1 (continued)*

Cisco System Device	Device OID	Device Name
7200	1.3.6.1.4.1.9.1.108	cisco7206
	1.3.6.1.4.1.9.1.125	cisco7204
	1.3.6.1.4.1.9.1.179	ciscoUBR7246
	1.3.6.1.4.1.9.1.194	cisco7202
	1.3.6.1.4.1.9.1.210	ciscoUBR7223
	1.3.6.1.4.1.9.1.222	cisco7206VXR
	1.3.6.1.4.1.9.1.223	cisco7204VXR
	1.3.6.1.4.1.9.1.271	ciscoUBR7246VXR
7300	1.3.6.1.4.1.9.1.439	cisco7304
	1.3.6.1.4.1.9.1.476	cisco7301
7400	1.3.6.1.4.1.9.1.376	cisco7401VXR
	1.3.6.1.4.1.9.1.403	cisco7401ASR
7500	1.3.6.1.4.1.9.1.45	cisco7507
	1.3.6.1.4.1.9.1.46	cisco7513
	1.3.6.1.4.1.9.1.48	cisco7505
	1.3.6.1.4.1.9.1.204	cisco7576
	1.3.6.1.4.1.9.1.288	cisco7507z
	1.3.6.1.4.1.9.1.289	cisco7513z
	1.3.6.1.4.1.9.1.290	cisco7507mx
	1.3.6.1.4.1.9.1.291	cisco7513mx
7600	1.3.6.1.4.1.9.1.401	ciscoOSR7603
	1.3.6.1.4.1.9.1.402	ciscoOSR7606
	1.3.6.1.4.1.9.1.509	cisco7609
	1.3.6.1.4.1.9.1.528	cisco7613
7700	1.3.6.1.4.1.9.1.302	cisco7750Mrp200
	1.3.6.1.4.1.9.1.303	cisco7750Ssp80
	1.3.6.1.4.1.9.1.456	cisco7750Mrp300
AS5300	1.3.6.1.4.1.9.1.162	ciscoAS5300
AS5800	1.3.6.1.4.1.9.1.188	ciscoAS5800
C4GWY	1.3.6.1.4.1.9.1.318	catalyst4kGateway

Table 1 *Devices Supported by QPM 3.1 (continued)*

Cisco System Device	Device OID	Device Name
Cat2900	1.3.6.1.4.1.9.1.170	catalyst2908xl
	1.3.6.1.4.1.9.1.171	catalyst2916m-xl
	1.3.6.1.4.1.9.1.183	catalyst2924XL
	1.3.6.1.4.1.9.1.184	catalyst2924CXL
	1.3.6.1.4.1.9.1.217	catalyst2924XLv
	1.3.6.1.4.1.9.1.218	catalyst2924CXLv
	1.3.6.1.4.1.9.1.219	catalyst2912XL
	1.3.6.1.4.1.9.1.220	catalyst2924MXL
	1.3.6.1.4.1.9.1.221	catalyst2912MfXL
Cat2948_L3	1.3.6.1.4.1.9.1.275	cat2948gL3
	1.3.6.1.4.1.9.1.386	cat2948gL3Dc
Cat2950 (Cat2950 running Enhanced Image)	1.3.6.1.4.1.9.1.325	catalyst295024C
	1.3.6.1.4.1.9.1.359	catalyst2950t24
	1.3.6.1.4.1.9.1.427	catalyst295012G
	1.3.6.1.4.1.9.1.428	catalyst295024G
	1.3.6.1.4.1.9.1.429	catalyst295048G
	1.3.6.1.4.1.9.1.430	catalyst295024S
	1.3.6.1.4.1.9.1.472	catalyst295024GDC
	1.3.6.1.4.1.9.1.482	catalyst295024LRESt
	1.3.6.1.4.1.9.1.483	catalyst29508LRESt
	1.3.6.1.4.1.9.1.484	catalyst295024LREG
Cat2950_SI (Cat2950 running Standard Image)	1.3.6.1.4.1.9.1.323	catalyst295012
	1.3.6.1.4.1.9.1.324	catalyst295024
	1.3.6.1.4.1.9.1.480	catalyst295024SX
Cat2980	1.3.6.1.4.1.9.5.49	wsc2980gsysID
	1.3.6.1.4.1.9.5.51	wsc2980gasysID
Cat3500	1.3.6.1.4.1.9.1.246	catalyst3508GXL
	1.3.6.1.4.1.9.1.247	catalyst3512XL
	1.3.6.1.4.1.9.1.248	catalyst3524XL
	1.3.6.1.4.1.9.1.278	cat3548XL
	1.3.6.1.4.1.9.1.287	cat3524tXLEn

Table 1 *Devices Supported by QPM 3.1 (continued)*

Cisco System Device	Device OID	Device Name
Cat3550	1.3.6.1.4.1.9.1.366	catalyst355024
	1.3.6.1.4.1.9.1.367	catalyst355048
	1.3.6.1.4.1.9.1.368	catalyst355012T
	1.3.6.1.4.1.9.1.431	catalyst355012G
	1.3.6.1.4.1.9.1.452	cat355024Dc
	1.3.6.1.4.1.9.1.453	cat355024Mmf
	1.3.6.1.4.1.9.1.485	catalyst355024PWR
Cat4000	1.3.6.1.4.1.9.5.40	wsc4003sysID
	1.3.6.1.4.1.9.5.46	wsc4006sysID
Cat4000(IOS)	1.3.6.1.4.1.9.1.448	cat4006
Cat4200	1.3.6.1.4.1.9.1.399	cisco4224
Cat4232_L3	1.3.6.1.4.1.9.1.300	cat4232L3
Cat4908_L3	1.3.6.1.4.1.9.1.298	cat4908gL3
	1.3.6.1.4.1.9.1.387	cat4908gL3Dc
Cat4500	1.3.6.1.4.1.9.5.58	wsc4503sysID
	1.3.6.1.4.1.9.5.59	wsc4506sysID
Cat4500(IOS)	1.3.6.1.4.1.9.1.501	cat4507
	1.3.6.1.4.1.9.1.502	cat4506
	1.3.6.1.4.1.9.1.503	cat4503
Cat5000	1.3.6.1.4.1.9.5.7	wsc5000sysID
	1.3.6.1.4.1.9.5.17	wsc5500sysID
	1.3.6.1.4.1.9.5.29	wsc5002sysID
	1.3.6.1.4.1.9.5.34	wsc5505sysID
	1.3.6.1.4.1.9.5.36	wsc5509sysID
Cat6000_NO_PFC	1.3.6.1.4.1.9.5.38	wsc6006sysID
	1.3.6.1.4.1.9.5.39	wsc6009sysID
	1.3.6.1.4.1.9.5.44	wsc6509sysID
	1.3.6.1.4.1.9.5.45	wsc6506sysID
	1.3.6.1.4.1.9.5.47	wsc6509nebsysID
	1.3.6.1.4.1.9.5.48	wsc6knamsysID
	1.3.6.1.4.1.9.5.50	wsc6513sysID
	1.3.6.1.4.1.9.5.56	wsc6503sysID
Cat6000_PFC1	Discovered according to the PFC card (sysObjectID similar to Cat6000_NO_PFC)	

Table 1 *Devices Supported by QPM 3.1 (continued)*

Cisco System Device	Device OID	Device Name
Cat6000_PFC1(IOS)	1.3.6.1.4.1.9.1.280	cat6006
	1.3.6.1.4.1.9.1.281	cat6009
	1.3.6.1.4.1.9.1.282	cat6506
	1.3.6.1.4.1.9.1.283	cat6509
	1.3.6.1.4.1.9.1.310	cat6509Sp
	1.3.6.1.4.1.9.1.400	ciscoWSC6513
	1.3.6.1.4.1.9.1.449	ciscoWSC6503
Cat6000_PFC2	Discovered according to the PFC card (sysObjectID similar to Cat6000_NO_PFC)	
Cat6000_PFC2(IOS)	Discovered according to the PFC card (sysObjectID similar to Cat6000_PFC1(IOS))	
Cat6000_PFC3	Discovered according to the PFC card (sysObjectID similar to Cat6000_NO_PFC)	
Cat6000_PFC3(IOS)	Discovered according to the PFC card (sysObjectID similar to Cat6000_PFC1(IOS))	
Cat8500	1.3.6.1.4.1.9.1.190	cisco8510
	1.3.6.1.4.1.9.1.196	cisco8515
	1.3.6.1.4.1.9.1.207	catalyst8500
	1.3.6.1.4.1.9.1.202	catalyst8540msr
	1.3.6.1.4.1.9.1.203	catalyst8540csr
	1.3.6.1.4.1.9.1.230	catalyst8510msr
MSFC	1.3.6.1.4.1.9.1.258	catalyst6kMsfc
	1.3.6.1.4.1.9.1.301	catalyst6kMsfc2
RSM	1.3.6.1.4.1.9.1.168	ciscoWSX5302
VG200	1.3.6.1.4.1.9.1.279	ciscoVG200

Supported Devices and QoS Techniques for IOS Software Releases

Cisco IOS releases supported include 11.1cc, 12.0, 12.1, 12.2, 12.1E, and 12.T. In addition, a Cisco IOS mapping function is used to enable QPM 3 to support 12.1E and 12.2T QoS techniques included in later releases of IOS main (T or E train) software.

These tables show the QoS techniques that you can use with the devices and IOS software releases that QPM 3 supports:

- [Supported Scheduling Methods, page 9](#)
- [Supported Modular CLI \(MQC\) Features, page 12](#)
- [Supported Marking, Policing, and Shaping Methods, page 16](#)
- [Supported Link Efficiency Features, page 18](#)
- [Resource Reservation Protocol Support, page 20](#)

- [Supported Frame Relay Traffic Shaping Features, page 21](#)
- [Access Control Policy Support, page 23](#)
- [Supported Features for IOS 11.1CC, page 24](#)
- [QoS Analysis \(Monitoring\) Capabilities, page 24](#)
- [Supported Queuing, Shaping, and Policing Features for Layer 3 Devices, page 26](#)
- [Supported QoS Features for Switches Running IOS, page 27](#)

Supported Scheduling Methods

[Table 2](#) shows the scheduling techniques that QPM supports on the devices and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
CBQ	Class-Based QoS	Class-Based QoS ¹
CQ	CQ	Custom Queuing
DWFQ	DWFQ	Distributed WFQ and QoS group DWFQ
DWRED	WRED	Distributed WRED
FIFO	FIFO	First In First Out Queuing
FQ	FQ	Fair Queuing (Flow-based Distributed WFQ)
PQ	PQ	Priority Queuing
WFQ	WFQ	Weighted Fair Queuing
WRED	WRED	Weighted Random Early Detection

1. Details of the Class-Based QoS features supported by QPM are shown in [Table 3](#).

Table 2 Supported Scheduling Techniques on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1600	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
1720	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
1750	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ

Table 2 Supported Scheduling Techniques on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1760	-	-	-	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
2500	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	-
2600	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
3200	-	-	-	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
3600	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
3700	-	-	-	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
MC3810	-	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
4000	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	-
4500	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
4700	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ
AS5300	WRED, FIFO, WFQ	CBQ, WRED, FIFO, WFQ	CBQ, WRED, FIFO, WFQ	-	-	-
AS5800	FIFO	FIFO	FIFO	-	-	-
7100	-	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ
7200	CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ
7300	-	-	-	CBQ	CBQ, CQ ⁴ , PQ ⁴ , FIFO ⁴ , WRED ⁴ , WFQ ⁴	-

Table 2 Supported Scheduling Techniques on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
7400	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	CBQ, CQ, PQ, FIFO, WRED, WFQ	CBQ, CQ, PQ, FIFO, WRED, WFQ
7500	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ
7500 with VIP	DWRED, FQ, FIFO	DWRED, FQ, DWFQ, FIFO	CBQ, DWRED, FQ, FIFO	CBQ, DWRED, FQ, FIFO	CBQ, DWRED, FQ, FIFO	CBQ, DWRED, FQ, FIFO
7700	-	-	CBQ, FIFO	-	-	CBQ, FIFO
Cat4200	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	-
C4GWY (C4 Gateway)	-	-	CBQ, CQ, PQ, FIFO, WRED, WFQ	-	-	-
VG200	-	-	CBQ, WRED	-	-	CBQ, WRED
LAN ports on Cat6000(IOS), LAN ports on 7600 IR	-	-	-	CBQ ⁵	CBQ ⁵	-
MSFC FlexWAN, MSFC FlexWAN on Cat6000(IOS), MSFC FlexWAN on 7600 IR	-	-	-	CBQ, DWRED, FQ, FIFO	CBQ, DWRED, FQ, FIFO	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	CBQ	CBQ	-
RSM (Catalyst 5000)	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	CQ, PQ, FIFO, WRED, WFQ	-	-	-
RSM (Catalyst 5000) with VIP	DWRED, FQ, FIFO	DWRED, FQ, FIFO	CBQ, DWRED, FQ, FIFO	-	-	-

1. Latest features supported for 12.1(13)E and 12.1(13)EX releases. QPM supports 12.1(13)E and 12.1(13)EX QoS techniques included in later releases of IOS 12.1E or 12.1EX train software.
2. Latest features supported for 12.2(14)S release. QPM supports 12.2(14)S QoS techniques included in later releases of IOS 12.2S train software.
3. Latest features supported for 12.2(13)T release. QPM supports 12.2(13)T QoS techniques included in later releases of IOS 12.2T train software.
4. Not supported on 7300 with NSE-100.
5. NBAR must be enabled on LAN ports on Cat6000(IOS) and 7600 IR when configuring CBQ.

Supported Modular CLI (MQC) Features

Table 3 shows the Modular CLI (MQC) features that QPM supports on the devices and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
Shaping	Shaping, Modular Shaping	Class-Based Shaping and Hierarchical Shaping
D-Shaping	Shaping, Modular Shaping	Class-Based Distributed Shaping and Hierarchical Distributed Shaping
ToS Marking	IP Precedence, DSCP Marking	Class-Based IP Precedence and IP DSCP Marking
COS ¹	CoS Marking	Class-Based Set Layer 2 Class Of Service Byte
MPLS	MPLS	Class-Based Set and Match MPLS Experimental Byte
FR-DE	FR-DE	Class-Based Set and Match of Frame Relay Discard Eligibly Bit
Policing	Policing	Class-Based Policing
ERate Policing	Policing with Excess rate	Class-Based Excess Rate Policing
LLQ	Priority	Class-Based Low Latency Queuing
IP-RTP	IP-RTP	Class-Based IP-RTP classification
FRF	Voice Fragmentation	Class-Based QoS using MQC with Frame Relay Fragmentation
DFRF	Voice Fragmentation	Class-Based QoS using MQC with Distributed Frame Relay Fragmentation
NBAR	NBAR	Class-Based Network-Based Application Recognition
D-NBAR	NBAR	Class-Based Distributed Network-Based Application Recognition

1. CoS marking is supported only on ISL/802.1Q interfaces

Table 3 Supported MQC Features on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1600	-	LLQ	FRF, LLQ, Shaping	-	-	FRF, LLQ, Shaping
1720	-	-	FRF, ToS Marking, LLQ, Shaping	-	-	FRF, ToS Marking, Policing, LLQ, NBAR, Shaping
1750	-	-	FRF, ToS Marking, LLQ, Shaping	-	-	FRF, ToS Marking, Policing, LLQ, NBAR, Shaping
1760	-	-	-	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE
2500	-	LLQ	FRF, IP-RTP, ToS Marking, Policing, LLQ,	-	-	-
2600	-	FRF, LLQ	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , ERate Policing	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, ERate Policing
3200	-	-	-	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, Shaping, COS ⁴ , FR-DE, ERate Policing
3600	-	FRF, LLQ	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , ERate Policing	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, ERate Policing

Table 3 Supported MQC Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
3700	-	-	-	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, ERate Policing
MC3810	-	LLQ	FRF, LLQ, Shaping	-	-	FRF, LLQ, Shaping
4000	-	-	FRF, Policing	-	-	-
4500	-	LLQ	FRF, IP-RTP, ToS Marking, Policing, LLQ, COS ⁴ , ERate Policing	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, COS ⁴ , FR DE, ERate Policing
4700	-	LLQ	FRF, ToS Marking, Policing, LLQ, COS ⁴ , ERate Policing	-	-	FRF, ToS Marking, Policing, LLQ, COS ⁴ , FR-DE, ERate Policing
AS5300	-	LLQ	LLQ, Shaping	-	-	-
AS5800	-	-	-	-	-	-
7100	-	LLQ	FRF, IP-RTP, ToS Marking, LLQ, Policing, NBAR, Shaping, ERate Policing	FRF, ToS Marking, LLQ, Policing, NBAR	FRF, IP-RTP, ToS Marking, LLQ, Policing, NBAR, Shaping	FRF, IP-RTP, ToS Marking, LLQ, Policing, NBAR, Shaping, ERate Policing
7200	-	FRF, LLQ	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , MPLS, ERate Policing	FRF, ToS Marking, Policing, LLQ, NBAR, MPLS	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, MPLS	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, MPLS, ERate Policing
7300	-	-	-	ToS Marking, Policing, LLQ, MPLS	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, MPLS	-

Table 3 Supported MQC Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
7400	-	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping	-	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, MPLS	FRF, IP-RTP, ToS Marking, Policing, LLQ, NBAR, Shaping, COS ⁴ , FR-DE, MPLS, ERate Policing
7500	-	-	-	-	-	-
7500 with VIP	-	-	D-FRF, IP-RTP, ToS Marking, Policing, LLQ, D-Shaping, COS ⁴ , MPLS, ERate Policing	D-FRF, ToS Marking, Policing, LLQ, D-NBAR, MPLS	D-FRF, IP-RTP, ToS Marking, Policing, LLQ, D-NBAR, D-Shaping, COS ⁴ , FR-DE, MPLS	D-FRF, IP-RTP, ToS Marking, Policing, LLQ, D-NBAR, D-Shaping, COS ⁴ , FR-DE, MPLS, ERate Policing
7700	-	-	FRF, ToS Marking, LLQ, Shaping	-	-	FRF, ToS Marking, LLQ, Shaping
Cat 4200	-	-	FRF, IP-RTP, LLQ, NBAR, Shaping	-	-	-
C4GWY (C4 Gateway)	-	-	FRF, IP-RTP, LLQ, NBAR, Shaping	-	-	-
VG200	-	-	IP-RTP, LLQ, Shaping	-	-	FRF, IP-RTP, LLQ, NBAR, Shaping
LAN ports on Cat6000(IOS), LAN ports on 7600 IR ⁵	-	-	-	ToS Marking, Policing, LLQ, D-Shaping, MPLS, D-NBAR	ToS Marking, Policing, LLQ, D-Shaping, MPLS, D-NBAR	-
MSFC FlexWAN, MSFC FlexWAN on Cat6000(IOS), MSFC FlexWAN on 7600 IR	-	-	-	ToS Marking, Policing, LLQ, D-Shaping, MPLS, D-NBAR	ToS Marking, Policing, LLQ, D-Shaping, MPLS, D-NBAR	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	ToS Marking, LLQ, Shaping, MPLS, NBAR	ToS Marking, LLQ, Shaping, MPLS, NBAR	-

Table 3 Supported MQC Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
RSM (Catalyst 5000)	-	-	-	-	-	-
RSM (Catalyst 5000) with VIP	-	-	IP-RTP, ToS Marking, Policing, LLQ, D-Shaping, COS ⁴ , MPLS, ERate Policing	-	-	-

1. Latest features supported for 12.1(13)E and 12.1(13)EX releases. QPM supports 12.1(13)E and 12.1(13)EX QoS techniques included in later releases of IOS 12.1E or 12.1EX train software.
2. Latest features supported for 12.2(14)S release. QPM supports 12.2(14)S QoS techniques included in later releases of IOS 12.2S train software.
3. Latest features supported for 12.2(13)T release. QPM supports 12.2(13)T QoS techniques included in later releases of IOS 12.2T train software.
4. CoS marking is supported only on ISL/802.1Q interfaces
5. NBAR must be enabled on LAN ports on Cat6000(IOS) and 7600 IR when configuring CBQ.

Supported Marking, Policing, and Shaping Methods

Table 4 shows the marking, policing, and shaping methods that QPM supports on the devices and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
PBR	Marking	Policy Based Routing (also called coloring or classification)
GTS	Shaping	Generic Traffic Shaping
CAR	Policing	Committed Access Rate

Table 4 Supported Marking, Policing, and Shaping Features on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1600	PBR, GTS	GTS, CAR	GTS, CAR	-	-	GTS, CAR
1720	GTS, CAR	GTS, CAR	GTS, CAR	-	-	GTS, CAR
1750	GTS, CAR	GTS, CAR	GTS, CAR	-	-	GTS, CAR
1760	-	-	-	-	-	GTS, CAR
2500	PBR, GTS	GTS, CAR	GTS, CAR	-	-	-
2600	GTS, CAR	GTS, CAR	GTS, CAR	-	-	GTS, CAR
3200	-	-	-	-	-	GTS, CAR
3600	GTS, CAR	GTS, CAR	GTS, CAR	-	-	GTS, CAR
3700	-	-	-	-	-	GTS, CAR

Table 4 Supported Marking, Policing, and Shaping Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
MC3810	-	PBR, GTS	PBR, GTS	-	-	PBR, GTS
4000	PBR, GTS	PBR, GTS	PBR, GTS	-	-	-
4500	GTS, CAR	GTS, CAR	GTS, CAR	-	-	GTS, CAR
4700	GTS, CAR	GTS, CAR	GTS, CAR	-	-	GTS, CAR
AS5300	-	-	-	-	-	-
AS5800	-	-	-	-	-	-
7100	-	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR
7200	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR
7300	-	-	-	-	GTS ⁴ , CAR ⁴	-
7400	-	-	GTS, CAR	-	GTS, CAR	GTS, CAR
7500	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR	GTS, CAR
7500 with VIP	CAR	CAR	CAR	CAR	CAR	CAR
7700	-	-	-	-	-	GTS, CAR
Cat 4200	-	-	GTS, CAR	-	-	-
C4GWY (C4 Gateway)	-	-	GTS, CAR	-	-	-
VG200	-	-	GTS	-	-	GTS
MSFC FlexWAN, MSFC FlexWAN on Cat6000(IOS), MSFC FlexWAN on 7600 IR	-	-	-	CAR	CAR	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	-	-	-
RSM (Catalyst 5000)	GTS, CAR	GTS, CAR	GTS, CAR	-	-	-
RSM (Catalyst 5000) with VIP	CAR	CAR	CAR	-	-	-

1. Latest features supported for 12.1(13)E and 12.1(13)EX releases. QPM supports 12.1(13)E and 12.1(13)EX QoS techniques included in later releases of IOS 12.1E or 12.1EX train software.
2. Latest features supported for 12.2(14)S release. QPM supports 12.2(14)S QoS techniques included in later releases of IOS 12.2S train software.
3. Latest features supported for 12.2(13)T release. QPM supports 12.2(13)T QoS techniques included in later releases of IOS 12.2T train software.
4. Not supported on 7300 with NSE-100.

Supported Link Efficiency Features

Table 5 shows the link efficiency features that QPM supports on the devices and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
IP RTP	IP RTP	IP Real-time Protocol Priority (for IOS releases that do not support MQC IP RTP).
CRTP	CRTP	Compressed Real-time Protocol
LFI	LFI	Link Fragmentation and Interleaving
DCRTP	CRTP	Distributed Compressed Real-time Protocol
DLFI	LFI	Distributed Link Fragmentation and Interleaving
TX-Ring Limit	TX-Ring Limit	Transmission Ring Limit

Table 5 Supported Link Efficiency Features on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1600	CRTP, LFI	IP RTP, CRTP, LFI	-	-	-	-
1720	CRTP, LFI	CRTP, LFI	IP RTP, CRTP, LFI	-	-	IP RTP, CRTP, LFI
1750	CRTP, LFI	CRTP, LFI	IP RTP, CRTP, LFI	-	-	IP RTP, CRTP, LFI
1760	-	-	-	-	-	IP RTP, CRTP, LFI
2500	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	-	-	-
2600	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI, TX-Ring Limit	-	-	IP RTP, CRTP, LFI, TX-Ring Limit
3200	-	-	-	-	-	IP RTP, CRTP, LFI
3600	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI, TX-Ring Limit	-	-	IP RTP, CRTP, LFI, TX-Ring Limit
3700	-	-	-	-	-	IP RTP, CRTP, LFI, TX-Ring Limit

Table 5 Supported Link Efficiency Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
MC3810	-	CRTP, LFI	IP RTP, CRTP, LFI	-	-	IP RTP, CRTP, LFI
4000	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	-	-	-
4500	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	-	-	IP RTP, CRTP, LFI
4700	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	-	-	IP RTP, CRTP, LFI
AS5300	-	CRTP, LFI	CRTP, LFI	-	-	-
AS5800	-	-	-	-	-	-
7100	-	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI
7200	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI, TX-Ring Limit	IP RTP, CRTP, LFI, TX-Ring Limit	IP RTP, CRTP, LFI, TX-Ring Limit	IP RTP, CRTP, LFI, TX-Ring Limit
7300	-	-	-	-	IP RTP ⁴ , CRTP ⁴ , LFI ⁴ , TX-Ring Limit ⁴	-
7400	-	-	IP RTP, CRTP, LFI	-	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI
7500	CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI	IP RTP, CRTP, LFI
7500 with VIP	-	-	DCRTP, TX-Ring Limit	TX-Ring Limit	TX-Ring Limit	DCRTP, DLFI, TX-Ring Limit
7700	-	-	-	-	-	-
Cat 4200	-	-	IP RTP, CRTP, LFI	-	-	-
C4GWY (C4 Gateway)	-	-	IP RTP, CRTP, LFI	-	-	-
CVG200	-	-	-	-	-	-
MSFC FlexWAN, MSFC FlexWAN on Cat6000(IOS), MSFC FlexWAN on 7600 IR	-	-	-	-	-	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	-	-	-
RSM (Catalyst 5000)	CRTP, LFI	CRTP, LFI	CRTP, LFI	-	-	-

Table 5 Supported Link Efficiency Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
RSM (Catalyst 5000) with VIP	-	-	-	-	-	-

1. Latest features supported for 12.1(13)E and 12.1(13)EX releases. QPM supports 12.1(13)E and 12.1(13)EX QoS techniques included in later releases of IOS 12.1E or 12.1EX train software.
2. Latest features supported for 12.2(14)S release. QPM supports 12.2(14)S QoS techniques included in later releases of IOS 12.2S train software.
3. Latest features supported for 12.2(13)T release. QPM supports 12.2(13)T QoS techniques included in later releases of IOS 12.2T train software.
4. Not supported on 7300 with NSE-100.

Resource Reservation Protocol Support

Table 6 shows the devices and IOS software releases that support Resource Reservation Protocol signaling. The table uses the following abbreviations:

RSVP Resource Reservation Protocol signaling

Table 6 RSVP Support on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1600	RSVP	RSVP	-	-	-	-
1720	-	RSVP	RSVP	-	-	RSVP
1750	-	RSVP	RSVP	-	-	RSVP
1760	-	-	-	-	-	RSVP
2500	RSVP	RSVP	RSVP	-	-	-
2600	RSVP	RSVP	RSVP	-	-	RSVP
3200	-	-	-	-	-	RSVP
3600	RSVP	RSVP	RSVP	-	-	RSVP
3700	-	-	-	-	-	RSVP
MC3810	-	RSVP	RSVP	-	-	RSVP
4000	RSVP	RSVP	RSVP	-	-	-
4500	RSVP	RSVP	RSVP	-	-	RSVP
4700	RSVP	RSVP	RSVP	-	-	RSVP
AS5300	-	-	-	-	-	-
AS5800	-	-	-	-	-	-
7100	-	RSVP	RSVP	RSVP	RSVP	RSVP
7200	RSVP	RSVP	RSVP	RSVP	RSVP	RSVP
7300	-	-	-	-	RSVP ⁴	-

Table 6 *RSVP Support on Devices and IOS Software Releases (continued)*

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
7400	-	-	RSVP	-	RSVP	RSVP
7500	RSVP	RSVP	RSVP	RSVP	RSVP	RSVP
7500 with VIP	-	-	-	-	-	-
7700	-	-	-	-	-	-
Cat 4200	-	-	RSVP	-	-	-
C4GWY (C4 Gateway)	-	-	RSVP	-	-	-
VG200	-	-	RSVP	-	-	RSVP
MSFC Flex WAN, MSFC Flex WAN on Cat6000(IOS), MSFC Flex WAN on 7600 IR	-	-	-	RSVP	RSVP	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	-	-	-
RSM (Catalyst 5000)	-	-	-	-	-	-
RSM (Catalyst 5000) with VIP	-	-	-	-	-	-

1. Latest features supported for 12.1(13)E and 12.1(13)EX releases. QPM supports 12.1(13)E and 12.1(13)EX QoS techniques included in later releases of IOS 12.1E or 12.1EX train software.
2. Latest features supported for 12.2(14)S release. QPM supports 12.2(14)S QoS techniques included in later releases of IOS 12.2S train software.
3. Latest features supported for 12.2(13)T release. QPM supports 12.2(13)T QoS techniques included in later releases of IOS 12.2T train software.
4. Not supported on 7300 with NSE-100.

Supported Frame Relay Traffic Shaping Features

Table 7 shows the frame relay traffic shaping methods that QPM supports on the devices and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
FRTS	FRTS	Frame Relay Traffic Shaping
FRF	Voice Fragmentation	Enhanced Frame Relay Traffic Shaping with Frame Relay fragmentation (FRF.12)

QoS Feature	QPM Name	Description
FRFQ	Extra Parameters for FRTS	Enhanced Frame Relay Traffic Shaping with Frame Relay Fair Queue
FRV	Voice bandwidth	Enhanced Frame Relay Traffic Shaping with Frame Relay Voice Configuration (Frame Relay Voice bandwidth parameter)

Table 7 Supported FRTS Features on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
1600	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
1720	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
1750	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
1760	-	-	-	-	-	FRTS, FRF, FRFQ, FRV
2500	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	-
2600	FRTS	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
3200	-	-	-	-	-	FRTS, FRF, FRFQ, FRV
3600	FRTS	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
3700	-	-	-	-	-	FRTS, FRF, FRFQ, FRV
MC3810	-	FRTS	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
4000	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	-
4500	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
4700	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
AS5300	FRTS	FRTS	FRTS	-	-	-
AS5800	FRTS	FRTS	FRTS	-	-	-
7100	-	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV
7200	FRTS	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV

Table 7 Supported FRTS Features on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E ¹	12.2S ²	12.2T ³
7300	-	-	-	-	FRTS ⁴ , FRF ⁴ , FRFQ ⁴ , FRV ⁴	-
7400	-	-	FRTS, FRF, FRFQ, FRV	-	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV
7500	FRTS	FRTS	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV	FRTS, FRF, FRFQ, FRV
7500 with VIP	-	-	FRF, FRV	FRF, FRV	FRF, FRV	FRF, FRV
7700	-	-	FRTS, FRF, FRFQ, FRV	-	-	FRTS, FRF, FRFQ, FRV
Cat 4200	-	-	FRTS, FRF, FRFQ, FRV	-	-	-
C4GWY (C4 Gateway)	-	-	FRTS, FRF, FRFQ, FRV	-	-	-
VG200	-	-	-	-	-	-
MSFC FlexWAN, MSFC FlexWAN on Cat6000(IOS), MSFC FlexWAN on 7600 IR	-	-	-	-	-	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	-	-	-
RSM (Catalyst 5000)	-	-	-	-	-	-
RSM (Catalyst 5000) with VIP	-	-	-	-	-	-

1. Latest features supported for 12.1(13)E and 12.1(13)EX releases. QPM supports 12.1(13)E and 12.1(13)EX QoS techniques included in later releases of IOS 12.1E or 12.1EX train software.
2. Latest features supported for 12.2(14)S release. QPM supports 12.2(14)S QoS techniques included in later releases of IOS 12.2S train software.
3. Latest features supported for 12.2(13)T release. QPM supports 12.2(13)T QoS techniques included in later releases of IOS 12.2T train software.
4. Not supported on 7300 with NSE-100.

Access Control Policy Support

Table 8 shows the devices and IOS software releases for which QPM supports access control policies. The table uses the following abbreviations:

AC Access Control policies

Table 8 Access Control Policy Support on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E	12.2S	12.2T
All IOS Devices supported by QPM except 8500	AC	AC	AC	AC	AC	AC

Supported Features for IOS 11.1CC

Table 9 shows the QoS features that QPM supports on devices running IOS 11.1CC. The table uses the following abbreviations:

FIFO	First in First Out
DWFQ	Distributed WFQ and QoS group DWFQ
DWRED	Distributed WRED
FQ	Fair Queuing
WFQ	Weighted Fair Queuing
WRED	Weighted Random Early Detection
CAR	Committed Access Rate

Table 9 Supported QoS Features for Devices running IOS 11.1CC

Cisco Systems Device	QoS Features	
	Scheduling	Policing
7500 with VIP	FIFO, DWRED, FQ, DWFQ	CAR

QoS Analysis (Monitoring) Capabilities

Table 10 shows the types of QoS that QPM QoS Analysis supports on devices and IOS versions. The table uses the following abbreviations:

CAR ¹	Committed Access Rate
Class-Based QoS ^{2,3}	Class-Based QoS

- CAR MIB does not include DSCP information, so policies with the DSCP option cannot be monitored
- QPM does not support monitoring of network elements that are assigned to a policy group configured with Modular Shaping.
- QPM does not support monitoring of DSCP-based WRED actions.

Table 10 Supported QoS Analysis on Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E	12.2S	12.2T
1600	-	CAR	CAR, Class-Based QoS	-	-	CAR, Class-Based QoS
1720	CAR	CAR	CAR, Class-Based QoS	-	-	CAR, Class-Based QoS
1750	CAR	CAR	CAR, Class-Based QoS	-	-	CAR, Class-Based QoS
1760	-	-	-	-	-	CAR, Class-Based QoS
2500	-	CAR	CAR	-	-	-
2600	CAR	CAR	CAR, Class-Based QoS	-	-	CAR, Class-Based QoS
3200	-	-	-	-	-	-
3600	CAR	CAR	CAR, Class-Based QoS	-	-	CAR, Class-Based QoS
3700	-	-	-	-	-	CAR, Class-Based QoS
MC3810	-	-	-	-	-	-
4000	-	-	-	-	-	-
4500	CAR	CAR	CAR	-	-	CAR
4700	CAR	CAR	CAR	-	-	CAR
AS5300	-	-	-	-	-	-
AS5800	-	-	-	-	-	-
7100	-	CAR	CAR	CAR	CAR	CAR
7200	CAR	CAR	CAR, Class-Based QoS	CAR	CAR, Class-Based QoS	CAR, Class-Based QoS
7300	-	-	-	-	CAR ¹ , Class-Based QoS	
7400	-	-	CAR	-	CAR, Class-Based QoS	CAR, Class-Based QoS
7500	CAR	CAR	CAR	CAR	CAR	CAR

Table 10 Supported QoS Analysis on Devices and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E	12.2S	12.2T
7500 with VIP	CAR	CAR	CAR	CAR, Class-Based QoS	CAR, Class-Based QoS	CAR, Class-Based QoS
7700	-	-	-	-	-	CAR
Cat 4200	-	-	CAR	-	-	-
C4GWY (C4 Gateway)	-	-	CAR	-	-	-
VG200	-	-	-	-	-	-
MSFC FlexWAN, MSFC FlexWAN on Cat6000(IOS), MSFC FlexWAN on 7600 IR	-	-	-	CAR	CAR	-
OSM on Cat6000(IOS), OSM on 7600 IR	-	-	-	-	-	-
RSM (Catalyst 5000)	CAR	CAR	CAR	-	-	-
RSM (Catalyst 5000) with VIP	CAR	CAR	CAR	-	-	-

1. Not supported on 7300 with NSE-100.

Supported Queuing, Shaping, and Policing Features for Layer 3 Devices

Table 11 shows the queuing, policing, and shaping methods that QPM supports on Layer 3 devices and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
WRR	WRR	Weighted Round Robin Queuing
CAR	Policing	Committed Access Rate
GTS	Shaping	Generic Traffic Shaping

Table 11 Supported Queuing, Shaping, and Policing Features on Layer 3 Devices and IOS Software Releases

Cisco Systems Device	IOS Software Release				
	12.0	12.1	12.2	12.1E	12.2T
Catalyst 8500	WRR	-	-	-	-
4908GL-3	WRR, CAR ¹ , GTS ¹	-	-	-	-
2948GL-3	WRR, CAR ¹ , GTS ¹	-	-	-	-
4232-L3	WRR, CAR ¹ , GTS ¹	-	-	-	-

1. CAR and GTS are supported on IOS 12.0(10)W5(18e) and above.

Supported QoS Features for Switches Running IOS

Table 12 shows the QoS features that QPM supports on switches running IOS, and IOS software releases. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
CB	-	Class based QoS with Policing, Marking, and Trust
CBQ	Class-Based QoS	Class-Based QoS with Marking, Policing, Shaping, LLQ, NBAR, MPLS
Excess Rate	Excess Rate	Excess rate policing
4Q1T	4Q1T	4 Queue 1 Threshold queuing
4Q2T	4Q2T	4 Queue 2Threshold queuing
2Q2T/1P2Q2T	2Q2T/1P2Q2T	2 Queue 2 Threshold / 1 Priority 2 Queue 2 Threshold queuing
4Q1T-Shape	4Q1T-Shape	4 Queue 1 Threshold queuing with shaping
COS Mapping	COS Mapping	COS-DSCP-COS mapping
IPP Mapping	IPP Mapping	IP-Precedence – DSCP mapping
Marking	Marking	Marking the IP Precedence priority or Marking by Trust
Markdown table	Markdown	DSCP Markdown tables are available.
In-Line Power	In-Line Power	In Line Power for IP Phones

QoS Feature	QPM Name	Description
Trust	Trust	Trust IP Precedence, IP DSCP, COS
Excess Markdown table	Excess Rate Markdown	Excess Rate DSCP Markdown tables are available.

Table 12 Supported QoS Features on Switches and IOS Software Releases

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E	12.2	12.2T
7600 IR	-	-	-	COS Mapping, IPP Mapping, CB, CBQ, 2Q2T/1P2Q2T, Markdown table, Excess Markdown table	COS Mapping, IPP Mapping, CB, CBQ, 2Q2T/1P2Q2T, Markdown table, Excess Markdown table	-
Cat 2900XL	Marking ¹	-	-	-	-	-
Cat2950	-	-	-	4Q1T, Trust, Marking, COS Mapping, CB	-	-
Cat2950_SI	-	-	-	4Q1T, Trust, Marking	-	-
Cat 3500XL	Marking ¹	-	-	-	-	-
Cat 3550	-	-	-	COS Mapping, IPP Mapping, 4Q2T, Priority, CB, Markdown table, Trust, In-Line Power	-	-
Cat4000 running Supervisor IOS	-	-	-	4Q1T-Shape, COS Mapping, IPP Mapping, CB, Markdown table, VLAN-Based, Trust, In-Line Power	-	-

Table 12 Supported QoS Features on Switches and IOS Software Releases (continued)

Cisco Systems Device	IOS Software Release					
	12.0	12.1	12.2	12.1E	12.2	12.2T
Cat4500 running Supervisor IOS	-	-	-	4Q1T-Shape, COS Mapping, IPP Mapping, CB, Markdown table, VLAN-Based, Trust, In-Line Power	-	-
Catalyst 6000 with PFC running Supervisor IOS	-	-	-	COS Mapping, IPP Mapping, CB, CBQ, 2Q2T/1P2Q2T, Markdown table, VLAN-Based, Trust	COS Mapping, IPP Mapping, CB, CBQ, 2Q2T/1P2Q2T, Markdown table, VLAN-Based, Trust	-
Catalyst 6000 with PFCII running Supervisor IOS, Catalyst 6000 with PFCIII running Supervisor IOS	-	-	-	COS Mapping, IPP Mapping, CB, CBQ, 2Q2T/1P2Q2T, Excess Rate, Markdown table, VLAN-Based, Trust, Excess Markdown table	COS Mapping, IPP Mapping, CB, CBQ, 2Q2T/1P2Q2T, Excess Rate, Markdown table, VLAN-Based, Trust, Excess Markdown table	-

1. QoS on Cat2900XL and Cat3500XL is supported on IOS version 12.0(5)XU and above

Supported Devices and QoS Techniques for CATOS Software Releases

Cisco CATOS releases supported include 5.5, 6.1, 6.2, 6.3 and 7.1. In addition, a Cisco CATOS mapping function is used to enable QPM to work with the supported QoS techniques of 5.5, 6.1, 6.2, 6.3 and 7.1 in later releases of CATOS.

[Table 13](#) describes the QoS techniques that you can use with the devices and CATOS software releases that QPM supports. The table uses the following abbreviations:

QoS Feature	QPM Name	Description
2Q1T	2Q1T	2 Queue 1 Threshold queuing
2Q2T	2Q2T	2 Queue 2 Threshold queuing

QoS Feature	QPM Name	Description
1P2Q2T	1P2Q2T	1 Priority 2 Queue 2 Threshold queuing
Marking	Marking	Classification
Policing	Policing	Traffic policing including microflows and mark down
Excess Rate Policing	Excess Rate Policing	Traffic policing including excess rate, microflows and mark down
COS Mapping	COS Mapping	COS-DSCP-COS mapping
IPP Mapping	IPP Mapping	IP-Precedence – DSCP mapping
Markdown table	Markdown table	DSCP Markdown tables are available.
VLAN Based	VLAN Based	VLAN Based QoS
Trust	Trust	Trust IP Precedence, IP DSCP, COS
Trust-Ext	Trust-Ext	Trust the Extension COS
In-Line Power	In-Line Power	In Line Power for IP Phones
Excess Markdown table	Excess Rate Markdown	Excess Rate DSCP Markdown tables are available.

Table 13 Supported Devices and QoS Techniques for Catalyst Operating System

Cisco Systems Device	Catalyst Software Release		
	5.5	6.x	7.x
Catalyst 2980 family	2Q1T, In-Line Power, Marking	2Q1T, In-Line Power, Marking	2Q1T, In-Line Power, Marking
Catalyst 4000 family	2Q1T, In-Line Power, Marking	2Q1T, In-Line Power, Marking	2Q1T, In-Line Power, Marking
Catalyst 4500 family	2Q1T, In-Line Power, Marking	2Q1T, In-Line Power, Marking	2Q1T, In-Line Power, Marking
Catalyst 5000 family with NFFC-II	Marking	Marking	-
Catalyst 6000 family with PFC	Marking, Policing, 2Q2T, 1P2Q2T, COS Mapping, IPP Mapping, Markdown Table, VLAN-Based, Trust, Trust-Ext, In-Line Power	Marking, Policing, 2Q2T, 1P2Q2T, COS Mapping, IPP Mapping, Markdown Table, VLAN-Based, Trust, Trust-Ext, In-Line Power	Marking, Policing, 2Q2T, 1P2Q2T, COS Mapping, IPP Mapping, Markdown Table, VLAN-Based, Trust, Trust-Ext, In-Line Power
Catalyst 6000 family without PFC	2Q2T, 1P2Q2T, Trust, In-Line Power	2Q2T, 1P2Q2T, Trust, In-Line Power	2Q2T, 1P2Q2T, Trust, In-Line Power

Table 13 Supported Devices and QoS Techniques for Catalyst Operating System (continued)

Cisco Systems Device	Catalyst Software Release		
	5.5	6.x	7.x
Catalyst 6000 family with PFCII	-	Marking, Excess Rate Policing, 2Q2T, 1P2Q2T, COS Mapping, IPP Mapping, Markdown Table, Excess Markdown table, VLAN-Based, Trust, Trust-Ext, In-Line Power	Marking, Excess Rate Policing, 2Q2T, 1P2Q2T, COS Mapping, IPP Mapping, Markdown Table, Excess Markdown table, VLAN-Based, Trust, Trust-Ext, In-Line Power
Catalyst 6000 family with PFCIII ¹²	-		Marking, Excess Rate Policing, 2Q2T, 1P2Q2T, COS Mapping, IPP Mapping, Markdown Table, Excess Markdown table, VLAN-Based, Trust, Trust-Ext, In-Line Power

1. Catalyst 6000 family with PFCIII is supported only by CatOS8.1(1) and later. QPM will map CatOS8.1(1) and later versions to 7.1.
2. QPM does not support outbound policies on VLANs on CatOS.

