

This table lists the IPv6 features supported in the Cisco IOS XR software release trains.

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IPv6 Forwarding Features

Feature	ASR9K	CRS
ICMPv6	Yes	
IPv6 Neighbor Discovery	Yes	
Stateless Auto-Config	Yes	
IPv6 Unicast IRB	[4.1.0][1]	
6PE (MPLS core)	3.9.1	
6VPE (MPLS core)	3.9.1	[4.3.2][2]
IPv6 Vlan Support	Yes	
IPv6 ABF	Yes	[4.1.2] [3]
IPv6 VRF-aware ABF	[4.2.0][4]	
IPv6 ABF on GRE	[4.2.1][5]	
IPv6 ABF Object Tracking	[5.1][6]	
IPv6 ECMP	3.2.0	3.2.0
IPv6 over Link Bundles	3.9.2	
IPv6 over Vlan Bundles	3.9.2	
IPv6 Hop-by-Hop Packet Filtering	Yes	
IPv6 support for BNG	[4.3.0][7]	
TCP MSS Adjust	[4.3.2][8]	
HTTP Redirect	[4.2.1][9]	

IPv6 Fast Convergence Features

Feature	ASR9K	CRS
BGP 3107 PIC Updates for Global Prefixes	[4.2.1][10]	
BGP PIC Core for VPNv6	Yes	
BGP PIC Edge Multipath VPNv6 with Per-Prefix Label	Yes	

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BGP Local Convergence with per-VRF label	Yes	
BGPv6 support for BFD	Yes	
OSPFv3 Fast Convergence: LSA and SPF throttling	Yes	
OSPFv3 support for BFD	Yes	
OSPFv3 LFA FRR	[4.3.1][11]	[4.3.1][12]
ISIS v6 Support for BFD	Yes	
ISIS v6 LFA FRR	[4.3.1][13]	[4.3.1][14]
IPv6 BFD	Yes	[4.1.1] [15]
BFD over PWHE	[4.3.1][16]	
BFD IPv6 Multihop	[4.3.0][17]	[4.3.1][18]
BFD over IRB	[5.1.0][19]	
BFD over Logical Bundles		[4.2.3][20]

IPv6 Routing Features

Feature	ASR9K	CRS
IS-IS IPv6	Yes	
Multi-Topology IS-IS	Yes	
OSPFv3 Global Table	3.7.2	
OSPFv3 Vrf Table (PE-CE)	[4.1.0][21]	[4.1.0][22]
OSPFv3 Authentication	Yes	
OSPFv3 Graceful Restart	[5.1.0][23]	
BGPv6	3.7.2	
BGPv6 NSR	Yes	
BGP Dampening	Yes	
BGP 3107 PIC Updates for Global Prefixes	[4.2.1][24]	[4.2.1][25]
EIGRPv6 PE-CE	Yes	
IPv6 VRF Lite	Yes	
OSPFv3 Max-Metric Router-LSA on-switchover/startup	Yes	
OSPFv3 Prefix Prioritization using RPL	Yes	

IPv6 FHRP Features

Feature	ASR9K	CRS
HSRPv6	Yes	
HSRPv6: IPv6 BFD	Yes	
HSRPv6: timers msec, delay min reload, preempt reload	Yes	
VRRPv3	[4.1.0][26]	[4.1.0][27]

IPv6 Security, Qos, Accounting Features

Feature	ASR9K	CRS
IPv6 ACL	3.7.2	
IPv6 QoS	Yes	
IPv6 H-QoS	Yes	
IPv6 Netflow	Yes	Yes
Destination-based NetFlow Accounting		[4.3.1][28]
IPv6 uRPF (Loose)	[4.1.1][29]	
IPv6 uRPF (Strict)	[4.1.1][30]	
IPv6 QPPB		[4.3.1][31]
IPv6 BGP Policy Accounting	3.9.2	
IPv6 LI	[4.2.0][32]	4.0.1
IPv6 ACL chaining	[4.3.1][33]	
IPv6 ACL in Class Map	[4.2.1][34]	
IPv6 ACL on L2 interface	Yes	
IPv6 ACL over BVI interface	[4.2.1][35]	
HSRPv6 EOT	Yes	
Egress IPv6 QPPB	Yes	
IPSLA v6 (ICMP Echo only)	Yes	
IPv6 static route tracking / HSRPv6	Yes	

IPv6 Multicast Features

Feature	ASR9K	CRS
IPv6 Multicast	4.0.1	
BSR for IPv6 MCAST	Yes	
IPv6 Multicast QoS	Yes	
mLDP IPv6	Yes	
Label Switched Multicast (LSM) MPLS Label Distribution Protocol (MLDP) based Multicast VPN	[4.2.1][36]	
mLDP OAM	[4.2.1][37]	
MVPNv6	[4.2.1][38]	
MLD Snooping	[4.3.0][39]	

IPv6 DHCP Features

Feature	ASR9K	CRS
DHCPv6	Yes	
DHCPv6 Relay Agent	[4.1.0][40]	
DHCPv6 Relay with Prefix Delegation	[4.1.2][41]	

IPv6 NAT MAP Features

Feature	ASR9K	CRS
Stateful NAT64	[4.3.0][42]	[4.1.2][43]
IPv4/IPv6 Stateless Translator (Xlat)		[4.1.0][44]
DS-Lite AFTR	[4.2.1][45]	[4.2.1][46]
PCP Support		[4.3.0][47]
MAP-T (AFTR)	[4.3.0][48]	
MAP-E (AFTR)	[4.3.1][49]	

IPv6 Tunnel Features

Feature	ASR9K	CRS
L2TPv3	[4.3.1][50]	
6PE/VPE over L2TPV3		[4.3.0][51]
6VPE over IPV4 MPLS TE Tunnels	[4.3.0][52]	
IPv6 Forwarding over IPv4 GRE Tunnels	[4.2.1][53]	[4.2.0][54]
6RD	[4.3.1][55]	[4.1.0][56]
6PE over GRE Tunnel	Yes	
IPv6 FA over IPv4 TE tunnel	Yes	
6VPE over GRE Tunnel	Yes	
PWHE		[4.2.1][57]
LISP		[4.2.1][58]

IPv6 Manageability

Feature	ASR9K	CRS
SNMP over IPV6	[4.2.0][59]	[4.2.0][60]
IPv6 and VPNv6 MIBs (RFC 4292/4293)	Yes (no 6vPE)	
OSPFv3 MIBs (RFC5643) catchup (with multi-instance support)	[4.2.1][61]	[4.2.1][62]
SSH	Yes	
Telnet	Yes	
DNS	Yes	
TFTP	Yes	
Syslog	Yes	

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NTP	Yes	
SFTP	Yes	
XML SSH & TTY Interface	Yes	
Traceroute	Yes	
IP SLA ICMP Echo Operation	[4.3.0][63]	[4.3.0][64]
VRF Aware Source Interface for Syslog Transactions	[4.2.3][65]	[4.2.3][66]

Additional Information

- [Cisco IOS XR Software Configuration Guides](#)
- [Cisco IOS XR Release Notes](#)
- [Cisco IPv6 Knowledge Base Portal](#)
- [Cisco IPv6 Main Page](#)