



# IETF RFCs Supported by Cisco NX-OS Unicast Features

This appendix lists the IETF RFCs for unicast routing supported in Cisco NX-OS.

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## BGP RFCs

RFCs	Title
RFC 1997	<i>BGP Communities Attribute</i>
RFC 2385	<i>Protection of BGP Sessions via the TCP MD5 Signature Option</i>
RFC 2439	<i>BGP Route Flap Damping</i>
RFC 2519	<i>A Framework for Inter-Domain Route Aggregation</i>
RFC 2545	<i>Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing</i>
RFC 2858	<i>Multiprotocol Extensions for BGP-4</i>
RFC 2918	<i>Route Refresh Capability for BGP-4</i>
RFC 3065	<i>Autonomous System Confederations for BGP</i>
RFC 3392	<i>Capabilities Advertisement with BGP-4</i>
RFC 4271	<i>A Border Gateway Protocol 4 (BGP-4)</i>
RFC 4273	<i>Definitions of Managed Objects for BGP-4</i>

RFCs	Title
RFC 4456	<i>BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)</i>
RFC 4486	<i>Subcodes for BGP Cease Notification Message</i>
RFC 4724	<i>Graceful Restart Mechanism for BGP</i>
RFC 4760	<i>Multiprotocol Extensions for BGP-4</i>
RFC 4781	<i>Graceful Restart Mechanism for BGP with MPLS</i>
RFC 4893	<i>BGP Support for Four-octet AS Number Space</i>
RFC 5004	<i>Avoid BGP Best Path Transitions from One External to Another</i>
RFC 5396 <sup>1</sup>	<i>Textual Representation of Autonomous System (AS) Numbers</i>
RFC 5549	<i>Advertising IPv4 Network Layer Reachability Information with an IPv6 Next Hop</i>
RFC 5668	<i>4-Octet AS Specific BGP Extended Community</i>
RFC 7606	<i>Revised Error Handling for BGP Update Messages</i>
RFC 7854	<i>BGP Monitoring Protocol (BMP)</i>
draft-ietf-idr-add-paths-08.txt	<i>Advertisement of Multiple Paths in BGP</i>
draft-ietf-idr-bgp4-mib-15.txt	<i>BGP4-MIB</i>
draft-kato-bgp-ipv6-link-local-00.txt	<i>BGP4+ Peering Using IPv6 Link-local Address</i>
draft-ietf-idr-avoid-transition-05.txt	<i>Bestpath Transition Avoidance</i>
draft-ietf-idr-bgp4-mib-15.txt	<i>Peer Table Objects</i>
draft-ietf-idr-dynamic-cap-03.txt	<i>Dynamic Capability</i>

<sup>1</sup> RFC 5396 is partially supported. The asplain and asdot notations are supported, but the asdot+ notation is not.

## First-Hop Redundancy Protocols RFCs

RFCs	Title
RFC 2281	<i>Hot Standby Redundancy Protocol</i>
RFC 3768	<i>Virtual Router Redundancy Protocol</i>
RFC 5798	<i>Virtual Router Redundancy Protocol (VRRP) Version 3 for IPv4 and IPv6</i>

## IP Services RFCs

RFCs	Title
RFC 768	<i>UDP</i>
RFC 791	<i>IP</i>
RFC 792	<i>ICMP</i>
RFC 793	<i>TCP</i>
RFC 826	<i>ARP</i>
RFC 1027	<i>Proxy ARP</i>
RFC 1591	<i>DNS Client</i>
RFC 1812	<i>IPv4 routers</i>
RFC 4022	<i>TCP-MIB</i>
RFC 4292	<i>IP-FORWARDING-TABLE-MIB</i>
RFC 4293	<i>IP-MIB</i>

## IPv6 RFCs

RFCs	Title
RFC 1981	Path MTU Discovery for IP version 6
RFC 2374	An Aggregatable Global Unicast Address Format
RFC 2460	Internet Protocol, Version 6 (IPv6) Specification
RFC 2464	Transmission of IPv6 Packets over Ethernet Networks
RFC 3021	Using 31-Bit Prefixes on IPv4 Point-to-Point Links
RFC 4191	Default Router preferences and more specific routes
RFC 4193	Unique Local IPv6 Unicast Addresses <b>Note</b> RFC 4193 is partially supported. Section 3.2.2 is not supported.
RFC 4291 (replaced RFC 2373)	IP Version 6 Addressing Architecture
RFC 4443 (replaced RFC 2463)	ICMPv6

RFCs	Title
RFC 4861 (replaced RFC 2461)	Neighbor Discovery for IP Version 6 (IPv6)
RFC 4862 (replaced RFC 2462)	IPv6 Stateless Address Autoconfiguration
RFC 6106	IPv6 Router Advertisement Options for DNS Configuration

## IS-IS RFCs

RFCs	Title
RFC 1142	<i>OSI 10589 intermediate system to intermediate system intro-domain routing exchange protocol</i>
RFC 1195	<i>Use of OSI IS-IS for routing in TCP/IP and dual environment</i>
RFC 2763, RFC 5301	<i>Dynamic Hostname Exchange Mechanism for IS-IS</i>
RFC 2966, RFC 5302	<i>Domain-wide Prefix Distribution with Two-Level IS-IS</i>
RFC 2972	<i>IS-IS Mesh Groups</i>
RFC 3277	<i>IS-IS Transient Blackhole Avoidance</i>
RFC 3373, RFC 5303	<i>Three-Way Handshake for IS-IS Point-to-Point Adjacencies</i>
RFC 3567, RFC 5304	<i>IS-IS Cryptographic Authentication</i>
RFC 3784, RFC 5305	<i>IS-IS Extensions for Traffic Engineering</i>
RFC 3847, RFC 5306	<i>Restart Signaling for IS-IS</i>
RFC 4205, RFC 5307	<i>IS-IS Extensions in Support of Generalized Multi-Protocol Label Switching</i>
draft-ietf-isis-igp-p2p-over-lan-06.txt	<i>Internet Draft Point-to-point operation over LAN in link-state routing protocols</i>

## OSPF RFCs

RFCs	Title
RFC 2328	<i>OSPF Version 2</i>
RFC 2370	<i>The OSPF Opaque LSA Option</i>
RFC 2740	<i>OSPF for IPv6</i>
RFC 3101	<i>The OSPF Not-So-Stubby Area (NSSA) Option</i>

RFCs	Title
RFC 3137	<i>OSPF Stub Router Advertisement</i>
RFC 3623	<i>Graceful OSPF Restart</i>
RFC 5709	<i>OSPFv2 HMAC-SHA Cryptographic Authentication</i>
draft-ietf-ospf-ospfv3-graceful-restart-04.txt	<i>OSPFv3 Graceful Restart</i>

## RIP RFCs

RFCs	Title
RFC 2082	<i>RIP-2 MD5 Authentication</i>
RFC 2453	<i>RIP Version 2</i>

