



IETF RFCs Supported by Cisco NX-OS Unicast Features

This appendix lists the IETF RFCs supported in Cisco NX-OS. For information on each RFC, see www.ietf.org.

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> |
| 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 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 ¹ | <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> |

| RFCs | Title |
|---------------------------------------|----------------------------------------------------|
| 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> |

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

First-Hop Redundancy Protocol RFCs

| RFCs | Title |
|----------|-------------------------------------------|
| RFC 2281 | <i>Hot Standby Redundancy Protocol</i> |
| RFC 3768 | <i>Virtual Router Redundancy Protocol</i> |

IP Services RFCs

| RFCs | Title |
|----------|--------------------------------|
| RFC 786 | <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 | <i>Path MTU Discovery for IP version 6</i> |
| RFC 2373 | <i>IP Version 6 Addressing Architecture</i> |
| RFC 2374 | <i>An Aggregatable Global Unicast Address Format</i> |
| RFC 2460 | <i>Internet Protocol, Version 6 (IPv6) Specification</i> |
| RFC 2461 | <i>Neighbor Discovery for IP Version 6 (IPv6)</i> |
| RFC 2462 | <i>IPv6 Stateless Address Autoconfiguration</i> |
| RFC 2464 | <i>Transmission of IPv6 Packets over Ethernet Networks</i> |
| RFC 3152 | <i>Delegation of IP6.ARPA</i> |

| RFCs | Title |
|----------|-------------------------------------------------------------------|
| RFC 3162 | <i>RADIUS and IPv6</i> |
| RFC 3513 | <i>Internet Protocol Version 6 (IPv6) Addressing Architecture</i> |
| RFC 3596 | <i>DNS Extensions to Support IP version 6</i> |
| RFC 4193 | <i>Unique Local IPv6 Unicast Addresses</i> |

IS-IS RFCs

| RFCs | Title |
|-----------------------------------------|----------------------------------------------------------------------------------------------------|
| RFC 1142 | <i>OSI 10589 Intermediate system to intermediate system intra-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> |
| 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> |
| RFC 3137 | <i>OSPF Stub Router Advertisement</i> |
| RFC 3623 | <i>Graceful OSPF Restart</i> |
| RFC 4552 (partial support) | <i>Authentication/Confidentiality for OSPFv3</i> |
| RFC 5709 | <i>OSPFv2 HMAC-SHA Cryptographic Authentication</i> |
| draft-ietf-ospf-ospfv3-graceful-restart-04.txt | <i>OSPFv3 Graceful Restart</i> |

Per-Hop Behavior RFCs

| RFCs | Title |
|----------|-------------------------------------|
| RFC 2597 | <i>Assured Forwarding PHB Group</i> |
| RFC 3246 | <i>An Expedited Forwarding PHB</i> |

RIP RFCs

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