



SPECIAL-ACL Commands

- [arp_acl_rule \(aclmgr\)](#), on page 2
- [ip_acl_rule \(aclmgr\)](#), on page 6
- [ip_acl_rule \(aclmgr\)](#), on page 12
- [ip_acl_rule \(aclmgr\)](#), on page 18
- [ip_acl_rule \(aclmgr\)](#), on page 23
- [ip_acl_rule \(aclmgr\)](#), on page 31
- [ipv6_acl_rule \(aclmgr\)](#), on page 36
- [ipv6_acl_rule \(aclmgr\)](#), on page 42
- [ipv6_acl_rule \(aclmgr\)](#), on page 47
- [ipv6_acl_rule \(aclmgr\)](#), on page 52
- [ipv6_acl_rule \(aclmgr\)](#), on page 59
- [mac_acl_rule \(aclmgr\)](#), on page 63

arp_acl_rule (aclmgr)

```
{[seqno][no] permitdeny {[arp_request] req_ip {sender1_ip_any|{sender1_host sender1_ip|sender1_net_ip
sender1_ip_mask}} mac {sender1_mac_any|{sender1_mac_host sender1_mac|sender1_net_mac
sender1_mac_mask}}|arp_response resp_ip {sender2_ip_any|{sender2_host sender2_ip|sender2_net_ip
sender2_ip_mask}} {target_ip_any|{target_host target_ip|target_net_ip target_ip_mask}} mac
{sender2_mac_any|{sender2_mac_host sender2_mac|sender2_net_mac sender2_mac_mask}}
[ {target_mac_any|{target_mac_host target_mac|target_net_mac target_mac_mask}}]} [arp_log] [capture
session session-id]
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
req_ip	Any IP protocol
resp_ip	Any IP protocol
<i>arp_request</i>	ARP_Request request value: 1 ARP requests
<i>arp_response</i>	ARP_Response response value: 1 ARP Responses
<i>sender1_ip_any</i>	Any any value: 1 Any IP address
<i>sender1_host</i>	Host host value: 1 host IP address
<i>sender1_ip</i>	Type: ipaddr IP address <a.b.c.d>

sender1_net_ip Type: ipaddr
IP address <a.b.c.d>

sender1_ip_mask Type: ipaddr
IP mask <a.b.c.d>

sender2_ip_any Any
any value: 1
Any IP address

sender2_host Host
host value: 1
host IP address

sender2_ip Type: ipaddr
IP address <a.b.c.d>

sender2_net_ip Type: ipaddr
IP address <a.b.c.d>

sender2_ip_mask Type: ipaddr
IP mask <a.b.c.d>

target_ip_any Any
any value: 1
Any IP address

target_host Host
host value: 1
host IP address

target_ip Type: ipaddr
IP address <a.b.c.d>

target_net_ip Type: ipaddr
IP address <a.b.c.d>

target_ip_mask Type: ipaddr
IP mask <a.b.c.d>

mac MAC configuration commands

sender1_mac_any Any
any value: 1
Any MAC address

<i>sender1_mac_host</i>	Host
	host value: 1 host MAC address

<i>sender1_mac</i>	Type: ethernet MAC address EEEE.EEEE.EEEE
--------------------	--

<i>sender1_net_mac</i>	Type: ethernet MAC address EEEE.EEEE.EEEE
------------------------	--

<i>sender1_mac_mask</i>	Type: ethernet MAC mask EEEE.EEEE.EEEE
-------------------------	---

<i>sender2_mac_any</i>	Any
	any value: 1 Any MAC address

<i>sender2_mac_host</i>	Host
	host value: 1 host MAC address

<i>sender2_mac</i>	Type: ethernet MAC address EEEE.EEEE.EEEE
--------------------	--

<i>sender2_net_mac</i>	Type: ethernet MAC address EEEE.EEEE.EEEE
------------------------	--

<i>sender2_mac_mask</i>	Type: ethernet MAC mask EEEE.EEEE.EEEE
-------------------------	---

<i>target_mac_any</i>	Any
	any value: 1 Any MAC address

<i>target_mac_host</i>	Host
	host value: 1 host MAC address

<i>target_mac</i>	Type: ethernet MAC address EEEE.EEEE.EEEE
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<i>target_net_mac</i>	Type: ethernet MAC address EEEE.EEEE.EEEE
-----------------------	--

<i>target_mac_mask</i>	Type: ethernet MAC mask EEEE.EEEE.EEEE
------------------------	---

<i>arp_log</i>	Log log value: 1 Log on match
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/arpacl

ip_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny proto_tcp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} [{src_port_op {src_port0src_port0_str}|src_port_range
{src_port1src_port1_str} {src_port2src_port2_str}|src_portgroup src_port_group]} {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name} [{dst_port_op
{dst_port0dst_port0_str}|dst_port_range {dst_port1dst_port1_str} {dst_port2dst_port2_str}|dst_portgroup
dst_port_group]} [{urg|ack|psh|rst|syn|fin|established|[log] [time-range time_range_name]]packet-length
{plen_op plen0plen_range plen1 plen2}|dscp
{dscp_numdscp_str}}]+[urg|ack|psh|rst|syn|fin|established|[log] [time-range
time_range_name]]packet-length {plen_op plen0plen_range plen1 plen2}|tos
{tos_numtos_str}|precedence {prec_numprec_str}}]+|{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} [{[fragments]|[log] [time-range
time_range_name]]packet-length {plen_op plen0plen_range plen1 plen2}|dscp
{dscp_numdscp_str}}]+[fragments]|[log] [time-range time_range_name]]packet-length {plen_op
plen0plen_range plen1 plen2}|tos {tos_numtos_str}|precedence {prec_numprec_str}}]+} [capture
session session-id]
```

Syntax Description	
<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_tcp</i>	Protocol tcp value: 6 Transmission Control Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipaddr Source network address
<i>src_wild</i>	Type: ipaddr Source wildcard bits
<i>src_prefix</i>	Type: ipprefix Source network prefix
src_key_host	A single source host

<i>src_host</i>	Type: ipaddr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>src_port_op</i>	Port operator
<i>src_port_range</i>	Port range
<i>src_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port0_str</i>	TCP port
<i>src_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port1_str</i>	TCP port
<i>src_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port2_str</i>	TCP port
src_portgroup	src port group <i>Not available in this release.</i>
<i>src_port_group</i>	Type: string Port group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipaddr Destination network address
<i>dst_wild</i>	Type: ipaddr Destination wildcard bits
<i>dst_prefix</i>	Type: ipprefix Destination network prefix
dst_key_host	A single destination host

<i>dst_host</i>	Type: ipaddr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
<i>dst_port_op</i>	Port operator
<i>dst_port_range</i>	Port range
<i>dst_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port0_str</i>	TCP port
<i>dst_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port1_str</i>	TCP port
<i>dst_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port2_str</i>	TCP port
dst_portgroup	dst port group <i>Not available in this release.</i>
<i>dst_port_group</i>	Type: string Port group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
tos	Match packets with given TOS value
<i>tos_num</i>	Type: integer min: 0 max: 15 Type of service value

<i>tos_str</i>	Type of service label
precedence	Match packets with given precedence value
<i>prec_num</i>	Type: integer min: 0 max: 7 Precedence value
<i>prec_str</i>	Precedence label routine value: 0 Match packets with routine precedence (0) priority value: 1 Match packets with priority precedence (1) immediate value: 2 Match packets with immediate precedence (2) flash value: 3 Match packets with flash precedence (3) flash-override value: 4 Match packets with flash override precedence (4) critical value: 5 Match packets with critical precedence (5) internet value: 6 Match packets with internetwork control precedence (6) network value: 7 Match packets with network control precedence (7)
fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length

<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length
<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
urg	Match on the URG bit
ack	Match on the ACK bit
psh	Match on the PSH bit
rst	Match on the RST bit
syn	Match on the SYN bit
fin	Match on the FIN bit
established	Match established connections
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipacl

ip_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny proto_udp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} [{src_port_op {src_port0src_port0_str}|src_port_range
{src_port1src_port1_str} {src_port2src_port2_str}|src_portgroup src_port_group]} {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name} [{dst_port_op
{dst_port0dst_port0_str}|dst_port_range {dst_port1dst_port1_str} {dst_port2dst_port2_str}|dst_portgroup
dst_port_group]}] [{[log] [time-range time_range_name]|packet-length {plen_op plen0plen_range
plen1 plen2}|dscp {dscp_numdscp_str}}]+[|[log] [time-range time_range_name]|packet-length
{plen_op plen0plen_range plen1 plen2}|tos {tos_numtos_str}|precedence
{prec_numprec_str}}]+}|{src_any|src_addr src_wildsrc_prefix|src_key_host src_host|src_key_addrgrp
src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp
dst_addrgrp_name} [{|[fragments]|log] [time-range time_range_name]|packet-length {plen_op
plen0plen_range plen1 plen2}|dscp {dscp_numdscp_str}}]+[|[fragments]|log] [time-range
time_range_name]|packet-length {plen_op plen0plen_range plen1 plen2}|tos
{tos_numtos_str}|precedence {prec_numprec_str}}]+}} [capture session session-id]
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_udp</i>	Protocol udp value: 17 User Datagram Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipaddr Source network address
<i>src_wild</i>	Type: ipaddr Source wildcard bits
<i>src_prefix</i>	Type: ipprefix Source network prefix
src_key_host	A single source host

<i>src_host</i>	Type: ipaddr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>src_port_op</i>	Port operator
<i>src_port_range</i>	Port range
<i>src_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port0_str</i>	UDP port
<i>src_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port1_str</i>	UDP port
<i>src_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port2_str</i>	UDP port
src_portgroup	src port group <i>Not available in this release.</i>
<i>src_port_group</i>	Type: string Port group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipaddr Destination network address
<i>dst_wild</i>	Type: ipaddr Destination wildcard bits
<i>dst_prefix</i>	Type: ipprefix Destination network prefix
dst_key_host	A single destination host

<i>dst_host</i>	Type: ipaddr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
<i>dst_port_op</i>	Port operator
<i>dst_port_range</i>	Port range
<i>dst_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port0_str</i>	UDP port
<i>dst_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port1_str</i>	UDP port
<i>dst_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port2_str</i>	UDP port
dst_portgroup	dst port group <i>Not available in this release.</i>
<i>dst_port_group</i>	Type: string Port group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
tos	Match packets with given TOS value
<i>tos_num</i>	Type: integer min: 0 max: 15 Type of service value

<i>tos_str</i>	Type of service label
precedence	Match packets with given precedence value
<i>prec_num</i>	Type: integer min: 0 max: 7 Precedence value
<i>prec_str</i>	Precedence label routine value: 0 Match packets with routine precedence (0) priority value: 1 Match packets with priority precedence (1) immediate value: 2 Match packets with immediate precedence (2) flash value: 3 Match packets with flash precedence (3) flash-override value: 4 Match packets with flash override precedence (4) critical value: 5 Match packets with critical precedence (5) internet value: 6 Match packets with internetwork control precedence (6) network value: 7 Match packets with network control precedence (7)
fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length

<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipacl

ip_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny proto igmp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} {{[log] [time-range time_range_name]|packet-length
{plen_op plen0|plen_range plen1 plen2}|dscp {dscp_numdscp_str}}+}+{[log] [time-range
time_range_name]|packet-length {plen_op plen0|plen_range plen1 plen2}|tos
{tos_numtos_str}|precedence {prec_numprec_str}}+}|{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} {{[fragments]|log [time-range
time_range_name]|packet-length {plen_op plen0|plen_range plen1 plen2}|dscp
{dscp_numdscp_str}}+}|{[fragments]|log [time-range time_range_name]|packet-length {plen_op
plen0|plen_range plen1 plen2}|tos {tos_numtos_str}|precedence {prec_numprec_str}}+} [capture
session session-id]}
```

Syntax Description	
<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_igmp</i>	Protocol igmp value: 2 Internet Group Management Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipaddr Source network address
<i>src_wild</i>	Type: ipaddr Source wildcard bits
<i>src_prefix</i>	Type: ipprefix Source network prefix
src_key_host	A single source host
<i>src_host</i>	Type: ipaddr Source address

src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipaddr Destination network address
<i>dst_wild</i>	Type: ipaddr Destination wildcard bits
<i>dst_prefix</i>	Type: ipprefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipaddr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
tos	Match packets with given TOS value
<i>tos_num</i>	Type: integer min: 0 max: 15 Type of service value

<i>tos_str</i>	Type of service label
precedence	Match packets with given precedence value
<i>prec_num</i>	Type: integer min: 0 max: 7 Precedence value
<i>prec_str</i>	Precedence label routine value: 0 Match packets with routine precedence (0) priority value: 1 Match packets with priority precedence (1) immediate value: 2 Match packets with immediate precedence (2) flash value: 3 Match packets with flash precedence (3) flash-override value: 4 Match packets with flash override precedence (4) critical value: 5 Match packets with critical precedence (5) internet value: 6 Match packets with internetwork control precedence (6) network value: 7 Match packets with network control precedence (7)
fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length

<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipacl

ip_acl_rule (aclmgr)

```

{[seqno]|no} permitdeny proto_icmp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} {[log] [time-range time_range_name]icmp_type
[icmp_code]}packet-length {plen_op plen0|plen_range plen1 plen2}|dscp {dscp_numdscp_str}}+|[log]
[time-range time_range_name]icmp_str|packet-length {plen_op plen0|plen_range plen1 plen2}|dscp
{dscp_numdscp_str}}+|[log] [time-range time_range_name]icmp_type [icmp_code]packet-length
{plen_op plen0|plen_range plen1 plen2}|tos {tos_numtos_str}|precedence {prec_numprec_str}}+|[log]
[time-range time_range_name]icmp_str|packet-length {plen_op plen0|plen_range plen1 plen2}|tos
{tos_numtos_str}|precedence {prec_numprec_str}}+|{{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} {[fragments]||log} [time-range
time_range_name]packet-length {plen_op plen0|plen_range plen1 plen2}|dscp
{dscp_numdscp_str}}+|[fragments]||log} [time-range time_range_name]packet-length {plen_op
plen0|plen_range plen1 plen2}|tos {tos_numtos_str}|precedence {prec_numprec_str}}+} [capture
session session-id]}

```

Syntax Description	
<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_icmp</i>	Protocol icmp value: 1 Internet Control Message Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipaddr Source network address
<i>src_wild</i>	Type: ipaddr Source wildcard bits
<i>src_prefix</i>	Type: ipprefix Source network prefix
src_key_host	A single source host

<i>src_host</i>	Type: ipaddr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipaddr Destination network address
<i>dst_wild</i>	Type: ipaddr Destination wildcard bits
<i>dst_prefix</i>	Type: ipprefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipaddr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
tos	Match packets with given TOS value
<i>tos_num</i>	Type: integer min: 0 max: 15 Type of service value

<i>tos_str</i>	Type of service label
precedence	Match packets with given precedence value
<i>prec_num</i>	Type: integer min: 0 max: 7 Precedence value
<i>prec_str</i>	Precedence label routine value: 0 Match packets with routine precedence (0) priority value: 1 Match packets with priority precedence (1) immediate value: 2 Match packets with immediate precedence (2) flash value: 3 Match packets with flash precedence (3) flash-override value: 4 Match packets with flash override precedence (4) critical value: 5 Match packets with critical precedence (5) internet value: 6 Match packets with internetwork control precedence (6) network value: 7 Match packets with network control precedence (7)
fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length

plen2 Type: integer
 min: 20 max: 9210
 Higher packet length

icmp_type Type: integer
 min: 0 max: 255
 ICMP message type

icmp_code Type: integer
 min: 0 max: 255
 ICMP message code

■ ip_acl_rule (aclmgr)

icmp_str

ICMP label

echo-reply value: 0
Echo reply

unreachable value: 1
All unreachables

net-unreachable value: 2
Net unreachable

host-unreachable value: 3
Host unreachable

dod-host-prohibited value: 4
Host prohibited

net-tos-unreachable value: 5
Network unreachable for TOS

host-tos-unreachable value: 6
Host unreachable for TOS

administratively-prohibited value: 7
Administratively prohibited

host-precedence-unreachable value: 8
Host unreachable for precedence

precedence-unreachable value: 9
Precedence cutoff

protocol-unreachable value: 10
Protocol unreachable

port-unreachable value: 11
Port unreachable

packet-too-big value: 12
Fragmentation needed and DF set

source-route-failed value: 13
Source route failed

network-unknown value: 14
Network unknown

host-unknown value: 15
Host unknown

host-isolated value: 16
Host isolated

dod-net-prohibited value: 17
Net prohibited

source-quench value: 18
Source quenches

redirect value: 19
All redirects

net-redirect value: 20
Network redirect

host-redirect value: 21
Host redirect

net-tos-redirect value: 22
Net redirect for TOS

host-tos-redirect value: 23
Host redirect for TOS

alternate-address value: 24
Alternate address

echo value: 25
Echo (ping)

router-advertisement value: 26
Router discovery advertisements

router-solicitation value: 27
Router discovery solicitations

time-exceeded value: 28
All time exceeded

ttl-exceeded value: 29
TTL exceeded

reassembly-timeout value: 30
Reassembly timeout

parameter-problem value: 31
All parameter problems

general-parameter-problem value: 32
Parameter problem

option-missing value: 33
Parameter required but not present

no-room-for-option value: 34
Parameter required but no room

timestamp-request value: 35
Timestamp requests

timestamp-reply value: 36
Timestamp replies

information-request value: 37
Information requests

information-reply value: 38
Information replies

mask-request value: 39
Mask requests

mask-reply value: 40
Mask replies

traceroute value: 41
Traceroute

conversion-error value: 42
Datagram conversion

mobile-redirect value: 43
Mobile host redirect

capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipacl

ip_acl_rule (aclmgr)

```

{[seqno]|no} permitdeny {ipprotoip_other_proto} {src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} {[fragments]|log} [time-range
time_range_name]|packet-length {plen_op plen0|plen_range plen1 plen2}|dscp
{dscp_numdscp_str}}+|[fragments]|log} [time-range time_range_name]|packet-length {plen_op
plen0|plen_range plen1 plen2}|tos {tos_numtos_str}|precedence {prec_numprec_str}}+} [capture
session session-id]

```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
ip	Any IP protocol
<i>proto</i>	Type: uinteger min: 0 max: 255 A protocol number
<i>ip_other_proto</i>	ip_other_proto ahp value: 51 Authentication header protocol eigrp value: 88 Cisco's EIGRP routing protocol esp value: 50 Encapsulation security payload gre value: 47 Cisco's GRE tunneling ospf value: 89 OSPF routing protocol nos value: 94 KA9Q NOS compatible IP over IP tunneling pim value: 103 Protocol independent multicast pcp value: 108 Payload compression protocol
<i>src_any</i>	Any

<i>src_addr</i>	Type: ipaddr Source network address
<i>src_wild</i>	Type: ipaddr Source wildcard bits
<i>src_prefix</i>	Type: ipprefix Source network prefix
src_key_host	A single source host
<i>src_host</i>	Type: ipaddr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipaddr Destination network address
<i>dst_wild</i>	Type: ipaddr Destination wildcard bits
<i>dst_prefix</i>	Type: ipprefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipaddr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
tos	Match packets with given TOS value
<i>tos_num</i>	Type: integer min: 0 max: 15 Type of service value

<i>tos_str</i>	Type of service label
precedence	Match packets with given precedence value
<i>prec_num</i>	Type: integer min: 0 max: 7 Precedence value
<i>prec_str</i>	Precedence label routine value: 0 Match packets with routine precedence (0) priority value: 1 Match packets with priority precedence (1) immediate value: 2 Match packets with immediate precedence (2) flash value: 3 Match packets with flash precedence (3) flash-override value: 4 Match packets with flash override precedence (4) critical value: 5 Match packets with critical precedence (5) internet value: 6 Match packets with internetwork control precedence (6) network value: 7 Match packets with network control precedence (7)
fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length

<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipacl

ipv6_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny proto_tcp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} [{src_port_op {src_port0src_port0_str}|src_port_range
{src_port1src_port1_str} {src_port2src_port2_str}|src_portgroup src_port_group]}] {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name} [{dst_port_op
{dst_port0dst_port0_str}|dst_port_range {dst_port1dst_port1_str} {dst_port2dst_port2_str}|dst_portgroup
dst_port_group]}] [{dscp {dscp_numdscp_str}][[flow-label flow_num]][[log] [time-range
time_range_name]][[urg|ack|psh|rst|syn|fin|established]][[packet-length {plen_op plen0|plen_range
plen1 plen2}]]+|{src_any|src_addr src_wildsrc_prefix|src_key_host src_host|src_key_addrgrp
src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp
dst_addrgrp_name} [dscp {dscp_numdscp_str}] [flow-label flow_num] [fragments] [log] [time-range
time_range_name] [packet-length {plen_op plen0|plen_range plen1 plen2}]]+ [capture session
session-id]}
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_tcp</i>	Protocol tcp value: 6 Transmission Control Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipv6addr Source network address
<i>src_wild</i>	Type: ipv6addr Source wildcard bits
<i>src_prefix</i>	Type: ipv6prefix Source network prefix
src_key_host	A single source host
<i>src_host</i>	Type: ipv6addr Source address

src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>src_port_op</i>	Port operator
<i>src_port_range</i>	Port range
<i>src_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port0_str</i>	TCP port
<i>src_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port1_str</i>	TCP port
<i>src_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port2_str</i>	TCP port
src_portgroup	src port group <i>Not available in this release.</i>
<i>src_port_group</i>	Type: string Port group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipv6addr Destination network address
<i>dst_wild</i>	Type: ipv6addr Destination wildcard bits
<i>dst_prefix</i>	Type: ipv6prefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipv6addr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>

<i>dst_addrgrp_name</i>	Type: string Address group name
<i>dst_port_op</i>	Port operator
<i>dst_port_range</i>	Port range
<i>dst_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port0_str</i>	TCP port
<i>dst_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port1_str</i>	TCP port
<i>dst_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port2_str</i>	TCP port
dst_portgroup	dst port group <i>Not available in this release.</i>
<i>dst_port_group</i>	Type: string Port group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
flow-label	Flow label <i>Not available in this release.</i>
<i>flow_num</i>	Type: integer min: 0 max: 1048575 Flow label value

fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length
<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
urg	Match on the URG bit
ack	Match on the ACK bit
psh	Match on the PSH bit
rst	Match on the RST bit
syn	Match on the SYN bit
fin	Match on the FIN bit
established	Match established connections
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipv6acl

ipv6_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny proto_udp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} [{src_port_op {src_port0src_port0_str}|src_port_range
{src_port1src_port1_str} {src_port2src_port2_str}|src_portgroup src_port_group]} {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name} [{dst_port_op
{dst_port0dst_port0_str}|dst_port_range {dst_port1dst_port1_str} {dst_port2dst_port2_str}|dst_portgroup
dst_port_group]}] [dscp {dscp_numdscp_str}] [flow-label flow_num] [log] [time-range
time_range_name] [packet-length {plen_op plen0|plen_range plen1 plen2}] +|{src_any|src_addr
src_wildsrc_prefix|src_key_host src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name} [dscp
{dscp_numdscp_str}] [flow-label flow_num] [fragments] [log] [time-range time_range_name]
[packet-length {plen_op plen0|plen_range plen1 plen2}] + [capture session session-id]}
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_udp</i>	Protocol udp value: 17 User Datagram Protocol
<i>proto_sctp</i>	Protocol sctp value: 132 Streams Control Transmission Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipv6addr Source network address
<i>src_wild</i>	Type: ipv6addr Source wildcard bits
<i>src_prefix</i>	Type: ipv6prefix Source network prefix
src_key_host	A single source host

<i>src_host</i>	Type: ipv6addr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>src_port_op</i>	Port operator
<i>src_port_range</i>	Port range
<i>src_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port0_str</i>	UDP port
<i>src_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port1_str</i>	UDP port
<i>src_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port2_str</i>	UDP port
src_portgroup	src port group <i>Not available in this release.</i>
<i>src_port_group</i>	Type: string Port group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipv6addr Destination network address
<i>dst_wild</i>	Type: ipv6addr Destination wildcard bits
<i>dst_prefix</i>	Type: ipv6prefix Destination network prefix
dst_key_host	A single destination host

<i>dst_host</i>	Type: ipv6addr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
<i>dst_port_op</i>	Port operator
<i>dst_port_range</i>	Port range
<i>dst_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port0_str</i>	UDP port
<i>dst_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port1_str</i>	UDP port
<i>dst_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port2_str</i>	UDP port
dst_portgroup	dst port group <i>Not available in this release.</i>
<i>dst_port_group</i>	Type: string Port group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
flow-label	Flow label <i>Not available in this release.</i>
<i>flow_num</i>	Type: integer min: 0 max: 1048575 Flow label value

fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length
<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipv6acl

ipv6_acl_rule (aclmgr)

```

{{seqno}}[no] permitdeny proto_sctp {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} [{src_port_op {src_port0src_port0_str}|src_port_range
{src_port1src_port1_str} {src_port2src_port2_str}|src_portgroup src_port_group]}] {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name} [{dst_port_op
{dst_port0dst_port0_str}|dst_port_range {dst_port1dst_port1_str} {dst_port2dst_port2_str}|dst_portgroup
dst_port_group}] [dscp {dscp_numdscp_str}] [flow-label flow_num] [log] [time-range
time_range_name] [packet-length {plen_op plen0plen_range plen1 plen2}] +[{src_any|src_addr
src_wildsrc_prefix|src_key_host src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr
dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp dst_addrgrp_name}] [dscp
{dscp_numdscp_str}] [flow-label flow_num] [fragments] [log] [time-range time_range_name]
[packet-length {plen_op plen0plen_range plen1 plen2}] + [capture session session-id]}

```

Syntax Description	
<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_sctp</i>	Protocol sctp value: 132 Streams Control Transmission Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipv6addr Source network address
<i>src_wild</i>	Type: ipv6addr Source wildcard bits
<i>src_prefix</i>	Type: ipv6prefix Source network prefix
src_key_host	A single source host
<i>src_host</i>	Type: ipv6addr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>

<i>src_addrgrp_name</i>	Type: string Address group name
<i>src_port_op</i>	Port operator
<i>src_port_range</i>	Port range
<i>src_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port0_str</i>	SCTP port
<i>src_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port1_str</i>	SCTP port
<i>src_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>src_port2_str</i>	SCTP port
src_portgroup	src port group <i>Not available in this release.</i>
<i>src_port_group</i>	Type: string Port group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipv6addr Destination network address
<i>dst_wild</i>	Type: ipv6addr Destination wildcard bits
<i>dst_prefix</i>	Type: ipv6prefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipv6addr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>

<i>dst_addrgrp_name</i>	Type: string Address group name
<i>dst_port_op</i>	Port operator
<i>dst_port_range</i>	Port range
<i>dst_port0</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port0_str</i>	SCTP port
<i>dst_port1</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port1_str</i>	SCTP port
<i>dst_port2</i>	Type: integer min: 0 max: 65535 Port number
<i>dst_port2_str</i>	SCTP port
dst_portgroup	dst port group <i>Not available in this release.</i>
<i>dst_port_group</i>	Type: string Port group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	<p>Differentiated services codepoint label</p> <p>default value: 0 Match packets with default dscp (000000)</p> <p>cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000)</p> <p>af11 value: 10 Match packets with AF11 dscp (001010)</p> <p>af12 value: 12 Match packets with AF12 dscp (001100)</p> <p>af13 value: 14 Match packets with AF13 dscp (001110)</p> <p>cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000)</p> <p>af21 value: 18 Match packets with AF21 dscp (010010)</p> <p>af22 value: 20 Match packets with AF22 dscp (010100)</p> <p>af23 value: 22 Match packets with AF23 dscp (010110)</p> <p>cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000)</p> <p>af31 value: 26 Match packets with AF31 dscp (011010)</p> <p>af32 value: 28 Match packets with AF32 dscp (011100)</p> <p>af33 value: 30 Match packets with AF33 dscp (011110)</p> <p>cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000)</p> <p>af41 value: 34 Match packets with AF41 dscp (100010)</p> <p>af42 value: 36 Match packets with AF42 dscp (100100)</p> <p>af43 value: 38 Match packets with AF43 dscp (100110)</p> <p>cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000)</p> <p>ef value: 46 Match packets with EF dscp (101110)</p> <p>cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000)</p> <p>cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)</p>
flow-label	Flow label <i>Not available in this release.</i>
<i>flow_num</i>	<p>Type: integer</p> <p>min: 0 max: 1048575</p> <p>Flow label value</p>

fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length
<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipv6acl

ipv6_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny proto_icmpv6 {{src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} {{icmpv6_type [icmpv6_code]|dscp
{dscp_numdscp_str}|flow-label flow_num|[log] [time-range time_range_name]|packet-length {plen_op
plen0|plen_range plen1 plen2}}}+[[{icmpv6_str|dscp {dscp_numdscp_str}|flow-label flow_num|[log]
[time-range time_range_name]|packet-length {plen_op plen0|plen_range plen1
plen2}}]+}|{src_any|src_addr src_wildsrc_prefix|src_key_host src_host|src_key_addrgrp
src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host dst_host|dst_key_addrgrp
dst_addrgrp_name} [dscp {dscp_numdscp_str}] [flow-label flow_num] [fragments] [log] [time-range
time_range_name] [packet-length {plen_op plen0|plen_range plen1 plen2}]}+ [capture session
session-id]}
```

Syntax Description	
<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>proto_icmpv6</i>	Protocol icmp value: 58 Internet Control Message Protocol
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipv6addr Source network address
<i>src_wild</i>	Type: ipv6addr Source wildcard bits
<i>src_prefix</i>	Type: ipv6prefix Source network prefix
src_key_host	A single source host
<i>src_host</i>	Type: ipv6addr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>

<i>src_addrgrp_name</i>	Type: string Address group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipv6addr Destination network address
<i>dst_wild</i>	Type: ipv6addr Destination wildcard bits
<i>dst_prefix</i>	Type: ipv6prefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipv6addr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
flow-label	Flow label <i>Not available in this release.</i>
<i>flow_num</i>	Type: integer min: 0 max: 1048575 Flow label value

fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length
<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
<i>icmpv6_type</i>	Type: integer min: 0 max: 255 ICMPv6 message type
<i>icmpv6_code</i>	Type: integer min: 0 max: 255 ICMPv6 message code

icmpv6_str

ICMPv6 label

unreachable value: 0

All unreachable

no-route value: 1

No route to destination

no-admin value: 2

Administration prohibited destination

beyond-scope value: 3

Destination beyond scope

destination-unreachable value: 4

Destination address is unreachable

port-unreachable value: 5

Port unreachable

packet-too-big value: 6

Packet too big

time-exceeded value: 7

All time exceeded

hop-limit value: 8

Hop limit exceeded in transit

reassembly-timeout value: 9

Reassembly timeout

parameter-problem value: 10

All parameter problems

header value: 11

Parameter header problems

next-header value: 12

Parameter next header problems

parameter-option value: 13

Parameter option problems

echo-request value: 14

Echo request (ping)

echo-reply value: 15

Echo reply

mld-query value: 16

Multicast Listener Discovery Query

mld-report value: 17

Multicast Listener Discovery Report

mld-reduction value: 18

Multicast Listener Discovery Reduction

router-solicitation value: 19

Neighbor discovery router solicitations

router-advertisement value: 20

Neighbor discovery router advertisements

nd-ns value: 21

Neighbor discovery neighbor solicitations

nd-na value: 22

Neighbor discovery neighbor advertisements

redirect value: 23

Neighbor redirect

router-renumbering value: 24

All router renumbering

renum-command value: 25

Router renumbering command

renum-result value: 26

Router renumbering result

renum-seq-number value: 27

Router renumbering sequence number reset

mldv2 value: 28

Multicast Listener Discovery Protocol

capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipv6acl

ipv6_acl_rule (aclmgr)

```
{[seqno][no] permitdeny {ipv6protoipv6_other_proto} {src_any|src_addr src_wildsrc_prefix|src_key_host
src_host|src_key_addrgrp src_addrgrp_name} {dst_any|dst_addr dst_wilddst_prefix|dst_key_host
dst_host|dst_key_addrgrp dst_addrgrp_name} [dscp {dscp_numdscp_str}] [flow-label flow_num]
[fragments] [log] [time-range time_range_name] [packet-length {plen_op plen0|plen_range plen1
plen2}]+ [capture session session-id]
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
ipv6	Any IPV6 protocol
<i>proto</i>	Type: uinteger min: 0 max: 255 A protocol number
<i>ipv6_other_proto</i>	ipv6_other_proto ahp value: 51 Authentication header protocol esp value: 50 Encapsulation security protocol sctp value: 132 Streams Control Transmission Protocol pcp value: 108 Payload compression protocol eigrp value: 88 Cisco's EIGRP routing protocol pim value: 103 Protocol independent multicast
<i>src_any</i>	Any
<i>src_addr</i>	Type: ipv6addr Source network address

<i>src_wild</i>	Type: ipv6addr Source wildcard bits
<i>src_prefix</i>	Type: ipv6prefix Source network prefix
src_key_host	A single source host
<i>src_host</i>	Type: ipv6addr Source address
src_key_addrgrp	Source address group <i>Not available in this release.</i>
<i>src_addrgrp_name</i>	Type: string Address group name
<i>dst_any</i>	Any
<i>dst_addr</i>	Type: ipv6addr Destination network address
<i>dst_wild</i>	Type: ipv6addr Destination wildcard bits
<i>dst_prefix</i>	Type: ipv6prefix Destination network prefix
dst_key_host	A single destination host
<i>dst_host</i>	Type: ipv6addr Destination address
dst_key_addrgrp	Destination address group <i>Not available in this release.</i>
<i>dst_addrgrp_name</i>	Type: string Address group name
dscp	Match packets with given dscp value
<i>dscp_num</i>	Type: integer min: 0 max: 63 Differentiated services codepoint value

<i>dscp_str</i>	Differentiated services codepoint label default value: 0 Match packets with default dscp (000000) cs1 value: 8 Match packets with CS1(precedence 1) dscp (001000) af11 value: 10 Match packets with AF11 dscp (001010) af12 value: 12 Match packets with AF12 dscp (001100) af13 value: 14 Match packets with AF13 dscp (001110) cs2 value: 16 Match packets with CS2(precedence 2) dscp (010000) af21 value: 18 Match packets with AF21 dscp (010010) af22 value: 20 Match packets with AF22 dscp (010100) af23 value: 22 Match packets with AF23 dscp (010110) cs3 value: 24 Match packets with CS3(precedence 3) dscp (011000) af31 value: 26 Match packets with AF31 dscp (011010) af32 value: 28 Match packets with AF32 dscp (011100) af33 value: 30 Match packets with AF33 dscp (011110) cs4 value: 32 Match packets with CS4(precedence 4) dscp (100000) af41 value: 34 Match packets with AF41 dscp (100010) af42 value: 36 Match packets with AF42 dscp (100100) af43 value: 38 Match packets with AF43 dscp (100110) cs5 value: 40 Match packets with CS5(precedence 5) dscp (101000) ef value: 46 Match packets with EF dscp (101110) cs6 value: 48 Match packets with CS6(precedence 6) dscp (110000) cs7 value: 56 Match packets with CS7(precedence 7) dscp (111000)
flow-label	Flow label <i>Not available in this release.</i>
<i>flow_num</i>	Type: integer min: 0 max: 1048575 Flow label value

fragments	Check non-initial fragments
log	Log matches against this entry
time-range	Specify a time range
<i>time_range_name</i>	Type: string length: 64 Time range name
packet-length	Match packets based on layer 3 packet length
<i>plen_op</i>	Packet-length operator
<i>plen_range</i>	Packet-length range
<i>plen0</i>	Type: integer min: 20 max: 9210 Packet length
<i>plen1</i>	Type: integer min: 20 max: 9210 Lower packet length
<i>plen2</i>	Type: integer min: 20 max: 9210 Higher packet length
capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
session	Session ID <1-48> for this session
<i>session-id</i>	Type: uinteger min: 1 max: 48 Session ID <1-48> for this session

Command Modes

- /exec/configure/ipv6acl

mac_acl_rule (aclmgr)

```
{[seqno]|no} permitdeny {src_any|src_addr src_wild} {dst_any|dst_addr dst_wild}
[mac_protomac_proto_str] [{vlan vlan|cos cos}] + [time-range time_range_name] [capture session
session-id]
```

Syntax	Description
<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny permit value: 2 Specify packets to forward deny value: 3 Specify packets to reject
<i>src_any</i>	Any any value: 1 Any source address
<i>src_addr</i>	Type: ethernet Source MAC address
<i>src_wild</i>	Type: ethernet Source wildcard bits
<i>dst_any</i>	Any any value: 1 Any destination address
<i>dst_addr</i>	Type: ethernet Destination MAC address
<i>dst_wild</i>	Type: ethernet Destination wildcard bits
<i>mac_proto</i>	Type: hex MAC protocol number

<i>mac_proto_str</i>	MAC protocol name
	ip value: 0x0800 IP (Internet Protocol V4)
	vines-echo value: 0x0BAF VINES Echo
	etype-6000 value: 0x6000 Ethertype 0x6000
	etype-8042 value: 0x8042 Ethertype 0x8042
	mop-dump value: 0x6001 DEC MOP dump
	mop-console value: 0x6002 DEC MOP Remote console
	decnet-iv value: 0x6003 DECnet Phase IV
	lat value: 0x6004 DEC LAT
	diagnostic value: 0x6005 DEC Diagnostic Protocol
	lavc-sca value: 0x6007 DEC LAVC,SCA
	appletalk value: 0x809B Appletalk
	aarp value: 0x80F3 Appletalk AARP

vlan	VLAN number
-------------	-------------

cos	CoS value
------------	-----------

<i>vlan</i>	Type: vlan VLAN number
-------------	---------------------------

<i>cos</i>	Type: integer min: 0 max: 7 CoS value
------------	---

time-range	Specify a time range
-------------------	----------------------

<i>time_range_name</i>	Type: string length: 64 Time range name
------------------------	---

capture	Enable packet capture on this filter for session <i>Not available in this release.</i>
----------------	--

session	Session ID <1-48> for this session
----------------	------------------------------------

session-id Type: uinteger
 min: 1 max: 48
 Session ID <1-48> for this session

Command Modes

- /exec/configure/macacl

