

Firewall Filter Match Conditions and Actions for EX Series Switches

Each term in a firewall filter consists of *match conditions* and an *action*. Match conditions are the values or fields that a packet must contain. You can define multiple, single, or no match conditions. If no match conditions are specified for the term, all packets are matched by default. The action is the action that the switch takes if a packet matches the match conditions for the specific term. Allowed actions are accept a packet or discard a packet. In addition, you can specify action modifiers to count, mirror, rate limit, and classify packets.

For each firewall filter, you define the terms that specify the filtering criteria (match conditions) to apply to packets and the action for the switch to take if a match occurs.

Table 1 describes the match conditions you can specify when configuring a firewall filter. The string that defines a match condition is called a *match statement*. All match conditions are applicable to IPv4 traffic. The match conditions are not applicable to IPv6 traffic.

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
destination-address <i>ip-address</i>	IP destination address field, which is the address of the final destination node.	<ul style="list-style-type: none">■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces■ EX8200—ports, VLANs, and Layer 3 interfaces	<ul style="list-style-type: none">■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces■ EX8200—ports, VLANs, and Layer 3 interfaces
destination-mac-address <i>mac-address</i>	Destination media access control (MAC) address of the packet.	<ul style="list-style-type: none">■ EX3200 and EX4200—ports and VLANs■ EX8200—ports and VLANs	<ul style="list-style-type: none">■ EX3200 and EX4200—ports and VLANs■ EX8200—ports and VLANs

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches *(continued)*

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
destination-port <i>number</i>	<p>TCP or User Datagram Protocol (UDP) destination port field. Typically, you specify this match in conjunction with the protocol match statement to determine which protocol is used on the port. In place of the numeric value, you can specify one of the following text synonyms (the port numbers are also listed):</p> <p>afs (1483), bgp (179), biff (512), bootpc (68), bootps (67),</p> <p>cmd (514), cvspserver (2401),</p> <p>dhcp (67), domain (53),</p> <p>eklogin (2105), ekshell (2106), exec (512),</p> <p>finger (79), ftp (21), ftp-data (20),</p> <p>http (80), https (443),</p> <p>ident (113), imap (143),</p> <p>kerberos-sec (88), klogin (543), kpasswd (761), krb-prop (754), krbupdate (760), kshell (544),</p> <p>ldap (389), login (513),</p> <p>mobileip-agent (434), mobilip-mn (435), msdp (639),</p> <p>netbios-dgm (138), netbios-ns (137), netbios-ssn (139), nfsd (2049), nntp (119), ntalk (518), ntp (123),</p> <p>pop3 (110), pptp (1723), printer (515),</p> <p>radacct (1813), radius (1812), rip (520), rkinit (2108),</p> <p>smtp (25), snmp (161), snmptrap (162), snpp (444), socks (1080), ssh (22), sunrpc (111), syslog (514),</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches *(continued)*

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
	tacacs-ds (65), talk (517), telnet (23), tftp (69), timed (525), who (513), xdmcp (177), zephyr-clt (2103), zephyr-hm (2104)		
destination-prefix-list <i>prefix-list</i>	IP destination prefix list field. You can define a list of IP address prefixes under a prefix-list alias for frequent use. You make this definition at the [edit policy-options] hierarchy level.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
dot1q-tag <i>number</i>	The tag field in the Ethernet header. The tag values can be 1–4095.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—not supported
dot1q-user-priority <i>number</i>	User-priority field of the tagged Ethernet packet. User-priority values can be 0–7. In place of the numeric value, you can specify one of the following text synonyms (the field values are also listed): <ul style="list-style-type: none"> ■ background (1)—Background ■ best-effort (0)—Best effort ■ controlled-load (4)—Controlled load ■ excellent-load (3)—Excellent load ■ network-control (7)—Network control reserved traffic ■ standard (2)—Standard or Spare ■ video (5)—Video ■ voice (6)—Voice 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches *(continued)*

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
<code>dscp number</code>	<p>Differentiated Services code point (DSCP). The DiffServ protocol uses the type-of-service (ToS) byte in the IP header. The most significant six bits of this byte form the DSCP.</p> <p>You can specify DSCP in hexadecimal, binary, or decimal form.</p> <p>In place of the numeric value, you can specify one of the following text synonyms (the field values are also listed):</p> <ul style="list-style-type: none"> ■ <code>ef (46)</code>—as defined in RFC 2598, <i>An Expedited Forwarding PHB</i>. ■ <code>af11 (10)</code>, <code>af12 (12)</code>, <code>af13 (14)</code>; <code>af21 (18)</code>, <code>af22 (20)</code>, <code>af23 (22)</code>; <code>af31 (26)</code>, <code>af32 (28)</code>, <code>af33 (30)</code>; <code>af41 (34)</code>, <code>af42 (36)</code>, <code>af43 (38)</code> <p>These four classes, with three drop precedences in each class, for a total of 12 code points, are defined in RFC 2597, <i>Assured Forwarding PHB</i>.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
<code>ether-type [ipv4 arp mpls dot1q value]</code>	<p>Ethernet type field of a packet. The <i>EtherType value</i> specifies what protocol is being transported in the Ethernet frame. In place of the numeric value, you can specify one of the following text synonyms:</p> <ul style="list-style-type: none"> ■ <code>aarp</code>—EtherType value AARP (0x80F3) ■ <code>appletalk</code>—EtherType value AppleTalk (0x809B) ■ <code>arp</code>—EtherType value ARP (0x0806) ■ <code>ipv4</code>—EtherType value IPv4 (0x0800) ■ <code>mpls multicast</code>—EtherType value MPLS multicast (0x8848) ■ <code>mpls unicast</code>—EtherType value MPLS unicast (0x8847) ■ <code>oam</code>—EtherType value OAM (0x88A8) ■ <code>ppp</code>—EtherType value PPP (0x880B) ■ <code>pppoe-discovery</code>—EtherType value PPPoE Discovery Stage (0x8863) ■ <code>pppoe-session</code>—EtherType value PPPoE Session Stage (0x8864) ■ <code>sna</code>—EtherType value SNA (0x80D5) 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—not supported.

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches (continued)

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
fragment-flags <i>fragment-flags</i>	<p>IP fragmentation flags, specified in symbolic or hexadecimal formats. You can specify one of the following options:</p> <p>dont-fragment (0x4000), more-fragments (0x2000), or reserved (0x8000)</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
icmp-code <i>number</i>	<p>ICMP code field. This value or option provides more specific information than icmp-type. Because the value's meaning depends upon the associated icmp-type, you must specify icmp-type along with icmp-code. In place of the numeric value, you can specify one of the following text synonyms (the field values are also listed). The options are grouped by the ICMP type with which they are associated:</p> <ul style="list-style-type: none"> ■ parameter-problem—ip-header-bad (0), required-option-missing (1) ■ redirect—redirect-for-host (1), redirect-for-network (0), redirect-for-tos-and-host (3), redirect-for-tos-and-net (2) ■ time-exceeded—ttl-eq-zero-during-reassembly (1), ttl-eq-zero-during-transit (0) ■ unreachable—communication-prohibited-by-filtering (13), destination-host-prohibited (10), destination-host-unknown (7), destination-network-prohibited (9), destination-network-unknown (6), fragmentation-needed (4), host-precedence-violation (14), host-unreachable (1), host-unreachable-for-TOS (12), network-unreachable (0), network-unreachable-for-TOS (11), port-unreachable (3), precedence-cutoff-in-effect (15), protocol-unreachable (2), source-host-isolated (8), source-route-failed (5) 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—VLANs and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches *(continued)*

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
icmp-type <i>number</i>	<p>ICMP packet type field. Typically, you specify this match in conjunction with the protocol match statement to determine which protocol is being used on the port. In place of the numeric value, you can specify one of the following text synonyms (the field values are also listed):</p> <p>echo-reply (0), echo-request (8), info-reply (16), info-request (15),</p> <p>mask-request (17), mask-reply (18), parameter-problem (12),</p> <p>redirect (5), router-advertisement (9), router-solicit (10), source-quench (4),</p> <p>time-exceeded (11), timestamp (13), timestamp-reply (14), unreachable (3)</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
interface <i>interface-name</i>	<p>Interface on which the packet is received. You can specify the wildcard character (*) as part of an interface name.</p> <p>NOTE: An interface from which a packet is sent cannot be used as a match condition.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
ip-options	Presence of the options field in the IP header.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—Layer 3 interfaces ■ EX8200—Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
is-fragment	If the packet is a trailing fragment. This match condition does not match the first fragment of a fragmented packet. Use two terms to match both first and trailing fragments.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
packet-length <i>bytes</i>	<p>Length of the received packet, in bytes.</p> <p>NOTE: packet-length is not supported on EX3200 and EX4200 switches.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches *(continued)*

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
<i>precedence precedence</i>	<p>IP precedence. In place of the numeric value, you can specify one of the following text synonyms (the field values are also listed):</p> <ul style="list-style-type: none"> ■ critical-ecp (5) ■ flash (3) ■ flash-override (4) ■ immediate (2) ■ internet-control (6) ■ net-control (7) ■ priority (1) ■ routine (0) 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
<i>protocol list of protocols</i>	<p>IPv4 protocol value. In place of the numeric value, you can specify one of the following text synonyms:</p> <p>egp (8), esp (50), gre (47), icmp (1), igmp (2), ipip (4),</p> <p>ospf (89), pim (103), rsvp (46), tcp (6), udp (17)</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
<i>source-address ip-address</i>	IP source address field, which is the address of the source node sending the packet.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
<i>source-mac-address mac-address</i>	Source MAC address.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs
<i>source-port number</i>	TCP or UDP source-port field. Typically, you specify this match in conjunction with the protocol match statement to determine which protocol is being used on the port. In place of the numeric field, you can specify one of the text synonyms listed under destination-port .	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces

Table 1: Supported Match Conditions for Firewall Filters on EX Series Switches (continued)

Match Condition	Description	Supported Platforms and Bind Points	
		Ingress	Egress
source-prefix-list <i>prefix-list</i>	<p>IP source prefix list field.</p> <p>You can define a list of IP address prefixes under a prefix-list alias for frequent use. You make this definition at the [edit <i>policy-options</i>] hierarchy level.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces
tcp-established	<p>TCP packets of an established TCP connection. This condition matches packets other than the first packet of a connection. tcp-established is a synonym for the bit names "(ack rst)".</p> <p>tcp-established does not implicitly check whether the protocol is TCP. To do so, specify the protocol tcp match condition.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
tcp-flags [<i>flags</i> <i>tcp-initial</i>]	<p>One or more TCP flags:</p> <ul style="list-style-type: none"> ■ bit-name—fin, syn, rst, push, ack, urgent ■ logical operators—& (logical AND), ! (negation) ■ numerical value—0x01 through 0x20 ■ text synonym—tcp-initial <p>To specify multiple flags, use logical operators.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
tcp-initial	<p>Match the first TCP packet of a connection. tcp-initial is a synonym for the bit names "(syn & !ack)".</p> <p>tcp-initial does not implicitly check whether the protocol is TCP. To do so, specify the protocol tcp match condition.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports, VLANs, and Layer 3 interfaces ■ EX8200—ports, VLANs, and Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
ttl <i>value</i>	TTL type to match. The value can be 1–255.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—Layer 3 interfaces ■ EX8200—Layer 3 interfaces 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—not supported ■ EX8200—not supported
vlan [<i>vlan-name</i> <i>vlan-id</i>]	The VLAN that is associated with the packet.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ports and VLANs ■ EX8200—ports and VLANs

Some of the numeric range and bit-field match conditions allow you to specify a text synonym. For a list of all the synonyms for a match condition, do any of the following:

- If you are using the J-Web Filters Configuration page, select the synonym from the appropriate list.
- If you are using the CLI, type a question mark (?) after the **from** statement.

To specify the bit-field value to match, you must enclose the values in quotation marks (" "). For example, a match occurs if the RST bit in the TCP flags field is set:

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tcp-flags "rst";
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For information about logical operators and how to use bit-field logical operations to create expressions that are evaluated for matches, see Understanding Firewall Filter Match Conditions.

When you define one or more terms that specify the filtering criteria, you also define the action to take if the packet matches all criteria. Table 2 shows the actions that you can specify in a term.

Table 2: Actions for Firewall Filters

Action	Description	Supported Platforms and Direction
accept	Accept a packet.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress and egress ■ EX8200—ingress and egress
discard	Discard a packet silently without sending an Internet Control Message Protocol (ICMP) message.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress and egress ■ EX8200—ingress and egress
reject <i>message-type</i>	<p>Discard a packet, and send an ICMPv4 message (type 3) “destination unreachable”. You can log the rejected packets if you configure the syslog action modifier.</p> <p>You can specify one of the following message codes: administratively-prohibited (default), bad-host-tos, bad-network-tos, host-prohibited, host-unknown, host-unreachable, network-prohibited, network-unknown, network-unreachable, port-unreachable, precedence-cutoff, precedence-violation, protocol-unreachable, source-host-isolated, source-route-failed, or tcp-reset.</p> <p>If you specify tcp-reset, a TCP reset is returned if the packet is a TCP packet. Otherwise nothing is returned.</p> <p>If you do not specify a message type, the ICMP notification “destination unreachable” is sent with the default message “communication administratively filtered”.</p>	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—not supported
routing-instance	Forward matched packets to a virtual routing instance.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress and egress ■ EX8200—not supported

Table 2: Actions for Firewall Filters *(continued)*

Action	Description	Supported Platforms and Direction
vlan	Forward matched packets to a specific VLAN.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—not supported

In addition to the actions, you can specify action modifiers. Table 3 shows the action modifiers that you can specify in a term.

Table 3: Action Modifiers for Firewall Filters

Action Modifier	Description	Supported Platforms and Direction
analyzer <i>analyzer-name</i>	Mirror port traffic to a specified destination port or VLAN that is connected to a protocol analyzer application. Mirroring copies all packets seen on one switch port to a network monitoring connection on another switch port. The analyzer name must be configured under [edit ethernet-switching-options analyzer].	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—ingress only
count <i>counter-name</i>	Count the number of packets that pass this filter, term, or policer.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress and egress ■ EX8200—not supported
forwarding-class <i>class</i>	Classify the packet in one of the following forwarding classes: <ul style="list-style-type: none"> ■ assured-forwarding ■ best-effort ■ expedited-forwarding ■ network-control 	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress and egress ■ EX8200—ingress and egress
interface <i>interface-name</i>	Forward the traffic to the specified interface bypassing the switching lookup.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—ingress only
log	Log the packet's header information in the Routing Engine. To view this information, issue the show firewall log command in the CLI.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—not supported
loss-priority [<i>low</i> <i>high</i>]	Set the Packet Loss Priority (PLP).	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—not supported
policer <i>policer-name</i>	Apply rate limits to the traffic. You can specify a policer for ingress port, VLAN, and router firewall filters only.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—ingress only
syslog	Log an alert for this packet. You can specify that the log be sent to a server for storage and analysis.	<ul style="list-style-type: none"> ■ EX3200 and EX4200—ingress only ■ EX8200—not supported



NOTE: On EX Series switches, **accept** and **discard** are the only actions supported for firewall filters applied on loopback interfaces.

- Related Topics**
- Firewall Filter Configuration Statements Supported by JUNOS Software for EX Series Switches
 - Example: Configuring Firewall Filters for Port, VLAN, and Router Traffic on EX Series Switches
 - Example: Using Filter-Based Forwarding to Route Application Traffic to a Security Device on EX Series Switches
 - Understanding Firewall Filter Match Conditions
 - Understanding How Firewall Filters Are Evaluated
 - Understanding How Firewall Filters Test a Packet's Protocol
 - Understanding the Use of Policers in Firewall Filters
 - Understanding Filter-Based Forwarding for EX Series Switches
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