



# ACS Packet Filter Configuration Mode Commands

The ACS Packet Filter Configuration Mode is used to create and configure Active Charging Service (ACS) packet filters.

## Command Modes

Exec > ACS Configuration > Packet Filter Configuration

**active-charging service** *service\_name* > **packet-filter** *packet\_filter\_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-packet-filter)#
```



## Important

The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).

- [direction](#), on page 1
- [end](#), on page 2
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- [ip local-port](#), on page 3
- [ip protocol](#), on page 4
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- [ip tos-traffic-class](#), on page 7
- [priority](#), on page 8

## direction

This command allows you to specify the direction in which the current packet filter will be applied.

## Product

ACS

## Privilege

Security Administrator, Administrator

## Command Modes

Exec > ACS Configuration > Packet Filter Configuration

**active-charging service** *service\_name* > **packet-filter** *packet\_filter\_name*

**end**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-packet-filter)#
```

**Syntax Description**

```
direction { bi-directional | downlink | uplink }  
default direction
```

**default**

Configures this command with its default setting.

Default: **bi-directional**

**bi-directional**

Specifies that the packet filter has to be applied in both uplink and downlink directions.

**downlink**

Specifies that the packet filter has to be applied only in the downlink direction.

**uplink**

Specifies that the packet filter has to be applied only in the uplink direction.

**Usage Guidelines**

Use this command to specify the direction in which the packet filter has to be applied.

**Example**

The following command specifies that the packet filter must be applied in the downlink direction:

```
direction downlink
```

**end**

Exits the current configuration mode and returns to the Exec mode.

**Product**

All

**Privilege**

Security Administrator, Administrator

**Syntax Description**

```
end
```

**Usage Guidelines**

Use this command to return to the Exec mode.

**exit**

Exits the current mode and returns to the parent configuration mode.

**Product**

All

<b>Privilege</b>	Security Administrator, Administrator
<b>Syntax Description</b>	<b>exit</b>
<b>Usage Guidelines</b>	Use this command to return to the parent configuration mode.

## ip local-port

This command allows you to configure the IP 5-tuple local port(s) for the current packet filter.

<b>Product</b>	ACS
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > ACS Configuration > Packet Filter Configuration <b>active-charging service</b> <i>service_name</i> > <b>packet-filter</b> <i>packet_filter_name</i> Entering the above command sequence results in the following prompt: <pre>[local]host_name(config-packet-filter)#</pre>
<b>Syntax Description</b>	<b>ip local-port</b> { = <i>port_number</i>   <b>range</b> <i>start_port_number</i> <b>to</b> <i>end_port_number</i> } <b>no ip local-port</b>  <b>no</b> If previously configured, deletes the ip local-port configuration from the current packet filter.  <b>port_number</b> Specifies the port number of the transport protocol. <i>port_number</i> must be the port number, and must be an integer from 1 through 65535.  <b>range start_port_number to end_port_number</b> Specifies a range of port numbers. <i>start_port_number</i> and <i>end_port_number</i> must be integers from 1 through 65535. <i>end_port_number</i> must be greater than <i>start_port_number</i> .  <b>Usage Guidelines</b> Use this command to configure the IP local port(s) for a packet filter.

### Example

The following command configures the IP local port as 456:

```
ip local-port 456
```

# ip protocol

This command allows you to configure the IP protocol(s) for the current packet filter.

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**Product**

ACS

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**Privilege**

Security Administrator, Administrator

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**Command Modes**

Exec &gt; ACS Configuration &gt; Packet Filter Configuration

**active-charging service** *service\_name* > **packet-filter** *packet\_filter\_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-packet-filter)#
```

---

**Syntax Description**

In StarOS 9.0 and later releases:

```
ip protocol = protocol_number
```

```
no ip protocol
```

In StarOS 8.2 and earlier releases:

```
ip protocol { = protocol_number | range start_protocol_number to end_protocol_number }
```

```
no ip protocol
```

**no**

If previously configured, deletes the IP protocol configuration from the current packet filter.

***protocol\_number***

Specifies the transport protocol field in the IP header.

*protocol\_number* must be the numerical value of the protocol, and must be an integer from 1 through 255.

***range start\_protocol\_number to end\_protocol\_number***




---

**Important** In StarOS 9.0 and later releases this option is deprecated.

---

Specifies a range of protocol assignment numbers.

*start\_protocol\_number* and *end\_protocol\_number* must be integers from 1 through 255.

*end\_protocol\_number* must be greater than *start\_protocol\_number*.

---

**Usage Guidelines**

Use this command to configure the protocol(s) for a packet filter.

**Example**

The following command configures the protocol assignment number 300:

```
ip protocol = 300
```

## ip remote-address

This command allows you to configure the IP remote address(es) for the current packet filter.

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**Product** ACS

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**Privilege** Security Administrator, Administrator

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**Command Modes** Exec > ACS Configuration > Packet Filter Configuration  
**active-charging service** *service\_name* > **packet-filter** *packet\_filter\_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-packet-filter)#
```

---

**Syntax Description** In StarOS 9.0 and later releases:

```
ip remote-address = { ipv4/ipv6_address | ipv4/ipv6_address/mask }  

no ip remote-address
```

In StarOS 8.2 and earlier releases:

```
ip remote-address { = { ipv4/ipv6_address | ipv4/ipv6_address/mask } | range {  

start_ipv4/ipv6_address | start_ipv4/ipv6_address/mask } to { end_ipv4/ipv6_address |  

end_ipv4/ipv6_address/mask } }  

no ip remote-address
```

**no**

If previously configured, deletes the IP remote-address configuration from the current packet filter.

```
ip remote-address = { ipv4/ipv6_address | ipv4/ipv6_address/mask }
```

*ipv4/ipv6\_address* specifies the IPv4/IPv6 address.

*ipv4/ipv6\_address/mask* specifies the IPv4/IPv6 address and the number of subnet bits representing the subnet mask in shorthand.

```
ip remote-address range { start_ipv4/ipv6_address | start_ipv4/ipv6_address/mask } to { end_ipv4/ipv6_address |  

end_ipv4/ipv6_address/mask }
```




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**Important** In StarOS 9.0 and later releases this keyword has been deprecated.

---

**range** specifies a range of IPv4/IPv6 addresses.

*start\_ipv4/ipv6\_address* and *end\_ipv4/ipv6\_address* specify, for the range, the starting and ending IPv4/IPv6 addresses. *end\_ipv4/ipv6\_address* must be greater than *start\_ipv4/ipv6\_address*.

*start\_ipv4/ipv6\_address/mask* and *end\_ipv4/ipv6\_address/mask* specify, for the range, the starting and ending IPv4/IPv6 address, and the number of subnet bits representing the subnet mask in shorthand. *end\_ipv4/ipv6\_address/mask* must be greater than *start\_ipv4/ipv6\_address/mask*.

**Usage Guidelines**

Use this command to configure the remote address(es) for a packet filter.

**Example**

The following command configures the IP remote address as *10.2.3.4/24*:

```
ip remote-address = 10.2.3.4/24
```

## ip remote-port

This command allows you to configure the IP remote port(s) for the current packet filter.

**Product**

ACS

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > ACS Configuration > Packet Filter Configuration

```
active-charging service service_name > packet-filter packet_filter_name
```

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-packet-filter)#
```

**Syntax Description**

```
ip remote-port { = port_number | range start_port_number to end_port_number }
no ip remote-port
```

**no**

If previously configured, deletes the ip remote-port configuration from the current packet filter.

***port\_number***

Specifies the port number of the transport protocol.

*port\_number* must be the port number, and must be an integer from 1 through 65535.

**range *start\_port\_number* to *end\_port\_number***

Specifies a range of port numbers.

*start\_port\_number* and *end\_port\_number* must be integers from 1 through 65535.

*end\_port\_number* must be greater than *start\_port\_number*.

**Usage Guidelines**

Use this command to configure the IP remote port(s) for a packet filter.

**Example**

The following command configures the IP remote port as 789:

```
ip remote-port = 789
```

## ip tos-traffic-class

This command allows you to configure Type of Service (TOS)/Traffic class under charging action in the Packet filter mode.

<b>Product</b>	ACS
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > ACS Configuration > Packet Filter Configuration <b>active-charging service</b> <i>service_name</i> > <b>packet-filter</b> <i>packet_filter_name</i> Entering the above command sequence results in the following prompt: <pre>[local]host_name(config-packet-filter)#</pre>
<b>Syntax Description</b>	<p><b>[no] ip tos-traffic-class = { <i>type-of-service</i>   <i>traffic class</i> } <b>mask</b> { = <i>mask-value</i> }</b></p> <p><b>no</b></p> <p>If previously configured, deletes the TOS/Traffic class under charging action.</p> <p><b>tos-traffic-class = { <i>type-of-service</i>   <i>traffic class</i> }</b></p> <p>Specifies the TOS/Traffic Class" value that is used to filter the traffic. Enter an integer, ranging from 0 to 255.</p> <p><b>mask {<i>mask-value</i>}</b></p> <p>Specifies the type-of-service or traffic-class mask field. Enter an integer, ranging from 0 to 255.</p>
<b>Usage Guidelines</b>	<p>Use this command to configure TOS/Traffic class in Packet filter and the corresponding value to be sent in the Create Bearer and Update Bearer request.</p> <p>If this CLI is not configured, by default TOS/Traffic class AVP is not included for Predefined rules in CBR/UBR messages.</p> <p>The default behavior can also be configured with below command:</p> <pre>no ip tos-traffic-class</pre> <p>While installing the Predefined rules for a bearer, TOS/Traffic class information can also be included such that the TOS value can be used to filter the traffic.</p>



**Note** Operator should configure TOS along with mask and there are no default values for TOS value and mask.

### Example

The following command configures TOS/Traffic class for the Predefined rules.

```
ip tos-traffic-class = 32 mask = 255
```

## priority

This command allows you to configure the current packet filter's priority.

### Product



**Important** This command is deprecated in certain 9.0 releases and in 10.0 and later releases. The precedence values of packet filters (those from both dynamic and predefined rules) are assigned by the PCEF based on an internal process.

ACS

### Privilege

Security Administrator, Administrator

### Command Modes

Exec > ACS Configuration > Packet Filter Configuration

**active-charging service** *service\_name* > **packet-filter** *packet\_filter\_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-packet-filter)#
```

### Syntax Description

**priority** *priority*  
**no priority**

**no**

If previously configured, deletes the priority configuration in the current packet filter.

**priority**

Specifies this packet filter's priority

*priority* must be an integer from 0 through 255.

### Usage Guidelines

Use this command to configure the packet filter's priority. The priority must be configured for the packet filter to be used in a TFT. Packets are compared against packet filters in a prioritized fashion, with 0 being the highest priority. Without this setting, this filter will not be used.



**Example**

The following command configures the packet filter's priority as 3:

```
priority 3
```

■ priority