

Chapter 21

Summary of Interface Configuration Statements

The following sections explain each of the interface configuration statements. The statements are organized alphabetically.

address

Syntax	<pre>address address { ... }</pre>
Hierarchy Level	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family <i>family</i>]
Description	Configure the interface address.
Options	<i>address</i> —Address of the interface.
Usage Guidelines	See “Configure the Interface Address and Domain” on page 214; for a general discussion of address statement options, see <i>JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide</i> .
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.
See Also	<i>JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide</i> for other statements that do not affect services interfaces.

clear-dont-fragment-bit

Syntax	clear-dont-fragment-bit;
Hierarchy Level	[edit interfaces <i>gr-fpc/pic/port</i> unit <i>logical-unit-number</i>]
Description	Clear the Don't Fragment (DF) bit on all IPv4 packets entering the GRE tunnel on the AS PIC. If the encapsulated packet size exceeds the tunnel MTU, the packet is fragmented before encapsulation.
Usage Guidelines	See "Enable Fragmentation on GRE Tunnels" on page 216.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

facility-override

Syntax	facility-override <i>facility-name</i> ;
Hierarchy Level	[edit interfaces <i>interface-name</i> services-options syslog host <i>hostname</i>]
Description	Override the default facility for system log reporting.
Options	<i>facility-name</i> —Name of the facility that overrides the default assignment. Valid entries include: authorization daemon ftp kernel local0 through local7 user
Usage Guidelines	See "Configure Default System Log Properties" on page 215.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

family

```

Syntax  family inet {
            address address {
                ...
            }
            service {
                input {
                    [ service-set service-set-name <service-filter filter-name> ];
                    post-service-filter filter-name;
                }
                output {
                    [ service-set service-set-name <service-filter filter-name> ];
                }
            }
        }

```

Hierarchy Level [edit interfaces *interface-name* unit *logical-unit-number*]

Description Configure protocol family information for the logical interface.

Options *family*—Protocol family. The only valid setting for service interfaces is the following:

inet—Internet Protocol version 4 suite.

The remaining statements are explained separately.

Usage Guidelines See “Configure the Interface Address and Domain” on page 214 or “Apply Filters and Services to an Interface” on page 217; for a general discussion of family statement options, see *JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide*.

Required Privilege Level interface—To view this statement in the configuration.
interface-control—To add this statement to the configuration.

See Also *JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide* for other statements that do not affect services interfaces.

host

Syntax	<pre>host <i>hostname</i> { services <i>priority-level</i>; facility-override <i>facility-name</i>; log-prefix <i>prefix-number</i>; }</pre>
Hierarchy Level	[edit interfaces <i>interface-name</i> services-options syslog]
Description	Specify the hostname for the system logging utility.
Options	<p><i>hostname</i>—Name of the system logging utility host machine. This can be the local Routing Engine or an external server address.</p> <p>The remaining statements are explained separately.</p>
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

inactivity-timeout

Syntax	inactivity-timeout <i>seconds</i> ;
Hierarchy Level	[edit interfaces <i>interface-name</i> services-options]
Description	Configure the inactivity timeout period for established flows. Timeout configured in the application protocol definition overrides this value.
Options	<p><i>seconds</i>—Timeout period, in seconds.</p> <p>Default: 30 seconds</p>
Usage Guidelines	See “Configure Default Timeout Settings” on page 214.
Required Privilege Level	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

input

Syntax	input { [service-set <i>service-set-name</i> <service-filter <i>filter-name</i> >]; post-service-filter <i>filter-name</i> ; }
Hierarchy Level	[edit interface <i>interface-name</i> unit <i>logical-unit-number</i> family inet service], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service]
Description	Define the input service sets and filters to be applied to traffic.
Options	The remaining statements are explained separately.
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

interfaces

Syntax	interfaces { ... }
Hierarchy Level	[edit]
Description	Configure interfaces on the router.
Default	The management and internal Ethernet interfaces are automatically configured. You must configure all other interfaces.
Usage Guidelines	For a complete description, see <i>JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide</i> .
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

log-prefix

Syntax	log-prefix <i>prefix-number</i> ;
Hierarchy Level	[edit interfaces <i>interface-name</i> services-options syslog host <i>hostname</i>]
Description	Set the system logging prefix value.
Options	<i>prefix-number</i> —System logging prefix value.
Usage Guidelines	See “Configure Default System Log Properties” on page 215.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

open-timeout

Syntax	<code>open-timeout <i>seconds</i>;</code>
Hierarchy Level	[edit interfaces <i>interface-name</i> services-options]
Description	Configure timeout period for TCP session establishment.
Options	<i>seconds</i> —Timeout period, in seconds. Default: 30 seconds
Usage Guidelines	See “Configure Default Timeout Settings” on page 214.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

output

Syntax	<code>output { [service-set <i>service-set-name</i> <service-filter <i>filter-name</i>>]; }</code>
Hierarchy Level	[edit interface <i>interface-name</i> unit <i>logical-unit-number</i> family inet service], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service]
Description	Define the output service sets and filters to be applied to traffic.
Options	The remaining statements are explained separately.
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

post-service-filter

Syntax	<code>post-service-filter <i>filter-name</i>;</code>
Hierarchy Level	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service input], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service input]
Description	Define the filter to be applied to traffic after service processing. The filter is applied only if a service set is configured and selected. You can configure a post-service filter on the input side of the interface only.
Options	<i>filter-name</i> —Identifier for the post-service filter.
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

service

Syntax	<pre> service { input { [service-set <i>service-set-name</i> <service-filter <i>filter-name</i>>]; post-service-filter <i>filter-name</i>; } output { [service-set <i>service-set-name</i> <service-filter <i>filter-name</i>>]; } } </pre>
Hierarchy Level	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet]
Description	Define the service sets and filters to be applied to an interface.
Options	The remaining statements are explained separately.
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

service-domain

Syntax	service-domain (inside outside);
Hierarchy Level	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet]
Description	Specify the service interface domain. If you specify this interface using the next-hop-service statement at the [edit services service-set <i>service-set-name</i>] hierarchy level, the interface domain must match that specified with the inside-service-interface and outside-service-interface statements.
Options	inside—Interface used within the network. outside—Interface used outside the network.
Usage Guidelines	See “Configure the Interface Address and Domain” on page 214.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

service-filter

Syntax	<code>service-filter <i>filter-name</i>;</code>
Hierarchy Level	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service (input output)], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service (input output)]
Description	Define the filter to be applied to traffic before it is accepted for service processing. Configuration of a service filter is optional; if you include the service-set statement without a service-filter definition, the router software assumes that the match condition is true and selects the service set for processing automatically.
Options	<i>filter-name</i> —Identifies the filter to be applied in service processing.
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

service-set

Syntax	<code>service-set <i>service-set-name</i>;</code>
Hierarchy Level	[edit interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service (input output)], [edit logical-routers <i>logical-router-name</i> interfaces <i>interface-name</i> unit <i>logical-unit-number</i> family inet service (input output)]
Description	Define one or more service sets to be applied to an interface. If you define multiple service sets, the router software evaluates the filters in the order in which they appear in the configuration.
Options	<i>service-set-name</i> —Identifies the service set.
Usage Guidelines	See “Apply Filters and Services to an Interface” on page 217.
Required Privilege Level	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

services

Syntax	<code>services <i>priority-level</i>;</code>
Hierarchy Level	[edit interfaces <i>interface-name</i> services-options syslog host <i>hostname</i>]
Description	Specify the system logging priority level.
Options	<p><i>priority-level</i>—Assigns a priority level to the facility. Valid entries include:</p> <ul style="list-style-type: none"> alert—Conditions that should be corrected immediately. any—Matches any level. critical—Critical conditions. emergency—Panic conditions. error—Error conditions. info—Informational messages. notice—Conditions that require special handling. warning—Warning messages.
Usage Guidelines	See “Configure Default System Log Properties” on page 215.
Required Privilege Level	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

services-options

Syntax	<pre>services-options{ inactivity-timeout <i>seconds</i>; open-timeout <i>seconds</i>; syslog { host <i>hostname</i> { services [<i>priority-number</i>]; facility-override <i>facility-name</i>; log-prefix <i>prefix-number</i>; } } }</pre>
Hierarchy Level	[edit interfaces <i>interface-name</i>]
Description	Define the service options to be applied on an interface.
Options	The remaining statements are explained separately.
Usage Guidelines	See “Configure Interface Properties” on page 214.
Required Privilege Level	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

syslog

Syntax

```
syslog {
  host hostname {
    services priority-level;
    facility-override facility-name;
    log-prefix prefix-number;
  }
}
```

Hierarchy Level [edit interfaces *interface-name* services-options]

Description Configure generation of system log messages for the service set. System log information is passed to the kernel for logging in the /var/log directory. Any values configured in the service set definition override these values.

Options The remaining statements are described separately.

Usage Guidelines See “Configure Default System Log Properties” on page 215.

Required Privilege Level interface—To view this statement in the configuration.
interface-control—To add this statement to the configuration.

unit

Syntax	<pre> unit <i>logical-unit-number</i> { family inet { address <i>address</i> { } service { input { [service-set <i>service-set-name</i> <service-filter <i>filter-name</i>>]; post-service-filter <i>filter-name</i>; } output { [service-set <i>service-set-name</i> <service-filter <i>filter-name</i>>]; } } service-domain (inside outside); } </pre>
Hierarchy Level	[edit interfaces <i>interface-name</i>]
Description	Configure a logical interface on the physical device. You must configure a logical interface to be able to use the physical device.
Options	<p><i>logical-unit-number</i>—Number of the logical unit. Range: 0 through 16,384</p> <p>The remaining statements are explained separately.</p>
Usage Guidelines	See “Configure Interface Properties” on page 214; for a general discussion of logical interface properties, see the <i>JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide</i> .
Required Privilege Level	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>
See Also	<i>JUNOS Internet Software Network Interfaces and Class of Service Configuration Guide</i> for other statements that do not affect services interfaces.

