

Chapter 23

Summary of Interface Configuration Statements

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

address

| | |
|---------------------------------|---|
| Syntax | <code>address address { ... }</code> |
| 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 “Configuring the Interface Address and Domain” on page 266; for a general discussion of address statement options, see the <i>JUNOS 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 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 "Enabling Fragmentation on GRE Tunnels" on page 268. |
| 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: <ul style="list-style-type: none"> authorization daemon ftp kernel local0 through local7 user |
| Usage Guidelines | See "Configuring Default System Log Properties" on page 267. |
| 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 “Configuring the Interface Address and Domain” on page 266 or “Applying Filters and Services to an Interface” on page 269; for a general discussion of family statement options, see the *JUNOS 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 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>severity-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 “Applying Filters and Services to an Interface” on page 269. |
| 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> <p>Range: 4 through 86,400 seconds</p> |
| Usage Guidelines | See “Configuring Default Timeout Settings” on page 266. |
| 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 “Applying Filters and Services to an Interface” on page 269. |
| 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 the <i>JUNOS 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 “Configuring Default System Log Properties” on page 267. |
| 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 seconds;</code> |
| Hierarchy Level | [edit interfaces <i>interface-name</i> services-options] |
| Description | Configure a timeout period for TCP session establishment. |
| Options | <i>seconds</i> —Timeout period, in seconds. Default: 30 seconds Range: 4 through 86,400 seconds |
| Usage Guidelines | See “Configuring Default Timeout Settings” on page 266. |
| 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 “Applying Filters and Services to an Interface” on page 269. |
| 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 “Applying Filters and Services to an Interface” on page 269. |
| 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 “Applying Filters and Services to an Interface” on page 269. |
| 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 “Configuring the Interface Address and Domain” on page 266. |
| Required Privilege Level | interface—To view this statement in the configuration. interface-control—To add this statement to the configuration. |

service-filter

| | |
|---------------------------------|--|
| Syntax | service-filter <i>filter-name</i> ; |
| 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 “Applying Filters and Services to an Interface” on page 269. |
| 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 service-set-name;</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 “Applying Filters and Services to an Interface” on page 269. |
| Required Privilege Level | interface—To view this statement in the configuration. interface-control—To add this statement to the configuration. |

services

| | |
|---------------------------------|--|
| Syntax | <code>services severity-level;</code> |
| Hierarchy Level | [edit interfaces <i>interface-name</i> services-options syslog host <i>hostname</i>] |
| Description | Specify the system logging severity level. |
| Options | <i>severity-level</i> —Assigns a severity level to the facility. Valid entries include: <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 “Configuring Default System Log Properties” on page 267. |
| Required Privilege Level | interface—To view this statement in the configuration. interface-control—To add this statement to the configuration. |

services-options

Syntax

```
services-options {
  inactivity-timeout seconds;
  open-timeout seconds;
  syslog {
    host hostname {
      services [ priority-number ];
      facility-override facility-name;
      log-prefix prefix-number;
    }
  }
}
```

Hierarchy Level [edit interfaces *interface-name*]

Description Define the service options to be applied on an interface.

Options The remaining statements are explained separately.

Usage Guidelines See “Configuring Interface Properties” on page 266.

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

syslog

Syntax

```
syslog {
  host hostname {
    services severity-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 “Configuring Default System Log Properties” on page 267.

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 “Configuring Interface Properties” on page 266; for a general discussion of logical interface properties, see the <i>JUNOS 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 Network Interfaces and Class of Service Configuration Guide</i> for other statements that do not affect services interfaces. |

