

# Chapter 8

## Summary of Service Set Configuration Statements

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

### adaptive-services-pics

<b>Syntax</b>	<pre>adaptive-services-pics {   traceoptions {     flag <i>flag</i>;   } }</pre>
<b>Hierarchy Level</b>	[edit services]
<b>Description</b>	Define global services properties.
<b>Options</b>	The remaining statements are explained separately.
<b>Usage Guidelines</b>	See “Trace Adaptive Services PIC Operations” on page 63.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## facility-override

<b>Syntax</b>	facility-override <i>facility-name</i> ;
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> syslog host <i>hostname</i> ]
<b>Description</b>	Overrides default facility for system log reporting.
<b>Options</b>	<i>facility-name</i> —Name of facility that overrides the default assignment. Valid entries are: authorization daemon ftp kernel local0 through local7 user
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 62.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## host

<b>Syntax</b>	host <i>hostname</i> { services <i>priority-level</i> ; facility-override <i>facility-name</i> ; interface-service <i>prefix-number</i> ; }
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> syslog]
<b>Description</b>	Specify host name for system logging utility.
<b>Options</b>	<i>hostname</i> —Name of system logging utility host machine.  The remaining statements are explained separately.
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 62.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## ids-rules

<b>Syntax</b>	([ ids-rules <i>rule-name</i> ]   ids-rule-sets <i>rule-set-name</i> );
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Specify the IDS rules or rule set included in this service set. You can configure multiple rules, but only one rule set for each service.
<b>Options</b>	<i>rule-name</i> —Identifier for the collection of terms that constitute this rule.  <i>rule-set-name</i> —Identifier for the set of rules to be included.
<b>Usage Guidelines</b>	See “Configure Service Rules” on page 61.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## interface-service

<b>Syntax</b>	interface-service { service-interface <i>name</i> ; }
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Specify device name for interface service PIC.
<b>Options</b>	service-interface <i>name</i> —Name of service device associated with interface-wide service set.
<b>Usage Guidelines</b>	See “Configure Service Interfaces” on page 60.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## log-prefix

<b>Syntax</b>	log-prefix <i>prefix-number</i> ;
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> syslog host <i>hostname</i> ]
<b>Description</b>	Set system logging prefix value.
<b>Options</b>	<i>prefix-number</i> —System logging prefix value.
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 62.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## nat-rules

<b>Syntax</b>	([ nat-rules <i>rule-name</i> ]   nat-rule-sets <i>rule-set-name</i> );
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Specify the NAT rules or rule set included in this service set. You can configure multiple rules, but only one rule set for each service.
<b>Options</b>	<i>rule-name</i> —Identifier for the collection of terms that constitute this rule.  <i>rule-set-name</i> —Identifier for the set of rules to be included.
<b>Usage Guidelines</b>	See “Configure Service Rules” on page 61.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## next-hop-service

<b>Syntax</b>	next-hop-service { inside-service-interface <i>name.number</i> ; outside-service-interface <i>name.number</i> ; }
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Specify interface names for forwarding next-hop service set.
<b>Options</b>	<i>inside-service-interface name.number</i> —Name and logical unit number of service interface associated with service set applied inside the network.  <i>outside-service-interface name.number</i> —Name and logical unit number of service interface associated with service set applied outside the network.
<b>Usage Guidelines</b>	See “Configure Service Interfaces” on page 60.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## service-set

**Syntax** `service-set service-set-name {`  
     `([ ids-rules rule-names ] | ids-rule-sets rule-set-name );`  
     `([ nat-rules rule-names ] | nat-rule-sets rule-set-name );`  
     `([ stateful-firewall-rules rule-names ] | stateful-firewall-rule-sets rule-set-name );`  
     `interface-service {`  
         `service-interface name;`  
     `}`  
     `next-hop-service {`  
         `inside-service-interface name.number;`  
         `outside-service-interface name.number;`  
     `}`  
     `syslog {`  
         `host hostname {`  
             `services priority-level;`  
             `facility-override facility-name;`  
             `interface-service prefix-number;`  
         `}`  
     `}`  
     `}`  
     `}`

**Hierarchy Level** [edit services]

**Description** Define the service set.

**Options** *service-set-name*—Identifies the service set.

The remaining statements are explained separately.

**Usage Guidelines** See “Configure Service Sets” on page 59.

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

## services

**services (hierarchy)**

<b>Syntax</b>	services { ... }
<b>Hierarchy Level</b>	[edit]
<b>Description</b>	Define the service rules to be applied to traffic.
<b>Usage Guidelines</b>	See “Configure Service Sets” on page 59.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

**services (syslog)**

<b>Syntax</b>	services <i>priority-level</i> ;
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> syslog host <i>hostname</i> ]
<b>Description</b>	Specify priority level for system logging messages.
<b>Options</b>	<i>priority-level</i> —Assigns a priority level to the facility. Valid entries are:  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.
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 62.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## stateful-firewall-rules

<b>Syntax</b>	([ stateful-firewall-rules <i>rule-names</i> ]   stateful-firewall-rule-sets <i>rule-set-name</i> );
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Specify the stateful firewall rules or rule set included in this service set. You can configure multiple rules, but only one rule set for each service.
<b>Options</b>	<i>rule-name</i> —Identifier for the collection of terms that comprise this rule.  <i>rule-set-name</i> —Identifier for the set of rules to be included.
<b>Usage Guidelines</b>	See “Configure Service Rules” on page 61.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## syslog

<b>Syntax</b>	syslog { host <i>hostname</i> { services <i>priority-level</i> ; facility-override <i>facility-name</i> ; interface-service <i>prefix-number</i> ; } }
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Configure generation of system log messages for the service set. The system log information is passed to the kernel for logging in the /var/log directory. These settings override the values defined at the [edit interfaces <i>interface-name</i> sp-options] hierarchy level; for more information on configuring those values, see the <i>JUNOS Internet Software Configuration Guide: Network Interfaces and Class of Service</i> .
<b>Options</b>	The remaining statements are described separately.
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 62.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## traceoptions

<b>Syntax</b>	traceoptions { flag <i>flag</i> ; }
<b>Hierarchy Level</b>	[edit services adaptive-services-pics]
<b>Description</b>	Configure Adaptive Services PIC tracing operations. The messages are output to /var/log/spd.
<b>Options</b>	flag <i>flag</i> —Tracing operation to perform.  all—Trace everything.  configuration—Trace configuration events.  routing-protocol—Trace routing protocol events.  routing-socket—Trace routing socket events.
<b>Usage Guidelines</b>	See “Trace Adaptive Services PIC Operations” on page 63.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.