

## Chapter 19

# 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

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<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 198.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## facility-override

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<b>Syntax</b>	<code>facility-override <i>facility-name</i>;</code>
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> syslog host <i>hostname</i> ]
<b>Description</b>	Overrides the default facility for system log reporting.
<b>Options</b>	<p><i>facility-name</i>—Name of the facility that overrides the default assignment. Valid entries are:</p> <ul style="list-style-type: none"> <li>authorization</li> <li>daemon</li> <li>ftp</li> <li>kernel</li> <li>local0 through local7</li> <li>user</li> </ul>
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 196.
<b>Required Privilege Level</b>	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

## host

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<b>Syntax</b>	<pre>host <i>hostname</i> {     services <i>priority-level</i>;     facility-override <i>facility-name</i>;     interface-service <i>prefix-number</i>; }</pre>
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> syslog]
<b>Description</b>	Specify the hostname for the system logging utility.
<b>Options</b>	<p><i>hostname</i>—Name of the system logging utility host machine.</p> <p>The remaining statements are explained separately.</p>
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 196.
<b>Required Privilege Level</b>	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

ids-rules

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<b>Syntax</b>	([ <i>ids-rules rule-name</i> ]   <i>ids-rule-sets 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 195.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

interface-service

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<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 the device name for interface service PIC.
<b>Options</b>	<i>service-interface name</i> —Name of the service device associated with interface-wide service set.
<b>Usage Guidelines</b>	See “Configure Service Interfaces” on page 194.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

ipsec-vpn-options

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<b>Syntax</b>	ipsec-vpn-options { local-gateway <i>address</i> ; }
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> ]
<b>Description</b>	Specify IPSec service options.
<b>Options</b>	The remaining statements are explained separately.
<b>Usage Guidelines</b>	See “Configure Service Rules” on page 195.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## ipsec-vpn-rules

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<b>Syntax</b>	([ ipsec-vpn-rules <i>rule-name</i> ]   ipsec-vpn-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 IPSec 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 195.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## local-gateway

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<b>Syntax</b>	local-gateway <i>address</i> ;
<b>Hierarchy Level</b>	[edit service-set <i>service-set-name</i> ipsec-vpn-options]
<b>Description</b>	Define the local address for the IPSec traffic.
<b>Options</b>	<i>address</i> —Local address.
<b>Usage Guidelines</b>	See “Configure Service Rules” on page 195.
<b>Required Privilege Level</b>	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

## log-prefix

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<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 the 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 196.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## nat-rules

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<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 195.
<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

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<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 the forwarding next-hop service set.
<b>Options</b>	<i>inside-service-interface name.number</i> —Name and logical unit number of the service interface associated with the service set applied inside the network. <i>outside-service-interface name.number</i> —Name and logical unit number of the service interface associated with the service set applied outside the network.
<b>Usage Guidelines</b>	See “Configure Service Interfaces” on page 194.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## service-interface

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<b>Syntax</b>	<code>service-interface <i>interface-name</i>;</code>
<b>Hierarchy Level</b>	[edit services service-set <i>service-set-name</i> interface-service]
<b>Description</b>	Specify name for the AS PIC interface associated with an interface-wide service set.
<b>Options</b>	<i>interface-name</i> —Identifier of the service interface.
<b>Usage Guidelines</b>	See “Configure Service Interfaces” on page 194.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## service-set

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<b>Syntax</b>	<pre> service-set <i>service-set-name</i> {   ([ <i>ids-rules rule-names</i> ]   <i>ids-rule-sets rule-set-name</i>);   ([ <i>nat-rules rule-names</i> ]   <i>nat-rule-sets rule-set-name</i>);   ([ <i>stateful-firewall-rules rule-names</i> ]   <i>stateful-firewall-rule-sets rule-set-name</i>);   interface-service {     <i>service-interface name</i>;   }   next-hop-service {     <i>inside-service-interface name.number</i>;     <i>outside-service-interface name.number</i>;   }   syslog {     <i>host hostname</i> {       <i>services priority-level</i>;       <i>facility-override facility-name</i>;       <i>interface-service prefix-number</i>;     }   } } </pre>
<b>Hierarchy Level</b>	[edit services]
<b>Description</b>	Define the service set.
<b>Options</b>	<i>service-set-name</i> —Identifies the service set.  The remaining statements are explained separately.
<b>Usage Guidelines</b>	See “Configure Service Sets” on page 193.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## services

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See the following sections:

services (hierarchy) on page 207

services (syslog) on page 207

### **services (hierarchy)**

**Syntax** services { ... }

**Hierarchy Level** [edit]

**Description** Define the service rules to be applied to traffic.

**Usage Guidelines** See “Configure Service Sets” on page 193.

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

### **services (syslog)**

**Syntax** services *priority-level*;

**Hierarchy Level** [edit services service-set *service-set-name* syslog host *hostname*]

**Description** Specify the priority level for system logging messages.

**Options** *priority-level*—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.

**Usage Guidelines** See “Configure System Log Properties” on page 196.

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

## stateful-firewall-rules

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<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 195.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## syslog

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<b>Syntax</b>	<pre> syslog {   host <i>hostname</i> {     services <i>priority-level</i>;     facility-override <i>facility-name</i>;     interface-service <i>prefix-number</i>;   } } </pre>
<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 Network Interfaces and Class of Service Configuration Guide</i> .
<b>Options</b>	The remaining statements are described separately.
<b>Usage Guidelines</b>	See “Configure System Log Properties” on page 196.
<b>Required Privilege Level</b>	interface—To view this statement in the configuration. interface-control—To add this statement to the configuration.

## traceoptions

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<b>Syntax</b>	<pre>traceoptions {     flag <i>flag</i>; }</pre>
<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>	<p>flag <i>flag</i>—Tracing operation to perform.</p> <ul style="list-style-type: none"><li>all—Trace everything.</li><li>configuration—Trace configuration events.</li><li>routing-protocol—Trace routing protocol events.</li><li>routing-socket—Trace routing socket events.</li></ul>
<b>Usage Guidelines</b>	See “Trace Adaptive Services PIC Operations” on page 198.
<b>Required Privilege Level</b>	<p>interface—To view this statement in the configuration.</p> <p>interface-control—To add this statement to the configuration.</p>

